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Gig and Platform Work

Growth and Employment

Care Economy and Labour Market

Organised by



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THEME 1



GIG AND PLATFORM WORK

KEYNOTE PAPER

Platform Work In Developing Countries: Is It Narrowing Or Widening Inequalities?

Uma Rani, Senior Economist, Research Department, International Labour Organization (ILO), Geneva

Digital labour platforms have gained prominence within the development agenda in recent years, and have emerged as a 'silver bullet' to address issues relating to rising unemployment, especially among youth, improve female labour force participation rates and address inequality. Though these platforms have the potential to create income and employment opportunities, research from academia and international organisations has highlighted a number of challenges. This lecture explores the developmental implications of digital labour platforms that have penetrated multiple sectors of the economy such as location-based (taxi, delivery, healthcare, domestic and beauty services), online microtask, freelance, and coding and programming tasks, as well retail trade (e-commerce platforms).

The lecture would explore whether the jobs facilitated by these platforms represent genuinely new opportunities or merely a shift from traditional labour market to platforms, and whether they bring about a change in the work organization. It will examine whether working on these platforms transitions workers from low-productivity to high-productivity sectors, enhances their skills for better career opportunities, improves their incomes, and overall well-being, and facilitates the creation of formal employment opportunities with associated work-related and social security benefits. The analysis seeks to elucidiate whether platform work has the potential to mitigate the inherent inequalities in the labour market and narrow the gap. Addiitonally, the lecture will explore the existing gender inequalities in the labour market, and assess whether platforms effectively address such as access to work for women, pay gaps and empower women, or if they exacerbate these inequalities. Finally, the lecture will focus on the implications of the online platform work, which allows for global outsourcing 24/7, and its impact on reducing or exacerbating inequalities among workers within and between countries globally. It will conclude with some policy suggestions aimed at addressing some of the challenges associated with platform work and ensuring income and social protection for all.

TECHNICAL SESSION 1.1

Food Security, Informal Employment and Precarity of Migrant Workforce: Digital Public Infrastructure and Emergent Welfare Frameworks in post-COVID India

Veena Ranna Naregal, Professor, Institute of Economic Growth, Delhi, Delhi

Beyond their impact on the nature of employment and work, new technologies, and processes of data convergence and platformisation have simultaneously transformed the role of the state, meanings, scope and channels of governance as well as the nature and means of access to welfare/social security benefits. This paper highlights the transformative impacts of digital technologies on the livelihoods, working conditions and access to benefits for the overwhelming segments of the Indian workforce in insecure, informal employment. In India, the Unique Identification Authority of India [UIDAI] has been the nodal agency through which institutional manoeuvres, public-private partnership models, political claims and techn'ological shifts towards digital governance and the rapid scaling up of digital infrastructures were envisaged and leveraged. Launched in 2009 through an energetic campaign underlining claims to reduce fraud and increase efficiency in the targeted delivery of private and public services, the UIDAI - conceived as the world's largest implementation of biometric technology initially functioned as an attached office of the Planning Commission [est. 1950]. However, following the dissolution of the Planning Commission in 2014, the UIDAI emerged as a nodal statutory authority within the Ministry of Electronics and Information Technology under the Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act 2016, credited for its claims of having extended possibilities of welfare provisioning, financial inclusion and delivery of public services, and aims to position the country as a global pioneer in public digital and data infrastructure. Parallel to these envisioned horizons and claims by the new digital state in India, alongside at least since 2012, the country has topped the global league tables that classify economies by the extent of dependence of their workforce on informal employment. Simultaneously Indian economic policy documents no longer saw informal employment as a 'transitional' stepping stone within a grand narrative of economic progress. Indeed, the dependence of more than 90% of the Indian labour force in informal employment, often tied to cyclical and short-term migration patterns, has been regarded as making for a distinctively Indian pattern of economic growth. Equally there was by-now a familiar critique of the lack of reliable and adequate data on internal migration in India. Post-Covid then, the rapid subsumption of the Indian state's governance and welfare architecture through swiftly scaled-up digital infrastructures

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alongside a radically restructured planning establishment has gone hand in hand with an orchestrated dismantling over the last decade or so, of existing agencies, repositories, national survey exercises and procedures for the gathering of national and state level data gathering developed through the post-Independence decades. Offering a lens on these deeply paradoxical trajectories and shifts, this paper focuses specifically on measures in the aftermath of the lockdown-induced India's internal migrant workers' crisis to create a digitally governed national grid enabling inter-state portability in the drawing of food rations. The Integrated Public Distribution System [IMPDS] connecting e-PDS state portals, accessible to beneficiaries [estimated at approximately 80% of the national population at 2011 Census figures against digital authentication of their biometric credentials, is advanced as a significant mode of improving food-security and redressing precarity of migrant labour populations in post-pandemic India. In particular, I examine available e-PDS data on the intra-state and inter-state drawing of rations outside the registered domicile to reflect on the extent of PDS portability established between migrantsending states and migrant-receiving states, and also how these data flows map out with respect to known patterns of inter-state migration flows and emerging intra-state mobility patterns. These realtime data trends are juxtaposed with qualitative data generated through fieldwork in Delhi to track and analyse the stages through which portability mechanisms, procedures and protocols to create inter-state connectivity of PDS systems have been designed and operationalised. I conclude with reflections on whether these ongoing re-alignments of the IMPDS within a national digital ecosystem are structurally poised to address the needs of large proportions of internal migrant populations, and their implications for the mandate on food security and inclusive governance.

Transcending the Formal-informal Divide in Gig Work on Digital Platforms: The Evidence from India

Balaji Parthasarathy, Professor, International Institute of Information Technology, Bangalore, Karnataka

Janaki Srinivasan, Associate Professor, International Institute of Information Technology, Bangalore, Karnataka

Mounika Neerukonda, Researcher, Fairwork India, Bengaluru, Karnataka Bilahari M, Researcher, Fairwork India, Bengaluru, India Meghashree Balaraj, Researcher, Fairwork India, Bengaluru, Karnataka Raktima Kalita, Researcher, Fairwork India, Bengaluru, Karnataka Aditya Singh, Researcher, Fairwork India, Bengaluru, Karnataka Mark Graham, Professor, Oxford Internet Institute, Oxford, United Kingdom

Digital platforms have grown thanks to institutional changes that have emphasised flexible labour markets, aided by technological advances. As platforms mediate an increasing number of services, the dominant work opportunity they offer is gig work to independent contractors. Thanks to a power asymmetry between gig workers and platforms, and little regulatory control over gig work,

the conditions of work are largely determined by platforms. Nevertheless, there is hope vested in the developmental possibilities of the platform economy and the gradual formalization of gig work. This paper examines the possibilities and the tensions inherent to any formalization by drawing on evidence from India, which has a large and rapidly growing platform economy.

Pouring on 'Wet Ground': A Comprehensive Analysis of Platform Work Regulation Developments and Employment Relations Systems Landscape in South America

Luciana Zorzoli, Associate Professor, Essex Business School, Colchester, United Kingdom

This research paper delves into the evolving terrain of platform work regulation within the global south, with a specific focus on the cases of Argentina and Chile in Latin America. The objective is to unravel the distinctive approaches each country is taking in shaping workers' access to rights and protections, thereby adding depth to the ongoing examination of trends and challenges faced by employment relations systems and national and international labour regulations. Taking a comparative perspective, the study initiates a comprehensive examination of constitutional rights and employment law provisions in Argentina and Chile. This is followed by an analysis of the evolving landscape of platform work regulation, encompassing aspects such as litigation, legal rulings, actions by ministries of labour and labour inspection agencies, and the implementation of both direct and indirect regulatory measures. The research extends beyond well-explored issues of worker classification, venturing into the specific demands of platform workers and the state's regulation of collective rights since the arrival of international platforms in the region, with a particular focus on delivery platforms. This study provides a nuanced understanding of platform work regulation from a Latin American standpoint, intertwining these insights with ongoing concerns about the coverage and efficacy of employment relations systems in these countries. By doing so, it not only contributes valuable insights to the existing body of research on workers' classification but also adds to the broader academic conversation surrounding the future of work and workers' rights. This research builds upon the analyses of present dynamics in platform work regulation, offering distinctive perspectives and lessons from the South American landscape. By doing so, it addresses a notable gap in existing scholarly discussions, ensuring that regions like Latin America, often underrepresented in such conversations, have a meaningful presence in the consideration of present trends and in shaping the discourse on the future of work and workers' access to rights.

State Regulation in Platform Work: **Emerging insights from India**

Eesha Kunduri, PhD Candidate, University of Minnesota, Minneapolis, Minnesota Anant Maringanti, Executive Director, Hyderabad Urban Lab Shaik Salauddin, Founder President, Telangana Gig and Platform Workers Union

With the enactment of the Rajasthan Platform-Based Gig Workers (Registration and Welfare) Act 2023, states across India are holding stakeholder meetings to discuss the crafting of a similar or improved legislation. In the interim, states like Karnataka and Telangana have announced accidental insurance benefits for platform-based gig workers; while Jharkhand has constituted a board to look into minimum wages for gig workers. Scratching the surface beyond such promising developments, however, we observe that an absence of basic data on the number of gig workers registered with aggregator companies comprises a fundamental bottleneck to any effective legislation, welfare schemes and budgetary allocations. Across states where such conversations are underway, aggregator companies are refusing to provide any form of data on the number of workers registered with their platforms, while government databases such as e-Shram do not categorically distinguish gig workers from other unorganised workers. This raises a fundamental question, as provocatively gestured in the paper's title: Are platform companies, or aggregator companies as they are commonly referred to, beyond the jurisdiction of the State? Drawing on insights from the work of Telangana Gig and Platform Workers' Union (TGPWU) in advocating for gig workers' rights and welfare, and from scholarship on urban political economy, critical state theory, and labour studies, this paper makes three key interventions: a. Because the State subsidises platform capitalism and enables the system to thrive, the onus of ensuring platforms' compliance with and accountability to regulatory structures and frameworks (whether existing, new, or emerging ones) should lie with the State. b. Much like contractual, informal, precarious, and non-standard work arrangements, platform work has contributed to an erosion of the category of the worker –a phenomena which calls for deeper historicization in the Indian context –in an attempt to return to and reclaim the category of the worker. c. In employment situations marked by an absence or lack of rights to collective bargaining, the State has a critical responsibility to ensure its commitment to the worker-citizen, since the right to livelihood is an extension of the right to life conferred by Article 21 of the Constitution of India (Olga Tellis & Ors v. Bombay Municipal Corporation & Ors., 1985) and "includes the right to work on decent and fair conditions of work" (IFAT & Ors. v. Union of India & Ors., 2021). Since fundamental rights are not contractual rights, "no estoppel can be claimed against enforcement of fundamental rights" (Olga Tellis & Ors v. Bombay Municipal Corporation & Ors.; see also Maringanti, 2011).

Addressing the Insecurities of Gig and Platform Work: Responses, Alternatives and the Organising Question

Babu P. Remesh, Professor, School of Development Studies, Ambedkar University Delh

Based on available empirical evidences, the paper discusses the underlying insecurities and vulnerabilities of labour in the gig and platform economy and the responses of various stakeholders to address precarity and representation/voice insecurities of these new genre of informal sector workers. Some of the central questions discussed in the paper include: How digitisation and technology aided-work organisation reshape the work and livelihood patterns of informal workers? How do these changes reflect on labour standards in the gig and platform economy jobs? and What are the reactions of various stakeholders, so far, to address these insecurities? Accordingly, responses of different actors- e.g. state, worker solidarity groups or labour unions - are examined by analysing different forms of reflections, such as regulations, litigations, agitations and alternative arrangements. A core concern of the paper is to discuss the 'organising question' of gig and platform economy workers (with special attention to Indian context). Hence, it tries to conceptualise the hindrances for mobilising and organising, such as lack of common/centralised workplace and the resultant 'worker- isolation'; difficulties to establish employer-employee relationships; technologically-aided controls and exclusions; malpractices of platform-intermediaries; and deficient regulatory frameworks. New ways of collectivising these 'technologically-organised' informal workers as well as the dilemmas faced by conventional labour unions are also discussed in the paper. The paper argues that the new form of technology-mediated work in the gig /platform economy often leads to novel systems of alienation of labour, which inter alia lower the bargaining capacity of the labouring poor to an abysmally lower level. Such a situation warrants concerted and coordinated efforts from concerned stakeholders to promote decent work in the sector. Based on available empirical evidences, the paper discusses the underlying insecurities and vulnerabilities of labour in the gig and platform economy and the responses of various stakeholders to address precarity and representation/voice insecurities of these new genre of informal sector workers. Some of the central questions discussed in the paper include: How digitisation and technology aided-work organisation reshape the work and livelihood patterns of informal workers? How do these changes reflect on labour standards in the gig and platform economy jobs?; and What are the reactions of various stakeholders, so far, to address these insecurities?. Accordingly, responses of different actors- e.g. state, worker solidarity groups or labour unions - are examined by analysing different forms of reflections, such as regulations, litigations, agitations and alternative arrangements. A core concern of the paper is to discuss the 'organising question' of gig and platform economy workers (with special attention to Indian context). Hence, it tries to conceptualise the hindrances for mobilising and organising, such as lack of common/centralised workplace and the resultant 'worker-

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isolation'; difficulties to establish employer-employee relationships; technologically-aided controls and exclusions; malpractices of platform-intermediaries; and deficient regulatory frameworks. New ways of collectivising these `technologically-organised' informal workers as well as the dilemmas faced by conventional labour unions are also discussed in the paper. The paper argues that the new form of technology-mediated work in the gig /platform economy often leads to novel systems of alienation of labour, which inter alia lower the bargaining capacity of the labouring poor to an abysmally lower level. Such a situation warrants concerted and coordinated efforts from concerned stakeholders to promote decent work in the sector.

TECHNICAL SESSION 1.2

Caste in Gig Economy: Exploring the 'Spatiality' of Work in India

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The gig economy has been studied from several theoretical frameworks but a significant analytical gap exists due to the lack of a 'spatialised' approach to understanding the social life of gig work. In such a context, this study aims to analyse the nature of 'spatiality' of workspaces in the Indian gig economy. Understanding how this form of spatiality produces itself as a terrain for new and old processes of social, political, bodily and sensorial interaction is an objective of this research which can be fully illustrated by gauging upon the logic of 'caste' since it serves as a crucial constituting factor for the formation of spatial relations in India. The caste system can be seen as a hierarchical division of society in India which manifests through a spatial-social demarcation in society. Hence, this paper examines how caste influences the 'spatiality' of workspaces which are increasingly merging with public spaces in the gig economy of India. Through fieldwork in New Delhi and NCR, I present the findings of my ethnographic research, consisting of 8 life-history interviews of gig workers from two food delivery services known as Swiggy and Zomato. These interviews are complemented by observation methods like spending considerable time with the individual respondents in their field location and travelling with them throughout the delivery process. I intend to further capture the insights derived through this method by developing graphic maps (using Geographic Information System or GIS) to show the spatial exploration by gig workers. This research will enable scholars working on the platform economy in India and South Asia, more widely, to unpack the performative, cognitive and affective dispositions associated with gig work and its relation with the social ethos of caste in public spaces. It will also demonstrate the enlarged ambit of work in the gig economy with the merging of work and public spaces as gig work no longer remains restricted to delivering 'orders' from one point to the other but also includes several processes (often determined by the socio-geographical structure of spaces) which are left to workers to navigate as a part of their job. This study contributes theoretically and conceptually to the discourse on the gig economy by introducing the lens of the oft-neglected domain of caste in platform studies based in the Global South. Methodologically, a spatialised ontology embeds gig work fully in the 'social' to understand the continuities and discontinuities of structures, orders and inequalities in the platform economy.

Shifting Trajectories in the World of Work: An Analysis of Control and Autonomy Measures at Platform Economy

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The platform economy has emerged as a key driver to accelerate economic growth and employment generation in India as like in the Global South. International Labour Organization defines two kinds of platforms 1) web-based and 2) location-based platforms. According to ILO (2021), at least 777 active platforms are operating worldwide in various industries such as transport, delivery services, consumer durable goods and domestic services, and retail. In India, total number of workers increased from about 25 lakhs in 2011-12 to 68 lakhs in 2019-20. (NITI Ayog, 2022). Around the world, the platform economy promotes flexibility and ensures workers' autonomy. It further democratized access to jobs, with low entry barriers, and creates equal opportunities for all, which over time can lead to improvement in the socioeconomic status of marginalized groups. Hence, it has been considered as a crucial driver of economic growth. Amidst this, a significant focus of contention about the future of the employment relationship, the vulnerability of platform workers, especially as most are hired as contractors or engaged as self-employed rather than employees, and the question of whether and how to regulate and protect their interests and those of others is being debated widely. In several legal jurisdictions, civil or common law origins, the highest courts are making concerted efforts to re-evaluate and re-examine core aspects of the traditionally used criteria to distinguish between independent contractors, selfemployed, and employees. A thorough review of judicially determined employment relationship tests in both legal jurisdictions often provides mixed results due to the intertemporal nature of technology (ILO, 2021), cross-border platforms (Adams-Prassal, 2023), and dynamics of local labour market structure (Khan and Sapkal, 2023). The main objective of this paper is to examine the regulatory obligations and liability provisions as enumerated in the employment relationship between platforms and their workers in India. Secondly, it will focus on two key aspects of employment 1) control and 2) autonomy provisions as espoused in the work contract in the platform economy. Therefore, in this paper, we offer a comprehensive comparative legal analysis of the determination test applied by Indian courts to address two specific research questions: 1) How and to what extent do the existing industry and e-commerce laws govern or regulate the platform economy in India? (Hints- To examinenot to control, partially regulate, and to completely regulate, a discussion of the parliament standing committee). 2) Do India's platform workers fall under the independent contractors or employee's category of the platform firms? In this context, India provides an ideal setting as it has a common-law origin that has shaped major industrial, property, social, and employment laws in India. With the slew of economic reforms in the early 1990's and a rapid tech-mediated economic development in the last decade, India witnessed a significant structural shift in the labour market, coupled with its demographic dividend, rapid urbanization, widespread adoption of smartphones, and associated technology have enabled India to emerge as the new frontier of this platform revolution. This paper is based on the critical meta-review of existing studies, government reports, labour and industrial laws and secondary literature that has been published about the platform economy in India. This paper identifies the

critical research gaps based on an extensive review of the literature survey and their conceptualization in existing employee-employer relationships. The regulatory aspects of employment relationships in platform economy need to be explored based on the dynamics of control and autonomy. Keywords: Platform economy, control, autonomy, liability, employment relationship, governance and decent work right.

R.I.G.H.T.S - Respect and Integrity of Gig Workers; **Humanity and Trust in Service**

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The value of goods and services purchased through e-commerce in India is expected to reach US\$ 111 billion by 2024 and US\$ 200 billion by 2026. Buoyed by the growth of smartphones and digital payments, more and more urban Indians are using apps to order groceries within 15 minutes or buy food from restaurants past midnight, avail of beauty salon services at home or call a cab to pick them up from their doorstep. The last link in this ever-growing digital bazaar is, however, still a human being represented by thousands of riders and drivers who crowd the streets of our cities on their two wheelers. The numbers burgeoned during the pandemic with more people buying online resulting in a greater demand for riders/drivers. Further, as many small establishments shut down during COVID-19, there was rampant unemployment and displaced people found that entry barriers to becoming drivers/ riders were low. The post pandemic economy finds that there is an glut in the supply of "location based platform workers" as they are called, 'platform' being the tech interface between supplier and customer. This has resulted in fragmented incomes and dissatisfaction among workers who compare current wages to the early halcyon days when these platforms first came into the market. Workers are questioning their status as "partners" which keeps them out of the ambit of social security benefits like insurance or paid leave. Internationally, organisations like Internation Labour Organization (ILO) have also begun to take serious note of the asymmetry of power in the platform economy, which is increasingly proving to be tilted against the workers. Based on a nationwide survey of over 5000 gig workers across sectors, called "R.I.G.H.T.S survey" was conducted by the activist organisation Janpahal in collaboration with the author in the latter half of 2023. The survey assessed platform workers' perceptions and opinion of their jobs along the lines of Respect, Integrity, Humanity and Trust. The broad research questions that the survey results answered are: 1. Do platform workers feel they are respected by the company and by society for the job they do? 2. Do platform workers believe the company is engaging with them with integrity and fairness with respect to compensation, penalties and transparency of payment? 3. Is the platform treating its workers with humanity, with attention to physical and mental stress experienced by the workers and safety conditions at work? 4. Is there a partnership of trust between the platform and the worker as reflected by conflict resolution, level of surveillance, and sharing of information? The report was launched on March 7th 2024 in Delhi in the presence of representatives from ILO, prominent academicians, and activists who have worked in the area of labour and livelihoods. The significance of this research is that it is the largest research on

gig workers conducted in India which cuts across cities and sectors. It also investigates little known aspects of a platform worker's day-to-day challenges of working in the urban Indian context. With growing digitalisation, the employer-employee paradigm is fast changing, and old laws and policies need updating to ensure fair work practices for workers. In the light of this, this paper will present a deeper understanding of the issues involved through authentic reports from the ground, for more informed policy making.

Earnings from Employment in the Emerging Platform **Economy: Comparison of the Traditional Taxi System** and Digital Cab Services in Two Indian Megacities

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The objective of the study is to examine whether employment in the emerging platform economy is helping its workers generate more earnings or not. To accomplish the objective of the study, we have chosen digital cab services as a representative of the digital platform economy and compared the digital ride-sharing platforms to the conventional taxi system in two Indian megacities, Bengaluru and Kolkata, based on a primary survey of a total of 691 drivers. We employed a mincer wage equation to investigate the determinants of earnings for drivers operating on different platforms across both cities. Determinants of earnings identified based on an OLS and ordered probit models are compared to check the robustness of the results. Mean average earnings are found to be higher among drivers in OLA/Uber business models. Earning differences exist between two cities as well. One of the policy implications is to address fair competition between conventional taxis and these ride-sharing platforms. More and more drivers should be encouraged to move to an app-based system as it yields more earnings, and at the same time, the drivers in conventional systems have to be protected. The objective of the study is to examine whether employment in the emerging platform economy is helping its workers generate more earnings or not. To accomplish the objective of the study, we have chosen digital cab services as a representative of the digital platform economy and compared the digital ride-sharing platforms to the conventional taxi system in two Indian megacities, Bengaluru and Kolkata, based on a primary survey of a total of 691 drivers. We employed a mincer wage equation to investigate the determinants of earnings for drivers operating on different platforms across both cities. Determinants of earnings identified based on an OLS and ordered probit models are compared to check the robustness of the results. Mean average earnings are found to be higher among drivers in OLA/Uber business models. Earning differences exist between two cities as well. One of the policy implications is to address fair competition between conventional taxis and these ride-sharing platforms. More and more drivers should be encouraged to move to an app-based system as it yields more earnings, and at the same time, the drivers in conventional systems have to be protected.

Understanding Resistance of Migrant Workers in Platform Economy: A Study of Bike based Workers in Bengaluru

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Platform work, a non-standard form of employment, is a result of the Fourth Industrial Revolution (4IR). In India, 7.7 million workers are engaged in the platform economy, and more than 3.3 million people are working in the platform economy only. A large number of workers who rely on the platform economy are migrant workers. Global South countries like India, Bangladesh, and China rely primarily on domestic migrant workers who often migrate to major cities from regional areas, to provide services such as ride-sharing, food delivery, and domestic and care work. The platform economy, with its least barriers to entry, presents both new employment opportunities and novel challenges and precarity, especially for developing economies like India. Particularly in the platform economy, some scholars argue that platforms that adopt these employment arrangements perpetuate cycles of exploitation that migrant workers have previously faced within traditional labour markets. Workers are forced to work for long working hours by platform company algorithms and incentives which impacts their mental, physical and social well-being. They are confined to a loop of work and waiting for work. This blurs downtime with work time and is exhausting, transforming from an employment relationship to the commodification of labour markets. Platform economies view the human body as a machine within the supply chain. Scholars in the global north tried to understand the control and precariousness of immigrant workers through the concept of digital Taylorism and biopolitics. The invisible hand of this marketplace, contribute to the biopower of the company, making it difficult for workers to organise and resist platform companies. These three frameworks - digital Taylorism, biopolitics, and worker resistance - are compelling. Yet, do they apply to platform work in the global south, particularly India? There is limited scholarly work that has examined the implications of platform company governance on the working hours, well-being, and resistance of domestic migrant workers in developing economies. The exploration of the platform economy and its workers from the perspective of the global south is an emerging and evolving area of study. This research discusses how concepts of digital Taylorism and biopolitics can be used to understand the resistance of migrant workers in the Indian platform economy. It adopts a comprehensive methodological approach, utilising both primary and secondary data sources to gain an in-depth understanding of the evolving socio-economic landscape. Primary sources include 50 interviews with bike-based platform workers engaged in food delivery and transport, offering a firsthand account of their experiences. Secondary sources comprise government reports, workers' blogs, and trade union records, providing additional perspectives. Employing a qualitative methodology, this study integrates historical research and ethnography, focussing specifically on regional migrant workers in India. Interviews extend to trade union officials and government representatives, ensuring a multi-stakeholder perspective. To capture a more nuanced viewpoint, the study incorporates netnography, leveraging insights from social media platforms to enhance the contemporaneity of the research. This holistic approach aims to inform nuanced policy

recommendations addressing challenges within the platform economy. By combining historical insights with contemporary data, the methodology facilitates a thorough examination of the complexities inherent in digital labour, amplifying marginalised voices and critically analysing structural constraints. This research finds that the exploitation of regional platform workers is a multi-dimensional challenge rooted in the absence of state-led regulatory frameworks, reliance on profit-maximising algorithms, and the precarious nature of platform work. This vulnerability is compounded by the hesitancy of workers to protest due to the perceived flexibility promised by the platform economy. The complex narrative reflects the dilemma faced by migrant workers, caught between the pursuit of livelihood and the fear of disrupting a precarious equilibrium. Examining this through the lens of digital Taylorism highlights the control mechanisms ingrained in the platform economy, underscoring the urgent need for regulatory safeguards and social protections for these vulnerable workers.

Amazon's One-Click Reality: **Unveiling the Complexities of Warehouse Work**

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Platform companies have transformed consumer experiences by offering efficient and smooth delivery services driven by advanced algorithms and technology. Nevertheless, underneath this ease lurks an intricate network of consequences for the workforce, especially noticeable in the experiences of workers working for platform companies such as Amazon. Central to this discussion is the substantial influence that a solitary customer action, such as clicking "place your order," can have on workers. While customers enjoy the convenience of this process, the workers, who are often controlled by platform companies via complex applications, bear the burden of rigorous demands and monitoring measures. These workers are subjected to rigorous surveillance, with their every move monitored and analysed in order to achieve optimal operating efficiency. An evident outcome of this system is the rise of algorithmic management, an approach employed by corporations driven by the relentless pursuit of financial gains. This strategy enhances surveillance mechanisms, managing and controlling the workforce through algorithms and data-driven techniques. However, the significant impact on workers resulting from these techniques is often disregarded by the management. For instance, Amazon warehouse workers function inside an ecosystem where continuous monitoring governs their actions, allowing very little space for independent decision-making and autonomy. Each action is closely observed, ranging from metrics of productivity to intervals of rest, creating a setting where the human labour force becomes subordinate to algorithmic directives. The increased amount of authority not only affects the psychological well-being of workers but also generates significant ethical concerns regarding the limitations of monitoring in a work environment. Therefore, when analysing the relationship between monitoring techniques and the modern workforce, significant questions emerge. To what extent do workers have genuine autonomy in a highly regulated environment? What are the consequences of ongoing surveillance on their productivity and overall quality of life? It also

ignites a discussion about wider societal consequences. Because, the use of extensive monitoring in the workplace establishes a precedent that goes beyond the limitations of certain sectors or enterprises. It establishes a precedent for the future of work, potentially altering the dynamics of labour and power relationships between employers and employees in various sectors. While, recognising the indisputable convenience facilitated by technological developments in consumer experiences, it is also crucial to carefully manage the delicate equilibrium between efficiency and the welfare of the workforce. That's why, this ongoing monitoring and regulation carried out by algorithms and surveillance techniques necessitate a detailed analysis of the ethical, social, and psychological consequences for the individuals working for these platforms. This article therefore aims to examine the complex relationship between surveillance methods and the modern labour force, focussing on the example of Amazon warehouse workers. Furthermore, it also prompts inquiries on the degree of autonomy granted to employees and the potential consequences of continuous surveillance inside the work environment.

Platform Work and Gender: Trajectories of Inclusion and Exclusion

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Could the digital labour platforms be a panacea to solving the gender-based inequality in the labour markets across the world? Could the problems related to pay, conditions, discrimination, bias and harassment be overcome through the digital transactions and digital interfaces that the platforms mediate work through? In this presentation, we look at platform work and gender and explore the trajectories of inclusion and exclusion in the labour market for women workers and discuss how the working conditions have changed overall for women through the digital mediation of work, both in location-based platforms and cloudwork platforms. Subsequently, the article aims at developing a taxonomy to understand what kind of solutions for overcoming gender-based inequality in the labour market are proposed via digital labour platforms; and whether these are indeed possible, based on analyses of the actual policies and practices observed in digital platform work. The article aims to do two things. One, it aims to critically evaluate the policies and practices put forth by some platforms that are presented as gender-inclusive or gender-neutral, that involve technological interventions into the labour market. Second, it aims to systematically assess what types of inclusion and exclusion are proposed for women workers in the current organisational setup of platforms. The paper relies on Fairwork's ongoing research in the platform economy across 39 countries, which features interviews with more than 5000 workers. We argue that platforms can help improve the working conditions of women workers. However, this is possible, if the platform policies look beyond technological solutionism and address the structural constraints on women's full participation in the labour market. Could the digital labour platforms be a panacea to solving the gender-based inequality in the labour markets across the world? Could the problems related to pay, conditions, discrimination, bias and harassment be overcome through the digital transactions and digital interfaces that the platforms mediate work through? In

this presentation, we look at platform work and gender and explore the trajectories of inclusion and exclusion in the labour market for women workers and discuss how the working conditions have changed overall for women through the digital mediation of work, both in location-based platforms and cloudwork platforms. Subsequently, the article aims at developing a taxonomy to understand what kind of solutions for overcoming gender-based inequality in the labour market are proposed via digital labour platforms; and whether these are indeed possible, based on analyses of the actual policies and practices observed in digital platform work. The article aims to do two things. One, it aims to critically evaluate the policies and practices put forth by some platforms that are presented as gender-inclusive or gender-neutral, that involve technological interventions into the labour market. Second, it aims to systematically assess what types of inclusion and exclusion are proposed for women workers in the current organisational setup of platforms. The paper relies on Fairwork's ongoing research in the platform economy across 39 countries, which features interviews with more than 5000 workers. We argue that platform policies look beyond technological solutionism and address the structural constraints on women's full participation in the labour market.

TECHNICAL SESSION 1.3

Impact of Online Platforms for Food Delivery on Restaurants in Pune, India

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New technologies are bringing about rapid changes in all spheres of life, be it work, shopping or leisure activities. Innovations in technologies are finding applications at all the points of the productiontransportation-delivery, and consumption process of goods and services. These new technology enabled services have created their own demand and have changed the buying and consumption habits of people. Earlier eating out was an elaborate ritual of going to a restaurant, whereas now, ordering in from far and wide through platforms like Swiggy and Zomato is the reality, and has increased manifold. In India, in the food delivery business, online food delivery services are growing and more number of people are ordering food online. Also, more and more restaurants are joining these platforms to increase their sales and revenues. Hence on the whole, these technology driven platforms seem to be a win-win situation for all the parties. However, there needs to be an assessment of the impacts these platforms are creating. Since not too much literature is available on these trends in India, we propose to study the impact of these changing habits and lifestyles on various aspects of the overall business of restaurants and its implications for employment in these restaurants. We propose to focus on examining the impact of the expansion of the food delivery online platforms like Swiggy, Zomato and others on the sales, profits, work, and employment in restaurants in Pune city. To this end, we have carried out a survey of 49 restaurants in Pune city. We find that a majority of the restaurants registered an increase in sales and profits. However, a smaller number also registered a decline in the profits earned. Most of the restaurants had to pay a commission between 16 to 25 percent and some even up to 50 percent to the online delivery platforms. For majority of the restaurants, impact on at-restaurant sales was minimal after aligning with online delivery platforms. We found that about 22 percent of the restaurants experienced that their regular at-restaurant customers were shifting to online mode. About changes in hiring due to alignment with online delivery platforms, we found that about 16 percent of the restaurants said they had to change their hiring pattern and within this, a larger percentage reported a decline in hiring. Thus, we find that though small, there is an adverse impact on employment for restaurants due to aligning with the online delivery platforms. The overall positive impact of aligning with online delivery platforms for these restaurants was an increase in sales

and in their market size. Two main issues that the restaurants experienced due to aligning with online delivery platforms was difficulty in customising the customer's order and more importantly they found the commission charged to be too high and want some kind of an intervention and regulation from authorities for the same. On the whole, we can say that ordering online food from restaurants has resulted in new ways of consumption for the buyers and new ways of business for the restaurants. These new ways of working are benefiting most of the restaurants but are still creating few adverse impacts on some restaurants in terms of decline in profits and decline in employment. In our sample, the extent of these adverse impacts is small. Further detailed study can throw light on what kind of restaurants are experiencing these adverse impacts. Some kind of intervention in terms of regulating the commission charged by these online delivery platforms can help to address the issue of declining profits and employment observed in some of the sample units.

The Rise of 'Khaabarwala': A Case Study of a Food Platform's Journey in Bolpur and Beyond

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Over the past decade, the food industry has witnessed profound transformations, notably with the emergence of food delivery platforms as transformative entities. The surge in popularity of these applications became particularly pronounced during the COVID-19 pandemic, marking unprecedented peaks in their adoption. Among the multitude of food delivery aggregators (ADAs) in operation, a locally-rooted ADA named 'Khaabarwala' has surfaced in Bolpur, a small city highly dependent on tourism. Despite its modest size, Bolpur has become a hotspot for tourists, attracting a considerable influx over the years. 'Khaabarwala' has managed to carve its niche in this market, competing with established industry leaders like Swiggy and Zomato, which have already expanded their services into the region. In the context outlined above, the study aims to unravel the emergence and journey of the 'Khaabarwala' food delivery platform. Additionally, it endeavours to scrutinise the platform's growth trajectory over the past year and delve into the strategies employed to establish a foothold in the Bolpur food delivery market. The methodology involves gathering both open-ended and closedended responses from the platform's owner and key stakeholders, namely delivery partners. This data collection encompasses documented order details, focus group discussions, and personal interviews. The findings are presented through straightforward tables, graphs, and narrative descriptions. This research unfolds as a distinctive case study within the realm of the platform economy, offering multifaceted contributions. In a market predominantly governed by industry giants charging premium prices, the entry of local-based platforms injects a competitive dynamic. Moreover, the prevalent operation of major platforms often results in the isolation of small and modest food establishments, such as 'kirana' shops. However, the emergence of local platforms holds the potential for fostering a more inclusive and sustainable business environment, benefiting not only the platform itself but also local small-scale eateries. The primary contribution lies in the elucidation of the strategies adopted by the local platform

to contend with industry leaders, providing valuable insights and guidance for those contemplating similar ventures but grappling with challenges. To fulfil this purpose, both qualitative and quantitative data have been used, incorporating participant interviews, focus group discussions, and the platform's monthly data. Despite seasonal fluctuations evident in the data, an interesting observation is noted: while the owner used to wait for at least one order, there are now instances where, due to a shortage of delivery partners, they sometimes halt order acceptance after a specific time. Furthermore, the owner is planning to expand the business to different cities. The implementation of this strategy is driven not only by considerations of scalability but also by the owner's deep-seated passion for the endeavour. This paper stands as a noteworthy contribution to its domain, offering valuable insights that can guide the success of other locally-based platforms. It provides a roadmap for these platforms to operate effectively and potentially carve out a substantial market share alongside established industry leader. The lessons drawn from the experiences of 'Khaabarwala' offer practical and instructive implications for emerging platforms seeking to navigate challenges, compete with larger players, and establish a significant presence in their respective markets.

Delivering more than just Food: Zomato's Menu of Information Asymmetries

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This study strives to investigate the intricate and complex realm of information asymmetries that exist within the gig economy, with a specific focus on examining the experiences of labour within the food delivery sector. In order to achieve this objective, our qualitative study concentrated on investigating the operations of Zomato, a prominent food delivery platform in Delhi. Through engaging in semistructured interviews with 200 Zomato delivery employees, we were able to unveil profound insights that offer a better understanding of the different dimensions of this phenomenon. The major questions that steered our investigation were twofold: firstly, we attempted to determine the existence of information asymmetries within the gig economy, and secondly, we aimed to identify the nuanced nature of these asymmetries. The findings of our study underscore the significant presence of information asymmetry within the Zomato platform. We identified five principal categories to systematically analyse and classify these asymmetries: information and privacy, price mechanism, evaluation, gig allocation, and grievance redressal. Every single one of these categories offers a comprehensive understanding of the multifaceted challenges that gig workers face. The information and privacy dimension critically examines the transparency and privacy aspects involved in the exchange of information between the platform and its workers. This analysis delves into the complexities of information sharing and highlights the potential implications for worker privacy. The price mechanism category delves into the fairness and clarity of the pricing structures implemented on the Zomato platform. By scrutinising the methods and criteria employed to assess worker performance, the evaluation dimension sheds light on

the mechanisms used to evaluate the quality of work performed by gig workers. Furthermore, the gig allocation category investigates the mechanisms that govern the distribution of tasks among platform workers. This analysis aims to uncover any potential biases or disparities in task allocation that may exist within the Zomato platform. Lastly, the grievance redressal category assesses the effectiveness of the mechanisms in place for addressing worker concerns on the Zomato platform. This examination is crucial in understanding the avenues available for gig workers to voice their grievances and seek resolution. By categorising and analysing these information asymmetries, our research makes a substantial contribution to the existing literature on this topic within the gig economy, particularly within the Indian context. The insights gained from our study have significant implications for various stakeholders, including academicians, policymakers, and practitioners. By shedding light on the intricate dynamics at play within Zomato's food delivery platform, we provide valuable insights that can contribute to a deeper understanding of the challenges faced by gig workers. Additionally, our research highlights the broader implications for the evolving landscape of the gig economy in India. The need for enhanced transparency and fairness in gig platforms is a key takeaway from our study. By identifying the specific hurdles faced by gig workers in the food delivery sector, we lay the foundation for informed policy talks and strategic interventions aimed at fostering a more equitable and sustainable gig economy. The findings of our study serve as a call to action for policymakers and platform operators to address the information asymmetries that exist within the gig economy, with the ultimate goal of creating a more balanced and just working environment for gig workers.

Participation of Women and Persons of Disability in Location-based Delivery Gig Work: A Case Study from Kochi, Kerala

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Platform mediated gig works constitute a recent addition to non-standard employment in the world. What makes platform gig work unique is the use of digital intermediation in commissioning and supervising work. While the same criticisms of rising precarious labour conditions and erosion of social security in non-standard work apply to platform mediated gig work as well, this employment model is often lauded for greater flexibility and autonomy and ease of accessibility. The potential of this employment model in democratising job opportunities and formalising informal economies are of particular importance in the global south. While gig work is considered to be a moonlighting job option in the global north, the job becomes an only source of livelihood generation for most gig workers in global south economies like India. This study looks at how democratic food delivery gig work is in including marginal sessions of the society in its workforce based on field observations from Kochi, India. Studies find that flexible working hours and autonomy over the management of work can attract women and persons with disability to the workforce. This study observes that the labour pool is dominated by able bodied men in the age group of 20-40 years. There is limited participation of female labourers and absence of persons with disability in the workforce. The absence of women and persons

with disabilities in an employment model hailed for autonomy and flexibility hence calls for a critical understanding of the working of location based gig work. The paper argues that the subsistence piece rate and target-based incentive system platforms in place of a guaranteed minimum wage is acting as an indirect coercion method to make the worker work for long hours to earn decent wages. Working long hours, while dealing with the risk elements of outdoor work is a concern for women and persons with disabilities due to various institutional and health related reasons. While for persons with disability the major institutional barrier is accessibility, for women the institutional barriers appear in the form of unpaid care work and the time poverty associated with it. Both the groups are vulnerable when it comes to capital ownership, in this case, owning a smartphone and two-wheeler. Women face the risk of sexual harassments of various forms at the workplace. For a disabled female worker, the risks are doubled. Even among able bodied workers, the health effects of working long hours riding a motor cycle is causing physical as well as mental health issues. More studies need to be undertaken to understand the health effects of delivery gig work on people falling under various disabilities. The paper observes that the bias and prejudice that prevent marginal sections of the society from participating in the traditional labour market have made their way into platform based gig work as well. While technology alone can't undo the societal conditioning, both platform agglomerates and government authorities can come together to design an action plan for ensuring decent working condition for women and persons with disability in platform gig work. The paper suggests incorporation of affirmative actions within the platform companies' work policy and app design in deciding work allocation and incentive conditions for marginal workforce with special emphasis on safety and health concerns.

Harnessing the Facebook for Online Marketing in Papua New Guinea: How does it Transpire?

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The Fourth Industrial Revolution and digital technologies could shape nations' growth story significantly. As digital technologies become ubiquitous, the digital economy is increasingly becoming the foundation of the modern economy. Digitalisation creates economic forces that facilitate firms' scope of enlarging, and economies of size, etc. Accelerating the digital economy is no longer an option but crucial for development and growth of any nation including the most unexplored and unconnected part of the world, the pacific island nation Papua New Guinea (PNG). Digital platforms are emerging as the new centre for business innovation, with emerging technologies providing the means to develop increased value additions and business models with enhanced performance. But, digital marketplaces in the context of PNG is at its nascent stage. The new waves of technology are an enabler of connecting the buyers and sellers in real time. In this paper, our interest is only digital marketing platforms, even though digital platforms play a contributory role in strengthening the former. The new waves of technology are an enabler of connecting the buyers and sellers in real time. Mobile penetration rate in PNG including one bang (basic phone) subscribers is 30 percent of the population, with a highly

skewed distribution tilted toward the capital city. Further, the enabling technology for online marketing has just begun or in the process of emerging. With one of the poorly developed digital technologies and hence the online marketing in PNG reporting one of the least internet and subscribers' rates, Facebook is somewhat used as an onsite marketing place in PNG. In this backdrop the questions raised here are: (i) 'Is E-commerce happening in PNG if at all other than Port Moresby? (ii) As an alternative, is S-commerce the possibility? (iii) If so, is the same S-commerce operating elsewhere works out for PNG? (iv) What is it that is working in PNG? To understand this, we explore the sample of online sellers via Facebook using the snowballing method of data collection during the period from April to May 2022. In this manner, we identified 242 Facebook online sellers during the survey period. Having explored these questions, the research further examines how the Facebook is somewhat used as an onsite marketing place in PNG. And lastly, we try to answer why E-commerce or S-commerce could not work in PNG? With this discussion, insight is drawn on the challenges of digital marketing in PNG.

My Male Colleagues Ask Me Why I Don't Work in a Mall Instead: The Gendered Labour of Gig Work in India

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Much research over the past few years indicates that the "flexibility" promised by platform-based gig work doesn't look like flexibility in practice for gig workers. Furthermore, what kinds of resources and social networks a gig worker has access to; the assumptions people make about them and their skill levels; and the stigma attached to them and the work they do because of their social location, all fundamentally shape how flexibility works for individual gig workers. A key aspect of gig workers' social location is gender. In this paper, we draw on Fairwork India's interviews between 2019 and 2023 to examine how gender shapes the way gig workers experience (in)flexibility in different aspects of their work. From the choice that gig workers make of sectors and platforms to work in, to their everyday interactions at platform hubs, hangout zones and customer homes, and the perceived safety concerns of their family members, the paper illustrates the gendered bones of gig work in practice.

TECHNICAL SESSION 1.4

The Platform Economy and the Changing World of Work: An Exploratory Study of Labour Market for Graduates

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Digital platforms have transformed the labour market for graduates in the economy. They facilitate job search, freelancing, and certifications. It is important that skills of students/graduates are aligned with the changing world of work and rapid technological developments. The aim of this paper is to explore the digital transformation of work and how it is influencing the demand for graduates. The focus is on graduates and the types of white-collar jobs and gigs available to them in the digital economy. The paper follows a mixed methodology approach where a quantitative study is conducted to analyse the job profiles, salary, qualifications and working model for full time and gig work. An in-depth interview of few gig workers is also conducted to highlight the difference between traditional full-time work and gig work, to trace their experience in the gig economy and understand their perception about the new changes related to artificial intelligence (AI). The paper compares and highlights the differences between traditional full-time work and gig work. Rapid digitalisation, low availability of high paying full time jobs, lack of employability and technical skills among the graduates has led to an increase in demand for white collar gig work among graduates. Study of digital platforms highlight that the majority of the job profiles are discipline specific and biased towards experienced STEM and business graduates. This shows that data driven technological advancements are changing the labour market and related job profiles for the graduates. This raises concern for graduates who have general non-technical higher education. Introduction of AI is likely to further disrupt the traditional work and job profiles. The experience of a student and experienced professional has helped in highlighting the differences and understanding manifold reasons for growth of gig economy among the educated. There is a dilemma associated with the choice between gig work and full time work. It is seen that discipline and experience also matter as graduates from certain disciplines have better job opportunities and higher salary in the labour market. Due to digitalisation and technological advancements some niche professions are also redefining the labour market for graduates. The gig economy is dichotomous where on one side experienced professionals and consultants enjoy higher payment and on the other side content writers, front end developers receive lower compensation. To some extent, lack of joboriented skills and decent full-time jobs has led to the growth of the gig economy among young graduates. On the brighter side, this growth of the gig economy is also leading to entrepreneurial

spirit among the graduates who have public networks and financial support. They are choosing niche professions like social media influencer/consultant, vlogger and exploring their capabilities. It is found that AI has immense scope of helping gig workers but there is also a possibility that it can disrupt the gig economy and replace humans by automating certain tasks performed by individuals. There is a need to further investigate the impact of AI and gig economy on certain non-technical disciplines and how they will cope in this phase of rapid changes and innovation.

Decoding Autonomy, Control, and Resistance in Indian Gig Platforms: A Modified Labour Process Theory Perspective

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In the contemporary realm of work, the emergence of platform-based gig economies has garnered significant attention, prompting an exploration into the intricate dynamics of labour processes, particularly focussing on the nuanced interplay of control, autonomy, and resistance within these digital landscapes. While gig platforms are conventionally perceived as digital intermediaries facilitating transactions between workers and customers, recent studies underscore their active role in orchestrating and influencing work processes, signalling a departure from the traditional understanding of the labour process. This study seeks to address the gaps in existing attempts to understand the evolving labour processes within gig platforms. The challenges lie in the inadequacy of prevailing theoretical frameworks and the need for empirical validation, particularly considering the unique characteristics of developing countries such as India. To bridge this gap, a modified Labour Process Theory (LPT) approach is employed, amalgamating essential concepts from various theoretical frameworks, and contextualising them within the specificities of the Indian gig economy. Key LPT concepts form the crux of the analytical framework. The concept of 'possessive individualism,' is used to explain the autonomy of gig workers. The concept suggests that the competitive working environment prompts individuals to act in their self-interest. The control mechanism in gig platforms can be noted as a form of 'techno-normative control'. Both the elements of technical control and normative control based on the consent of gig workers are evident in the gig platforms. This presence of techno-normative control in gig platforms is explained using the concept of 'obscuring production relations and securing surplus value.' The gig platforms obscure production relations by having invisible owners and managers. In the absence of physical managers, the possibilities for collision between workers and managers tend to be low and the self-managing tendency of gig workers may improve. The resistance in gig platforms is explained using the possibility of gig workers finding common spaces (online or offline) to share their feelings and concerns. The effectiveness of collective struggles then motivates the 'possessive individuals' to join in it when collective demands arise. This contributes to the development of a distinctive 'autonomy, control, and resistance' framework within gig platforms, acknowledging the complexity of power dynamics inherent in this evolving employment landscape. Empirical validation of the theoretical framework is achieved through an in-depth critical review of existing literature and the analysis of data sourced from the 'Gigpedia database of WageIndicator Foundation', which

encompasses news related to the gig economy in India. The cross-validation with empirical insights underscores the robustness and applicability of the modified LPT approach in elucidating the intricate dynamics within gig platforms. This research significantly contributes to both theoretical understanding and policy development in the context of the gig economy. As nations, especially developing ones like India, grapple with the complexities of this evolving employment landscape, the study provides evidence-based insights for shaping public policies. Moreover, it contributes to the vital theoretical question of 'how is the labour process evolving in capitalism?'

The Role of Caste and Gender in Defining Employment and Earning Outcomes in Gig Economy

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The expansion of the gig economy (also called the digital economy or the platform economy) in India is celebrated for bringing jobs to an economy which has witnessed largely a jobless growth in the past few years. For this reason, millions of workers in recent years have joined the gig work which is characterised by a great deal of built-in flexibility and absence of economic guarantees and social security. The number of service providers involved with various platforms has increased from 8.5 million in 2016 to 15 million in 2018; a number which must have increased manifold in the recent years. The precarity associated with the gig work also manifests itself in the absence of freedom to service providers in setting up prices for services, high volatility in the volume of work available, and the technology/algorithm based relationship being skewed in favour of customers and platform owners rather than in favour of service providers. It is commonplace that caste as a deeply entrenched social structure in India, and gender are known to influence labour market outcomes in different sectors of the economy. Dalits and women are known to face 'selective inclusion' in the labour market whereby they are engaged in lowly-paid, poor quality employment, and face strong entry barriers in fetching decent employment opportunities. Do the social markers of caste and gender add another layer of identity- based exploitation in the gig economy for the workers from marginalised groups? Or is the gig economy 'liberating' for the workers from marginalised communities because it is constructed manifestly on the absence of the direct managerial control? The above objective, which also forms the main research question of the paper, is addressed with the help of a set of sub-questions/sub-queries: 1. What are the factors that underline the participation or an undeterred entry in the gig economy for women and Dalits vis-à-vis workers from non-Dalit cates? 2. What kind of entry barriers are faced by women and Dalits in the entry barriers? 3. Has the gig economy in their perception helped them in evading the caste and gender based discrimination which is prevalent and widespread in other sectors of the economy? If yes, how? 4. How do women perceive the work opportunities provided in the gig economy? Has it liberated them and enhanced their participation in the economy? Or does the gig work poses before them other kind of challenges which hinders their prospects of taking up such work? 5. To what extent, social and economic status influences the entry as well as operation in the gig economy? 6. Are there regional variations in the extent of the role played by caste and gender in determining

employment and earnings outcomes in the gig economy? If yes, what are the underlying factors? 7. Is there any correlation between the size of the gig economy (in other words, demand for gig workers) and obfuscation of caste and gender identities in the gig economy? In other words, do the capitalistic tendencies in the gig economy have a potential to lead towards a labour market with no consideration for caste and gender? The study includes gig workers involved with cloud work with platforms like FlexingIT and UPwork to the extent possible. According higher importance to geographical tethered work (in terms of number of interviews of gig workers in this segment) in the paper is reasonable as the survey report by Boston Consulting Groups and Michael & Susan Dell Foundation (2021) reveals that more than 50 percent of gig jobs are driven by demand for low wage, low-skilled work, with only around 30 percent of the jobs demanding specialised skills. Given the nature of research objective as well as the absence of a proper data source on gig workers in India, findings of the study are based on the field survey among the gig workers conducted in four metropolitan cities spread across northern, western, and southern parts of the country.

AI HRM for the Gig Workers: A SWOT Analysis

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Technological advancements and innovations such as AI, machine learning, big data, robotics, and more are increasingly changing the face of gig work, facilitating the growth of the gig economy. While bridging 'physical' and 'virtual' boundaries, the breakthrough in information technology innovations is upscaling human capabilities, promising operational benefits to gig workers. This necessitates the urgency of addressing the much-ignored human resource management (HRM) of gig workers by the gig platforms. Because of this, the paper explores the role of HRM with AI blended gig platforms, addressing HRM functions from the gig platform (employer) perspective for gig workers (employees). We conducted a SWOT analysis for AI-dominated gig platforms, discussing the underlying strengths, weaknesses, opportunities, and challenges from the HRM perspective. Further, we also suggest HRM policies and practices that can guide practitioners in designing the HRM space for the new-age gig workers. To conclude, we assert the need to upskill and revamp HRM functions to match the needs of the changing nature of the workforce. Limitations and future research agendas are discussed. To date, HRM research in the gig economy appears to be centralised on the workers' perspective and related outcomes, with scant attention given to the employer's perspective on gig working models. With the rise in the number of online web-based & location-based gig platforms from approximately 142 in 2010 to more than 777 in 2020, engaging around 14 million active gig workers on just five Englishspeaking online web-based gig platforms, the adoption of gig working models continues to grow and is being sought by a large number of workers across the world. This is endangering the relevance of traditional organisation models to keep up with the AI-dominated gig work arrangements. Here, we put forth a framework for transformative impact, identifying the challenges and opportunities inherent in gig economy platforms for HRM practitioners and academicians. In particular, we highlight the scope

of human resource policies and practices from the gig platforms' perspective to facilitate employment relationships in the novel gig economic work arrangements. The developers of gig platforms emphasise more on the operational directions for gig workers, and the HRM perspective is often overlooked. Moreover, the technical or the diving team may not be from the HRM discipline to 'HRM loopholes' in the gig platforms. This might cost and affect the employing organisation on operational, technical, and legal fronts, necessitating urgent attention and redress. The paper is segregated into five sections. Firstly, we begin by reviewing the literature on the gig economy and discussing the scholarly work on HRM and AI in the gig economy. Then, we explore the bright side of digital platforms and their interaction with AI and HRM from the gig employer's perspective. We further discuss the challenges and opportunities emerging from this interaction for gig employers, gig workers, and human resource practitioners. To do so, we conducted a SWOT analysis of the AI-based gig platforms from the gig employers' perspective to suggest AI-augmented HRM policies and processes to address the ignored HRM role in the gig economy. The novel arrangement of work practices is critical to ensuring the balance between the choice of informal employment and the essentiality of social protection for gig workers by gig platform owners. After this, we discuss the theoretical contributions, practical implications, and future research directions. A conclusion follows to sum up the discussion and research agenda.

Digital Precariat in Urban India

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Digital platforms have transformed and restructured employment relations and work of the large segment of working population in the world. Time and geographically bounded work has been changed to task based. In absence of defined employer and physical workplace, digital platform mediates and facilitates workers' supply and consumers' demand. Digital platforms decide price, and fix the value share. While these platform workers are considered as business associates by the 'platforms', their class interests and conflicts (wage structure, mode and means of production, site of production, entitlements, employment and working conditions, collective action) resemble to others workers of the working class. However, this workforce faces different types of vulnerabilities which go beyond economic and social inequalities. Drawing Guy Standing's (2011) and Mike Savage's (2020) idea of precariat, workers in the various platforms are appeared as 'new economic class'. Hypothesis of the study is that gig workers are facing multi-dimensional work related precarity. The whole phenomena of digitalised work in India is urban centric. Following mixed methods research, this study is based on an on-going primary fieldwork of 700 transport gig workers covering major four cities (Chandigarh from north, Hyderabad from south, Mumbai from west, and Kolkata from east) in India. Workers from Uber/Ola/Indrive platforms are considered in the study. Drawing from Alkira-Foster's (2014) multidimensional poverty index (MPI) and PEPSO (2014), a precarity index is developed to examine precarity among digital workers across different trades, class, social group and region (cities). The precarity is measured on 0 (no precarity) to 1 (high precarity) relative scale. Unlike cloud work (mainly

desk and home based), the location of gig work (physical) is highly gendered (100% of transport workers are male). The workforce is young (73% of them belong to 18-39 age group) and level of education is high (86% of the workers are having secondary and above levels of education). Average dependents on these workers are six members. About 78 percent of the workers own their vehicles, of which, over two-third fall into debt trap owing to loan at exorbitant rate of interest from informal financial institutions. Although transport workers are into low level of income trap, they are forced to work for more hours (average daily working hours is 10.67 across four cities) to meet the expenses and monthly EMI for their vehicle. Work and income are task based. Hence, wage fixation is calculated based on piece rated (trip or delivery). Labour market precarity (LMP) is shown. Precarity stems from seven main indicators of LMP, namely, labour market, occupational health, income, work, skill, social security, and collective bargaining. Four main sources of precarity are more prevalent in this occupation, such as, occupational health (various health related diseases due to long working hours), social security (in absence of ESI or any other accidental benefits), income (insufficient income due to low income share), and representation (absence of unions or any collectives). Precarity varies from city-to-city and urban infrastructure-to-urban infrastructure. For example, transport workers in Mumbai (skips meals and more working hours) are more precariat than workers in Kolkata, Hyderabad, and Chandigarh. Wage theft is used as a method of value extraction. Workers face economic exclusion and intermediary extraction. Income and precarity gaps arose due to technological advancement. Platform workers establish 'quasi' relations with other members of the working class to mediate their voice and demand to reduce various forms of precarity and insecurities. In name of business partners/associates, data shows that digital workers are trapped in low value share, low piece-rated wage and digitally monitored 'cage', making these workers digital slave and new form of urban digital precariat as a dangerous economic class in the labour market. Further, we conclude that platform induced labour market is an extreme form of chronic poverty which is associated with high risk and uncertainty.

Food Delivery Platforms and the Regulatory Regime: A Survey Based Study

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The definition of 'work' has undergone several changes over time. Technological progress has been a major factor in challenging the existing definitions and statutes governing work engagements. Now, with automation, AI, big data, and other such technologies have meant less human engagement at work. Traditional work roles are evolving into increasingly flexible, on-demand and informal work. The new job roles being created, like the gig workers/platform workers where a platform acts as a digital intermediary in a labour market transaction faces a set of complications hitherto unknown to legislators, economists, and other experts. The new category of "platform workers" is a tertium genus and has characteristics of both "self- employed/contractor/independent worker" and "employee".

The regulatory vacuum means that the platform workers are at the mercy of the benevolence of the digital platforms. This power asymmetry establishes a need for study of the conditions of work and the regulatory environment in which these digital platforms operate. The study explores the existing statutes governing work engagements in India and identifies gaps and challenges in regulating the evolving nature of work, particularly in the context of food delivery platform workers. We perform a holistic analysis of all stakeholders including the food delivery platforms, platform workers, restaurant partners, users, and examine the need for a balanced regulatory approach by the state understanding that over-regulation may stifle the businesses and no regulation or under-regulation increases precariousness of platform workers. We examine the legal implications and responsibilities of digital platforms by analysing the terms and conditions of service of the platforms and how they operate in the real world in case of worker dissatisfaction, accidents or other unforeseen events. There is a need to study the data protection policies in light of the continuous surveillance by the digital platforms and the algorithmic work management practices and how this affects the working conditions of platform workers. The study uses data from a primary survey conducted in the Delhi-NCR region. The sample comprised of 30 food delivery platform workers working across the two major platforms operating in this segment (Swiggy, Zomato) in India. Through a structured questionnaire, the survey collected information on basic demographics, education and work life of the respondents to understand the employment relationship in the context of existing statutory legislations in India. We employ a comparative analysis approach to identify regulatory gaps and loopholes affecting gig and platform workers in India, contrasting international developments with national ones; undertake a qualitative approach to explore reasons for the expansion of business models, informal collective actions, and the impact of recently legislated acts like the Rajasthan Platform-Based Gig Workers (Registration and Welfare) Act, 2023. The study finds that workers are aware of the power asymmetry and understand the importance of collectivisation which is strikingly missing in this kind of a work arrangement. The issues pertaining to labour rights, challenges to informal collectivisation efforts of workers shall also be discussed in the paper. There is a significant difference between the gross earnings and net earnings of platform workers leading to heightened precariousness of workers. The other major challenges faced by workers include long distances travelled between orders (unpaid), long wait times, lack of social security benefits and its implications are also discussed in our paper. Several projections indicate a significant increase in gig work in near future. Therefore, such new kinds of working arrangements that are likely to be more prevalent require a pro-active regulatory environment for protecting the rights of workers to decent conditions of work. Hence, the role of the government in shaping the quality of employment in the platform economy becomes central. We intend to study and highlight this issue in our paper

Occupational Safety and Health at Platform Work in Guwahati

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Industry 4.0 has witnessed technological advancements in manufacturing and services, along with the promise of flexibility and independent nature of work. The platform economy is one such example where services are provided with digital technologies, that assures autonomy and flexibility. The NITI Aayog report (2022) estimated that the growth rate of the share of platform workers in India will be between 7.7 million (2021-22) to 23.8 million (2029-30) workers. At the larger level, it is observed that the share of platform workers are growing exponentially. However, the total number of quantity jobs is belittling the concerns pertaining to quality and health hazard of platform work. Existing literature on a traditional auto-rickshaw and cab drivers suggests that drivers face several Occupational Safety and Health (OSH) hazard challenges due to the intensity and physical strain of work that workers engages into. Contemporary literature on platform-mediated location-based work (transportation) also observed occupational vulnerabilities of job uncertainty and volatility, workplace fragmentation, and worker alienation. Moreover, perilous working conditions such as long working hours, lack of social security, bias towards clients, low wages, and regular surveillance using technologies have contributed to both physical and psychosocial risks. Notwithstanding, it is presumed that the vulnerabilities among platform drivers will be enormous because of the rapid rise in the share of platform workers in the near future. The working conditions of platform drivers in India are precarious due to inadequate regulation and the absence of resilient employment policies from the government and aggregators. At the national level, the Occupational Safety, Health, and Working Conditions Code, 2020, and the Code on Wages, 2019, do not recognise platform workers as a legal entity, resulting in a lack of accountability from both digital platforms and the state to ensure legitimate working conditions. Although the Code on Social Security 2019 acknowledges platform workers, it fails to regulate the platform economy as a whole, causing the state to neglect labour rights for platform workers. This inconsistency contradicts fundamental rights such of Article 19 (c), Article 41, Article 43 and others of the Constitution of India. Occupational Safety and Health for platform workers is still a neglected area in academia. Only few studies deal with the OSH of platform drivers, but they lack in-depth and empirical analysis as they have explored the OSH issues only through the health hazard without heeding out the pressing issues of legal entitlements and work-related risks. Thus, a more in-depth study is needed to understand the impact of technological advancement and technological supervision on the OSH of platform workers to create an informed policy debate and transpire a better policy-making. This study aims to bridge this gap in literature on the occupational safety and health of platform drivers. With the rapid technological advancement and increasing numbers of platform drivers, OSH cannot be ignored. The study will provide an interesting, in-depth, and holistic understanding of the OSH of platform drivers. The methodological approach for the study is both qualitative and quantitative. Descriptive

analysis has been used to understand determinants influencing physical and mental risks. Firstly, we attempt to relate and understand a routine work life of workers through documenting working hours, irregular meals, lack of sanitation, and lack of restrooms with physical health. Secondly, we explored the employee relationship dimensions such as experiences of harassment, surveillance, and grievance redressal with mental issues. For the qualitative approach, the drivers' experiences of health hazard and their perspectives on OSH has been recorded and analysed. The data for the study were collected using a structured questionnaire for quantitative analysis and a few open-ended questions for qualitative analysis. Convenience sampling method has been used in the study to collect primary data. The findings based on fieldwork conducted in Guwahati regarding the OSH issues of platform workers reveal that the platform drivers are struggling with physical and mental stress. Our finding finds that long working hours due to low wages, a lack of parking areas, insecurity at night, harassment from local authorities, lack of insurance, surveillance, and technological opacity are commonly prevalent among platform drivers.

TECHNICAL SESSION 1.5

Work Life Assessment: A Study of Gig Workers

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The Fourth Industrial Revolution(4IR) and the emergence of the digital platform have brought about innovative changes in the e-commerce logistics market. The digital platform is online-to-offline (O2O), which induces service providers and consumers to a virtual digital space to provide information and content services, commercial transactions and intermediation, among others, and create new values. This platform work is non-standard work, a new form of labour in the digital era, and gig workers are engaged in non-standard labour, such as temporary employment, dispatched work, and multi-party employment contracts. Gig work based on the digital platform allows startups to compete with existing businesses by lowering the costs of market access. Most of the literature has focussed on changes in the labour market, status analysis, and policy issues without understanding job insecurity, task instability, and the inferior quality of life experienced by gig workers. Thus, with the transformation in the labour market due to the 4IR and the expansion of the labour market platform, the current study aims to determine how service platform workers understand and perceive their working conditions with regard to quality of life and work-life balance. Two theories, work-life balance and quality of life, are meaningful indicators of the well-being of workers. Work-life balance is directly related to the quality of life and competitiveness of workers through a stable working environment and harmony with private life, and is a topic appropriate to assess the working environment and the quality of life for gig workers in the field of food industry. Furthermore, their opinion of the structural relationship between work-life balance and quality of life is empirically analysed in this study. The study uses quality of life and work-life balance to build a conceptual model; questionnaires were collected through an online survey of 247 gig workers using a convenience sampling method. Confirmatory factor analysis (CFA) was used in the study to evaluate the measurement model's appropriateness. Furthermore, the maximum likelihood method was used with structural equation modelling (SEM) to investigate relationships among the seven constructs in the suggested model. The study's findings indicate that, with the exception of "social support → overall QoL", there were statistically significant values in five paths: working environment \rightarrow overall QOL; leisure domain \rightarrow overall QOL; economic domain \rightarrow overall QOL; emotional domain → overall QOL; and overall QOL → psychological well-being. The components of the "work category" were shown to have less of an impact on the overall quality of life

than the economic and emotional aspects that fall under the life domain. The findings suggest that the fundamental solution to improving work and the quality of life perceived by gig workers is to improve the working environment and economic conditions. In particular, with the growing use of the platform in the labour market in the 'new normal' era, the protection of the rights of workers will emerge as an issue, due to the lack of boundaries in work, such as the lack of clear division between work and rest, and special employment status.

Platform Work and Working Conditions: A Study of Food Delivery Workers

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The ongoing technological revolution has changed the modes of transactions and businesses among people. In urban areas, technological advancement has enabled better, faster, and sometimes costeffective delivery of services. Digital platforms have emerged as an indispensable necessity for the delivery of personal and home-based services. Therefore, digital labour platforms have grown five times during 2010-2020, and nearly 8 percent of them are in India. India has emerged as a major supplier of digital labour, with its share in global supply of digital labour rising from 26 percent in 2018 to 34 percent in 2020, catalysed by the pandemic. Therefore, global discourse on gig/platform economy must include an understanding of the platform economy in India. The large, significantly young population, high unemployment levels, small demographic window (working-age population projected to peak at 59 percent by 2041, and the rapidly growing platform economy, further establish the necessity of examining India's gig/platform economy. Within this segment, food delivery has emerged as a swiftly growing industry, clocking a 10 percent growth during July-September 2023 alone. This trend has led to changing the nature of work and employment relations. This has raised questions about definitions of "work", "employee" and "employer", generation of "decent work" and conditions of work in the platform economy. In this context, this paper adds to the growing body of literature studying platform workers in India, particularly those engaged in the food delivery segment. A small survey conducted in regions of Delhi and Noida, helped in getting insights into the work life of workers undertaking food delivery work in the regions. Parwez and Ranjan [2021] show the precarious conditions of food delivery workers in India during the COVID-19 pandemic, arising from the work arrangements and lack of labour rights of the platform workers. This study also investigates some forms of precarities faced by platform workers in India and throws light into the challenges faced by such workers in the day-to-day work life. This study is based on a primary dataset collected through paper-based questionnaires in November 2023 in Delhi and Noida. Multiple efforts towards getting data from the platform companies (such as Zomato, and Swiggy) on their food delivery workers, did not yield any results. Therefore, a qualitative study (of 30 workers) was undertaken to examine the conditions of their work, at this stage. Given the short free time interval the workers have, care was taken to minimise their time commitment to the survey. Some of the key findings of this research were in line with the projections made by reports on the gig/platform

economy in India. Multiple reports have claimed that platform (food delivery, in case of NCAER) work witnesses maximum participation from the youth. The study sample mainly comprised of young workers, belonging to 18-28 years age group. Moreover, most of them reported being married and being the only earning members (70%) in the family, indicating some form of economic obligations to work. Despite the advertised higher flexibility and suitability of gig/platform work for certain groups, particularly women, their participation was found to be abysmally low. There were no females in the sample; however, the respondents stated having a few female colleagues. The reasons for this could be many and some of them are discussed in detail in my paper. Moreover, it was found that most workers work nearly 12 hours a day, on average meaning that this is "full-time" work for them. Earnings for workers are highly erratic, mostly weekly, with most of them having earned between ₹16,000-20,000 in October, followed by those who earned ₹30,000. The paper discusses more such findings related to the work lives of the workers. IV. Work through digital labour platforms is believed to offer greater flexibility (of work schedule) and autonomy to workers. However, in reality, platform operators have greater control over the terms and conditions of work compared to workers. This work establishes the need for state intervention and the need for regulating concerned businesses.

Social Security in India's Platform Economy: **Unpacking Supply Dynamics**

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As per NITI Aayog (2022), the share of gig and platform workers in the total workforce of India has increased from 0.54 percent in 2011-12 to 1.33 percent in 2019-20. NITI Aayog further estimates the number of gig workers in India to be 7.7 million in 2020-21, and estimate it to be 23.5 million by 2029-30. The Code on Social Security 2020 defines platform work as an arrangement outside the traditional employer-employee relationship. Thus, the growing number of gig and platform workers raise policy concerns related to the social protection of these workers. In this context, the objective of the study is as follows: To document and understand the existing mix of social security benefits provided by location-based platform businesses in India. To understand the challenges associated with the social security mix for the platform workers In-depth interviews were used to collect the data along with the review of relevant supporting documents that were either available publicly or made available to the researchers by the platform businesses. In-depth interviews were taken to collect data from the following participants: leading platform businesses (10) across four sectors in India who are operational in at least 4 states in India. These sectors were: ride-hailing, food delivery, e-Commerce, and professional home services; Staffing agencies (2) who provide workers to the platform businesses; Government institution (1) providing social protection at the pan-India level, housed under the Ministry of Labour; and Employment government institution (1) providing awareness, training, and education to workers at the pan-India level, housed under the Ministry of Labour and Employment.

We evaluated the social security benefits by the platform businesses over 10 different kinds of social securities, namely, accidental cover, term life cover, health and medical support, old age protection, education support for children, skill upgradation, access to credit, maternity cover, affirmative action for improving women participation to work, and other benefits. There are two key models through which a worker gets engaged with the platform businesses. The mode of engagement of the workers with the platform business could determine his/her eligibility for the social protection benefit. These models are direct engagement or through another party — a fleet owner or staffing agency. In the ride-hailing sector, the mode of worker engagement doesn't determine the eligibility of the worker for social security benefits provided by the platform. However, it does vary for the workers in the e-commerce sector. Among the 10 different types of social security benefits, the food delivery sector offers the most number of benefits among the four sectors. The eligibility criteria for the social security benefits varies across different platform businesses. Among the benefits accidental cover, education support for children, skill upgradation, and medical support in some kind were the common social security benefits across 4 sectors. The absence of old age protection was also common across all the platform businesses. The reason being that unlike traditional employment arrangements, platform work has a transient nature that makes it structurally difficult for a worker to accumulate a substantial corpus for old age protection through consistent long-term contributions. Some platform businesses are providing special benefits to the women workers to increase their participation. These include: paid menstrual leave, joining bonus, extension of POSH policies, etc. The cost of comprehensive health insurance poses a significant barrier in providing such coverage to platform workers. Between 2021 and 2023, health insurance premiums in India increased by 12-15 percent per year, surpassing the general inflation rate of 4.8-6.1 percent during the same period.

Role of Beauty Workers in the Gig Economy with **Special Reference to Sagar District**

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The gig economy known as the freelance or on-demand economy, refers to a labour market characterised by the prevalence of short-term, flexible jobs, often facilitated by digital platforms or online marketplaces. In the gig economy, individuals typically work as independent contractors, taking on tasks or projects on a temporary basis rather than being employed in traditional, long-term positions. The gig economy, characterised by short-term and flexible employment arrangements has witnessed a significant influx of workers across various industries. This paper explores the role of beauty workers in the gig economy, shedding light on the unique challenges and opportunities they encounter. The role of beauty workers in the gig economy is a dynamic and evolving aspect of contemporary employment patterns. As the gig economy continues to expand, individuals in the beauty industry are increasingly engaging in independent and flexible work arrangements. Understanding the role of beauty workers in the gig economy involves exploring the intersection of entrepreneurship, digital technology, gender

dynamics, and economic empowerment within the context of the beauty industry. As this sector continues to evolve, ongoing research and attention to the unique experiences of beauty workers is crucial to inform policies and practices that support the well-being and success of beauty workers in the gig economy. Beauty workers in the gig economy encompass a diverse range of professionals, including hairstylists, nail technicians and makeup artists, who leverage digital platforms to connect with clients. This study employs a mixed methods approach, combining qualitative interviews with beauty workers and quantitative analysis of platform data to gain comprehensive insight. This research contributes to the broader discourse on the gig economy by offering a nuanced understanding of the experience of beauty workers. Special attention is given to the socio-economic factors, digital literacy levels, and resource accessibility that shape the working environment for beauty workers, with a particular emphasis on the experiences of women in this sector. The research also investigates the influence of digital platforms on the nature of their work and explores avenues for leveraging these platforms to enhance economic opportunities. By concentrating on Sagar district, this research aims to contribute valuable and nuanced insights that can inform policies and initiatives aimed at improving the working conditions and empowerment of beauty workers in the gig economy at the local level. Insights from this study can inform policymakers, platform developers, and beauty industry stakeholders in creating a more sustainable and supportive gig economy for beauty workers. The findings shed light on the socio-economic conditions, digital literacy, and access to resources affecting beauty workers, particularly women, in this region. Additionally, the article explores the role of digital platforms in shaping their work environment and the potential for enhancing their economic opportunities.

Gig Workers Behavioral Intention to Participate in Gig Economy: A Bibliometric Analysis

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Gig economy is the new and emerging topic and has earned a considerable attention. Gig economy comprises flexible, temporary, or freelance jobs, often involving connecting with clients or customers through an online platform, and forms a large and growing section of the economy. This study aims to disclose the gig workers participation in gig economy over the 10 years, from 2014-2024. The Scopus database is used, where total of 821 papers written in English language are chosen from 1429 papers worldwide. Of which, 1192 papers are from economics, econometrics and business and 856 papers are article and review papers. Data visualisation and descriptive analysis were carried out using the bibliometric software Vosviewer. The findings revealed that over the past 10 years, there has been

a considerable increase in publications on gig economy. Due to its broader coverage of high-quality journals and structured formats that are compatible with the Bibliometric software, the Scopus database is the only one that was used for this study's science mapping. As the gig workers are increasing, policy makers need to consider the gig workers while developing the policy.

Navigating Algorithmic Management: Insights from Women Food Delivery Workers

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Navigating Algorithmic Management: Insights from Women Food Delivery Workers Mohammed Anfas K, Sandra Maria Augustian Abstract: The share of 'gig economy' platforms which act as digital 'intermediaries' between workers and customers is increasing all over the world. The recent report of NITI Aayog (2022) estimated 7.7 million gig workers in India. Along with this growing size of the 'gig economy,' the discourse around the gig economy business model is also on the rise. The limited entry and exit restrictions and ability of gig platforms to offer flexibility and freedom to the workers support the arguments to consider gig works as the 'future of work.' These peculiarities of gig platforms are improving female labour force participation. However, various studies consider gig work as a silver-coated version of contingent work, many of the gig workers lack social security protection and minimum pay for their efforts. The other major debate on gig platforms revolves around their algorithmic management practices. This paper specifically looks at the algorithmic management of the gig economy platforms from a gender perspective. Algorithmic management refers to the use of selflearning algorithms for undertaking managerial functions in an organization, thereby limiting human involvement in managerial tasks. The implications of algorithmic management in the gig economy platforms are diverse. Various studies have explored the implications of algorithmic management on the labour process, labour regulations, and the future of work aspects. The algorithmic management practices in the ride-hailing platforms, food delivery platforms, courier service platforms, and crowdwork platforms have been subjected to enquiries. However, most of the studies on the algorithmic management techniques of gig platforms are conducted in the context of the global north, and least studies have explored the topic from the context of the global south, especially in the Indian context. The gendered implications of algorithmic management have remained unexplored, and this study tried to address this gap in the literature. The study intended to understand the existing algorithmic management practices of food delivery platforms and explore the gendered implications of the specific system of algorithmic management in food delivery platforms. This qualitative research is based on 20 case studies collected from the pool of women and men gig workers from two major food delivery platforms in Trivandrum, namely, Swiggy and Zomato. The study revealed that the extent of gender inclusivity in food delivery platforms is limited by the existing social norms. Though the food delivery platforms offer easy entry and exit opportunities for the workforce, the pre-requirement of

a vehicle, driving skills, and basic English and digital proficiency are making the food delivery jobs inaccessible to the larger women workforce. Moreover, the general perception of "nights are unsafe for women" ultimately leads to the food delivery platform's policy of regulating the night rides of female workers. The care responsibilities and safety concerns act together and result in shortened working hours for women and create a wage gap. Though the gendered social norms are impacting the labour force participation, working time, and earning capacity of women workers, the findings do not support the argument of gendered subordination by the gig platforms. The concerns regarding complex incentive systems, algorithmic management, and work-related health and safety issues are common for all workers irrespective of their gender. Therefore, the study suggests that the policies for incorporating more female workers in the gig platforms should have a bigger focus on various social aspects of the problem than a narrowed focus on the gig platform itself. Keywords: Gig platforms, Algorithmic management, Gender.

Unveiling the Working Condition of Gig Workers: Evidence from Patiala City of Punjab

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The emergence of gig work has transformed traditional employment structures, providing workers with flexibility and autonomy but also posing new challenges in there working conditions. This study investigates unveiling the working condition of gig workers in this industry. This research endeavours to shed light on the intricate working conditions experienced by gig workers operating within the urban landscape of Patiala, Punjab. Through a comprehensive empirical investigation, this study aims to provide evidence-based insights into the multifaceted dimensions of gig work in the specific context of Patiala. The survey comprises 50 Zomato workers in Patiala city. The respondent consists entirely of males, indicating there is no female workers in Zomato's workforce. The predominance of younger, married participants with limited formal education underscores the demographic characteristics of Zomato's gig workforce. The extensive working hours, coupled with a short overall work experience, results in an intense and potentially challenging work environment. While the flexibility in choosing working hours is appreciated by many, concerns about the instability of income highlight the precarious nature of gig work. The reliance on incentives, especially for extra kilometres and weather conditions, introduces a variable aspect to gig workers' earnings. The absence of additional benefits such as retirement or pension for gig workers highlights the vulnerability of this workforce in terms of long-term financial planning and security. Issues related to exploitation, unfair treatment, and poor working conditions in this sector need to be addressed. Additionally, some gig workers frequently face unpredictable shifts and "hour famines," while others experience an oversupply of work, leading to extended periods of unpaid waiting time and uncertain working schedules. The lack of support and irregular schedules contribute to stress and frustration among workers. Exploitation and unfair treatment not only result in customer misbehaviour but also waste workers' time, impacting their

physical and cognitive abilities. The pressure to maximise income often pushes workers to ride faster, posing psychological and physical risks, especially considering the absence of health access, benefits, or accidental insurance provided by the company. Taking time off due to injuries can lead to income loss, and there is no support or security insurance for riders in such situations. The company's lack of support and communication is evident, as there is only one-way communication, with a middleman acting as a barrier between company management and workers. Despite attempts to reach out, workers feel unheard, and team leaders seem unresponsive to complaints. The company prioritises customer feedback over rider concerns, as evidenced by deducting payment from a rider's account for customerrelated issues like returned orders. Gig workers often express concerns about safety, particularly during nighttime shifts. Overall, the current state of affairs underscores the need for comprehensive reforms to address the myriad challenges faced by gig workers, including issues of exploitation, inadequate support, and safety concerns. The results are excessive working hours, income instability, and compensation concerns indicating potential dissatisfaction. Occupational health and safety issues, coupled with dissatisfaction and communication challenges, highlight the urgency to address worker rights for a stable and supportive work environment. Heavy workloads, and reports of exploitation or unfair treatment emerge as significant concerns among gig workers, reflecting a sense of instability and potential strain within this workforce.

Social Security in India: What Does the Latest PLFS Data Show?

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Social security is an important instrument for preventing and reducing poverty, inequality, social exclusion, and facilitating human development. It acts as a shock absorber when the economy and labour market are going through a churn. In ILO's Philadelphia declaration (1944), social security was accepted as a basic human right. Moreover, COVID-19 crisis has drawn our attention towards grim reality of social protection in India. Those workers who didn't have any social security protection suffered most during the crisis. This paper investigates the evolving landscape of social security in India, aiming to provide a comprehensive understanding of the trends and the extent of social security coverage across industries, employment categories, and job contracts with the help of unit level data of Periodic Labour Force Survey (PLFS) over last five years (2017-2022). This study shows that in the category of employed workers, the highest share of social protection is of regular workers and then followed by casual workers. However, coverage of social security is inadequate for regular workers as only 43-45 percent workers are covered. Further, as far as trend of social security coverage is concerned it is seen that for the last 5 years, i.e., 2017-2022, a declining trend has been observed across the employed workers, contractual workers, and major industrial sectors. This indicates that labour, whether regular or casual, is becoming more vulnerable to the uncertainties of life and the

economy. However, among all 8 categories of social securities, we have a found a rising trend in only one category of social security that is "only provident fund(PF)/health care/maternity benefit" in all the sectors and employed workers. This rising trend in one particular social security may be attributed to the COVID-19 crisis. In addition, coverage of social securities across broad categories of industries is almost negligible for casual workers unlike regular workers. Among those industries, it is noteworthy that regular workers employed in electricity & water industry and transport, storage & communication industry are comparatively better protected in terms of social security coverage than other industries. However, two industries, namely construction and hotel, trade & restaurant have been found at the bottom in terms of coverage of social security for regular workers. In conclusion, distribution of social security coverage is not uniform whether it is in employed category, type of job contract, or across broad categories of industries. Of all the categories, only regular workers are protected significantly. Casual workers are largely deprived of social security benefits. There too improvement is required. Because social security coverage has a direct impact on several key economic factors like growth rate of economy, standard of living, poverty, inequality, and human capital. These factors together determine the growth prospect of any country. Also, with the changing nature of job market, emergence of the gig and platform workers and capital-intensive production process, the need for social security has become paramount. Because it not only increases the bargaining power of workers but also improves the job quality. Further, climate change and uncertain weather pattern are also pertinent factors that bring uncertainty to the common man's life. Thus, due to these unfolding circumstances a robust social security protection is warranted for the workers.

Livelihood Strategies, Work Conditions and Satisfaction Level of Online Food Delivery Personnel

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The online food delivery is one of the fastest growing sectors at present and it is the core of the gig economy, which is a hot topic right now. It is a known fact that the changes in the gig economy have brought about changes to our occupations, our professions, our economies, and our daily lives, from newsreaders to taxi drivers to pizza delivery people to the unemployed. Kerala has the highest unemployment rate among major states—12.5 percent—compared to the national average of 5.0 percent. As of June 30, 2017, Thiruvananthapuram district is the top in terms of the number of job searchers in the general and professional/technical categories. The literature has shown a gap on livelihood strategies, work conditions and satisfaction level of online food delivery personnel. Therefore, the study was conducted to assess the socio-economic conditions of online food delivery personnel, to analyse their livelihood strategies, to evaluate their work conditions, and to examine the satisfaction level of online food delivery personnel. The study is based on the primary data. The calculations like percentage analysis and the frequency which are only required are used to analyse

the objectives. The area of working of the online food delivery personnel is confined to a boundary. One such important area is the Kazhakkuttam region, and the same is selected as the study area. In the Kazhakkuttam boundary the number of online food delivery personnel working at a time is approximately 350, of which 30 workers were taken as samples. Appropriate statistical tools are used for analysing the data such as tables, bar diagram, pie diagram etc., to analyse the data conveniently. The study found some crucial findings on the livelihood strategies, work conditions and satisfaction level of online food delivery personnel. The socioeconomic analysis reveals that, among the delivery personnel, most of them are youngsters as they are more likely familiarised with online platforms and majority of the delivery personnel are Hindu. The sample collected has no female worker as delivery personnel. As mentioned in the analysis, all the delivery personnel have the educational qualification SSLC and above. Some of them are still studying. The delivery boys opted this job because of their poor economic conditions. They can be considered as educated unemployed persons as they are over qualified for the job. Most of the delivery personnel are in below poverty line (BPL). The analysis on the work conditions and satisfaction level revealed that the majority of the delivery personnel face the problem of bad behaviour of the consumers as they set wrong location. All the delivery personnel said that the job was helpful to them even though they are not satisfied with it. Majority of workers say that for the last 4 months their return has been reduced as the companies employ labour over its requirements. This reduces the number of orders and the rate of boosts available to the existing workers which in turn reduces their income. It is also found that the insurance for the Uber eats workers is very crucial as it is available only for time of delivery. Insurance coverage is also as low as ₹5 lakh in case of death and ₹1 lakh in case of serious damages for both Uber eats and Swiggy delivery boys. In case of damages, the workers must be hospitalised at least for one day in order to get the insurance amount for the delivery boys of Swiggy. Moreover, Swiggy is found to be better in the views of delivery personnel. The implication of the study is that we can better know what is happening in the labour market with the changes like the emergence of online food delivery apps and how it affects the livelihood strategies and what is the scenario of the work conditions and the satisfaction level of the workers.

Designing for Racial Impartiality: The Impact of Relocating Host Photos on the Airbnb Website

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The paper delves into the complex and pressing issue of racial discrimination within the gig economy, focusing on platforms like Airbnb. It draws parallels between virtual interactions and face-to-face encounters, exploring the nuances of how platform design, specifically the visibility of user profile photos, can influence racial biases. Unlike some platforms that take proactive measures to mask race-identifying information, others, such as Airbnb, Upwork, and Taskrabbit, display profile photos, potentially enabling users to infer racial identities. A pivotal question emerges from this context: Can altering the salience of racially coded information, particularly host photos, have a tangible impact on mitigating racial discrimination? The study zeroes in on Airbnb's decision to remove host photos

from initial search results while retaining them on property profile pages. The overarching aim is to unravel the repercussions of this low-touch intervention on the persistent Black-White gap in host and guest outcomes. To rigorously assess this, the author harnesses publicly available data from hosts in 10 major U.S. cities within the Airbnb platform. This dataset spans a gamut of attributes, encompassing both time-invariant aspects (e.g., unit type, beds, baths) and time-variant components (e.g., reviews, ratings, superhost status). Additionally, the dataset includes textual reviews, providing valuable insights into guest satisfaction. The empirical approach adopts a difference-in-difference design, leveraging within-property and time variations in reservation timing, prices, and review content. The identification strategy capitalizes on key features of the data, particularly the reporting of when and for which date a night was sold, offering a nuanced understanding of whether a guest was exposed to the old or new website design. Contrary to expectations that removing host photos from initial search results could significantly curb racial discrimination, the study finds a different narrative. There is no substantial evidence indicating that the Black-White racial gap in pricing, nights sold, and revenue narrowed significantly following the website redesign. The magnitude of the reduction in this gap is both statistically and economically insignificant, ruling out any substantial progress. Furthermore, an in-depth analysis of guests' positive experiences, inferred from reviews, indicates no significant change in the likelihood that Black hosts receive positive reviews relative to White hosts. The overall conclusion is that the post-policy increase in the cost of discrimination, in terms of the search cost of time, was too mild to prompt guests to amend their discriminatory preferences. The study delves further into heterogeneity analysis to explore potential differential effects across various listing characteristics. While most criteria, including unit type, instant book status, and city demographics, show no differential impact, a notable exception arises in thin markets. Here, the racial gap in host outcomes narrows, possibly due to increased visibility of Black hosts in markets with fewer listings. In the broader context, the paper contributes substantially to the literature on discrimination in online platforms, shedding light on the role of salience-altering interventions. It builds upon prior work documenting discrimination on platforms like Airbnb and extends into the broader conversation on the behavioral impacts of manipulating information salience. The study, however, underscores the intricate nature of tackling discrimination in online spaces, hinting at the limitations of certain interventions even when they seem straightforward. As discussions around online platforms, discrimination, and transparency continue, this research offers valuable insights into the design choices that platforms grapple with in their attempts to mitigate discriminatory practices.

An Investigative Study of Women in the Cybersecurity Industry in India

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The cybersecurity industry is experiencing a multi-dimensional growth to make protection architecture more strong, resilient, automated and intelligent, in providing security against cybercrime and cyberattacks at the same time, innovation is said to be more effective if the team is diverse. In

this background, the paper discusses women in the cybersecurity industry in India on the basis of secondary data, and existing research, supplemented by discussion with women of two age groups i.e. i. Girls who are studying at the undergraduate level in engineering and ii. women with higher education degrees in STEM. Based on AISHE data, the paper argues that even though the educational system is producing a sufficient number of women in the cybersecurity sector more than one-third at the graduate level and almost two-fifths or more at the post-graduate, MPhil and PhD level of computer and information technology and the related areas were women in 2020, but as per the data of NASSCOM, only 21% of the countries cybersecurity workforce is women. As cybersecurity jobs are projected to grow at the rate of 32% by 2028 in India and the skill gap is expected to be of the tune of 42%, STEM women need to be trained and mentored to take a sufficient share of the job pie. The Ministry of Electronics & IT (MeitY) - started CyberShikshaa in 2018 with support from ISEA through which cybersecurity training is imparted to women tech. graduates from small urban and rural areas as a one-time education is not enough for the sector due to its dynamic nature. Since then, CyberShikshaa has continued to train in both offline and online modes. A similar skill-enhancing programme, the 'Privacy Module for Women on Break' was initiated in 2021 in collaboration with Microsoft India. The programme aims to impart skills for the DSCI Certified Privacy Professional (DCPP) certification among women professionals who want to join the industry after a career break. The industry has appreciated the effort and many alumni of the programme are working with tech giants like Accenture, KPMG, Standard Chartered etc. In 2022, the experience of CyberShilsha has been brought out as a Coffee table book for wider circulation. Some of the NGOs such as WiCyS (Women in CyberSecurity), Women's Society of Cyberjutsu (WSC), WoSEC: Women of Cybersecurity etc. have also emerged during the last decade for women in the cybersecurity industry to share their experiences and information to grow in their career. These efforts during the last decade have certainly benefitted as in 2013, the share of women in the workforce was merely 13%. However, what has been found as the largest deterrent in the discussion with women having STEM higher degrees is the male-dominated workforce of the cybersecurity industry. There is an unwritten division for work preference between male and female experts. Women are more in managerial work and men are more involved in hard-core technical work. They do not accept the fact it is only due to time constraints. Even for a consultant, she has to be there whenever required. Most of the surveyed college students have never seriously considered it. To broaden the base and to update the knowledge as cybersecurity is a dynamic field, there is a need to strengthen the continuous higher education system. Representative of the cybersecurity industry needs to visit colleges and deliver lectures to sensitise students about the nature, growth trends and challenges of the industry. They also need to offer internships and placement to women candidates to ensure diversity.

Revisiting The Gig Worker In India: **Evidence From The Periodic Labour Force Survey**

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Revisiting the Gig Worker in India: Evidence from the Periodic Labour Force Survey Manik Kumar Assistant Professor G. B. Pant Social science Institute, University of Allahabad maniktiwary@gmail.com manik@gbpssi.in Abstract The dynamic landscape of the Indian labor market has witnessed a paradigm shift with the emergence and proliferation of gig work. The present study tries to revisit the gig workers in India using national representative unit-level Periodic Labour Force Survey (PLFS) data from 2017-18 to 2022-23. Through a meticulous analysis of the survey data, this research aims to provide a nuanced understanding of the gig economy's impact on employment patterns, income dynamics, and socioeconomic conditions of gig workers across various sectors. PLFS data only have information regarding non-platform workers, so this study primarily focuses on one part of gig workers and excludes platform workers in the preview of the study. The basic idea of this paper is to critically evaluate the characteristics of gig workers given by NITI Aayog re-estimate using PLFS data. NITI aayog characteristics gig workers as non-agricultural workers, urban-centric, aged between 18-45 years, educated (higher secondary to graduate) and not belonging to the bottom 75 percentile of MPCE. In this study, we found a significant number of non-platform workers working in the agriculture sector, and many platform workers in Tier 2 and Tier 3 cities, age and education composition also vary from characteristics suggested by NITI aayog. Gig workers are classified into two categories first is platform workers those who are dependent on digital platforms or any kind of app for their work or task. Second is non-platform workers including casual wage workers and own account workers. The basic idea of this paper is to critically evaluate the characteristics of gig workers given by NITI Aayog re-estimate using PLFS data. NITI aayog characteristics gig worker as a non-agricultural worker, urban-centric, age between 18-45 years, educated (higher secondary to graduate) and not belonging to the bottom 75 percentile of MPCE. NITI aayog suggested gig workers located in urban areas. However, during the last five to ten years, online marketing companies' data shows a significant number of platform workers perform task-based jobs in tier 2 and 3 cities. Aayog also pointed out age (18-45 years) and education (higher secondary to graduate), but in this study we found there has been a significant difference in age and educational composition of non-platform workers. Present study strongly argue that India should prepare large dataset for gig economy that will capture major dimensions of gig economy as well as worker such as working conditions, job satisfaction, and financial stability etc. By providing an up-to-date overview of the gig worker landscape in India, this study aims to contribute valuable insights to policymakers, businesses, and researchers, fostering a deeper understanding of the gig economy's dynamics and its implications for the broader labor market. Based on our study we would like to suggest some policy recommendations for gig workers like defining and recognizing, explore innovative models for providing social security, potentially through a contributory fund to which both gig workers and platforms contribute, establishing mechanisms for determining fair compensation, considering factors such as working hours, skill level, and the nature of the gig, facilitate dialogue between gig workers, platforms, and relevant stakeholders to address concerns and promote a balanced relationship and encourage collaboration between platforms, government, and educational institutions to offer relevant and up-to-date training modules.

THEME 2



GROWTH AND EMPLOYMENT

KEYNOTE PAPER

The Great Disconnect India's Story of Growth without Decent Employment

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The Indian story of growth is no doubt a remarkable one especially since the launching of neoliberal economic reforms in 1991. It is now celebrated as the world's fastest growing economy. Yet in this remarkable story of growth there is a hidden disquiet in the form of a stubborn inability of the economy to transit towards a more decent employment regime characterized by gainful employment to all as well as providing employment and social security. The challenge seems so formidable that one could even discern a 'great disconnect' between growth and decent employment. The high growth is mostly, if not only, limited to the service sector. In this lecture I will summarize the main features of this great disconnect that have several manifestations. This great challenge has been further complicated by policy errors and unanticipated calamities in the form of the Covid-19 pandemic. The net result has been an increase in the category of self-employment such that it has once again emerged as the largest segment in the category of working people in the Indian economy. This is in addition to the category of those who are out of work and education but not currently seeking work. Both these categories are unacceptably high among women in the economy resulting in their low work participation. The low quality of employment in terms of low wages, casual nature of work as well as unpaid family labour are high among the socially disadvantaged sections especially those belonging to the categories of Scheduled Castes and Tribes. Since the incidence of the less educated is also high among these sections, the social dimension of India's employment question is another feature of this great disconnect.

It is in this almost stubborn employment scenario that the Indian economy has attained high rates of aggregate growth that is now officially celebrated as the country attaining the fifth largest economy position in the world and poised to become the third. Such over exuberance almost reaching the point of boast has hardly generated any serious public debate on the employment content of such growth and the continuing misery of a vast majority of people. The larger global context in which such a growth process taking place is in the midst of an unrelenting process of 'creative destruction' a la Schumpeter in the advanced economies including China giving rise to future uncertainties in the ability of the Indian economy to create decent employment. Although the process creative destruction has generated new jobs, they have largely bypassed the less educated – the larger segment – in the society.

As such further technological changes that are now knocking at the door in the form of frontier technologies are certain to bypass the less educated more aggressively than in the past. The human side of this process of creative destruction is that the losers are mainly the poor and rural residents who are also mostly less educated and gainers are the urban residents with better education.

Will this great disconnect then become a perpetual trap is then the most important question facing the Indian economy. Are there policy options for a more inclusive process of employment generation especially to the less educated in rural and urban areas who could also benefit by the advances in technological progress sweeping across the country. I argue for a policy shift to focus on addressing the developmental deficits mainly in rural areas while making a conscious policy choice to apply the technological advancements to benefit the hitherto neglected sectors as well as the people.

TECHNICAL SESSION 2.1

Spatial Inequalities in Household Earnings in India: Role of Urbanisation, Sectoral Inequalities, and Rural-Urban Differences

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This paper is a contribution to the literature on factors determining inequality within countries. Our focus is on understanding spatial differences in household earnings in India, which is among the most unequal countries in the world. India is characterised by a lack of convergence in per capita net state domestic product across Indian states. It is hypothesised that as the benefits from agglomeration are still being realised; larger, richer regions will benefit at the expense of smaller, poorer ones. This would further exacerbate inequalities. In this paper, we analyse data from Periodic Labour Force Survey (PLFS) 2018-19, which provides a complete description of household earnings, and is representative at the national as well as the sub-national level. Unlike the earlier rounds of employment and unemployment, the PLFS 2018-19 has information on earnings from all labour market activities including selfemployment. Using the PLFS, we can calculate the monthly per capita household earning (MPCHE) which is the ratio of total monthly earnings of the household to the household size. Thus, in a notable departure from the existing literature on inequality in India, we focus on household earnings rather than on consumption or wage inequality. Our key findings are as follows. Firstly, we establish large differences in median MPCHE at the sub-national level. Secondly, for the year 2018-19, we estimate the inequality as measured by Gini coefficient for India to be 0.45. This is lower than that of Brazil, China and South Africa, three countries with which India is typically benchmarked. We estimate inequality in rural and urban MPCHE, to be 0.366 and 0.456 respectively. Thirdly, we find that MPCHE inequality as measured by mean log deviation is 0.341 for all India, and when we decompose this by rural and urban, we find that the between-group component accounts for 20.6 percent of inequality. Shorrocks and Wan (2005), who review the cross-country studies on decomposition of earnings inequality by rural-urban, find that the average share of the between-group to be 19.6 percent. Fourthly, using a

regression model, we find that the average MPCHE in the bottom ventiles is lower when inequality is high. On the other hand, inequality is positively associated with average MPCHE for the top ventile. While the evidence is not causal, it suggests that we need to understand the consequences of inequality for the growth of income of poorer households. Using consumption survey data, Kumar et al. (2022) pool together all the consumption distribution percentiles across states and sectors to find that, on average, inequality is positively associated with individual's consumption. However, our results suggest that inequality's relationship with earnings differs, both in magnitude as well as direction, across various points of the earnings distribution. Lastly and most importantly, we show that inequality in India is predominantly a within-state phenomenon, with between-state differences accounting for only about 15 percent of total inequality in MPCHE. Given their importance in determining national inequality, we attempt to understand the drivers of inequality within India's states by unpacking the relative importance of urbanisation in explaining differences in inequality in household earnings at the subnational level. For this, we adapt a decomposition method developed by Mookherjee and Shorrocks (1982) to answer three questions: How much of the difference in state and all India inequality is because of difference in urbanisation rate within a sub-national region, i.e., a state, and India? How much of it is attributable to the difference in the relative mean urban-rural earnings? And how much difference is due to differences in inequality within rural and urban areas? The decomposition reveals that the relative importance of differences in within group inequality, urbanisation and in rural-urban mean MPCHE varies across states. In some of the poorest states, the average rural-urban earnings differential is surprisingly large, which in turn contributes to higher overall inequality. In contrast, in some of the more urbanised states, their inequality is lower than all-India on account of lower ruralurban disparities and lower within sector inequality.

Self-Employment in Indian Manufacturing: Features of Persistent Self-Exploitation in Contemporary India

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This paper examines a few features of self-employment in the Indian manufacturing sector primarily using the Periodic Labour force Survey (PLFS) data from 2017-2022 rounds. More specifically there are three 'atypical' features that are empirically established in this note. Upon delving deeper into these features, we observe a persistence of 'self-exploitation' in the that has become innate nature of the small producers of Indian manufacturing in contemporary India. Firstly, throughout the last six years, on an average 45 percent of manufacturing employment happened through self-employment in India. Among the self-employed workers, 50 percent of workers are unable to earn socially necessary (requirement) wage. We refer to socially necessary wage as the median weekly wage of agricultural workers in rural India and median weekly wage of construction workers in urban India. This is the first quantitative measurement of self-exploitation in the sector. A large section of selfemployed workers was not able to earn even meagre earnings that casual daily workers earn from their

engagement throughout the period. Secondly, even though one can identify characteristics of 'petty commodity production' as a persistent feature within the manufacturing sector, self-employment is however differentiated, like any other family-based enterprises (say peasantry). It is in this context of differentiation: we have analysed the bottom two earning quintiles among the self-employed workers in the manufacturing sector. These bottom quintiles do show a predominant social character marred with caste and religious norms (discriminatory) being reinforced. Especially Muslims, scheduled castes (SCs), and other backward classes (OBCs) comprise more than 80 percent of the workers in bottom two quintiles in India. Finally, we observe that one of the processes through which this distress is mitigated is the 'social reproductive squeeze' of working age women. This is usually the atypical feature of Indian petty commodity production. More than three quarters of the self-exploited workers in the manufacturing sector are self-employed women in the sector. A cross-sectional illustration from the Time Use Survey (TUS 2019) data shows that self-employed women in manufacturing spend almost thrice more time in the unpaid household care activities when compared to men. Persistence of lowearnings from the self-employment (self-exploitation) is therefore mitigated by the 'unpaid care work' provided by the working age women in the household. In other words, gendered care activity overexploits women within the confines of the household, since the marketed value of work (especially for women) is not able to provide enough subsistence to 'reproduce' one's own labour power. It is in this context: we have situated a larger theoretical framework. Stylised facts suggest that the atypical structural transformation of Indian economy gave rise to a low-labour absorbing manufacturing sector. While a certain section became part of the Industrial Reserve Army of Labour (IRAL). Marx's theory of the relative surplus population, or reserve army of labour, provides the answer to this conundrum. It is characterised as the group of jobless workers whose vigorous labour market competition keeps wages in check. This population excess normalises profit and drives down wages. Sweezy (1940) refers to the reserve army of labour as "the pivot upon which the demand and supply of labour works'. In the Indian development trajectory, we propose an extension of the three problematics posed by Harriss-White and Jan (2019) through petty commodity production. There is perhaps a fourth problematic, where self-exploited workers act or mimics the role that Industrial Reserve Army play.

Linkages between Growth and Employment: **Back to the Basics**

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It is well-known that the conventional (mainstream) wisdom in Development Economics places enormous faith on growth of domestic output (GDP), to take care of not only the challenge of employment generation, but several other markers of economic and social well-being. Furthermore, such wisdom also presumes considerable legitimacy for the view that as the Modern Economic Growth (MEG), to use the expression that got currency from Simon Kuznets, gets into the groove, the trends in output and occupational structure, with respect to the broad sectors (e.g. Primary, Secondary, and

Tertiary) are more or less correlated with each other. In other words, capitalist development is supposed to be characterized, in mainstream discourses, by similar speeds of adjustments in shares of output and employment across the major segments of the economy such as Agriculture, Industry, and Services.

As is well-known, it was around the middle of the 20th century that the so-called Development Economics was coming into being, due to several dissenting voices vis-a-vis the dominant theoretical tradition during the Inter-War years; in particular, the contribution of the Keynesian Revolution was seminal in this process. It was in such a context that contributions from scholars such as Colin Clark, Simon Kuznets, Arthur Lewis, among others, became powerful stylized representation of the above two claims, based largely on the presumed economic transformation trajectories of the so-called First World countries, in the emerging development economics literature.

It is important to highlight right away that what I have flagged above as the two powerful elements in the conventional wisdom framing the stylized strait-jacket pertaining to the growth-employment connect in transition pathways under capitalism, across time and places, is seriously inadequate, to put it mildly. There is already a large literature that has examined these issues in great detail, for several decades now. Nonetheless, a fascination with growth-fundamentalism and its "virtuous" spin-offs remains a prominent feature of much of the mainstream discourses even at the current juncture.

In this paper, I begin with brief conceptual overview of the relevant issues in political economy discourses with a special focus on the Marxian tradition, to highlight a couple of powerful messages, which are of great relevance with respect to the growth-employment linkages. The next section of the paper is an engagement with the experiences pertaining to the issues flagged above, during the recent decades; I provide a very brief account, almost like a snapshot, of the global trajectory since the early 1990s, and then look at the relevant outcomes for the Indian economy. The paper seeks to make a strong case that the factors such as the nature of macroeconomic policy regimes, class dynamics etc., highlighted in political economy discourses, are critical to understanding the nature of growth processes and a range of outcomes relating to employment, occupational diversification, etc.

Quality of Employment in India and its Determinants

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In India, despite a liberalised, efficiency-oriented, business-friendly environment, the expansion of the formal industrial sector, the so-called good governance initiatives and a high rate of growth for a prolonged period, India fails to meet the targets of 'decent work', i.e., large-scale productive and remunerative employment creation, comprehensive social protection for the working people, rights at work in general, and universal scope for dialogue/bargain at the workplace. The quality of employment in India is not only low but is miserable compared to most countries in the world. In this context, this paper analyses India's employment quality across rural-urban locations, social groups and gender, using a composite index based on certain dimensions of decent work as proposed by the International Labour Organization (ILO): 'employment opportunities', 'stability and security of work', 'social security'. A

composite index of quality of employment has been created by aggregating these three dimensions. We go deeper beyond the overall level of quality of employment and explore its heterogeneities; and try to identify the determinants which could explain the (lack of) quality of employment in India, using both the micro and macro level aspects. The paper uses the nationally representative unit/individuallevel data published by the Government of India for the period 2018-19. To identify the depth of heterogeneities or relative deprivations in the quality of employment in India, non-parametric twoindependent sample mean difference tests across rural-urban locations, social groups, and gender have been done. The ordered logistic regression has been applied to find out the probable determinants of the extent of quality of employment. The main findings of the paper are: (a) not only the overall quality of employment in India is poor, but also there are significant differences across locations and social groups, i.e., significant deprivations of the disadvantaged, and (b) although the individual/household level factors, such as age, education, skills, social and religion identities are significant in explaining the variations in employment quality, intriguingly, at the macro-level (sub-national state-level), factors such as the overall volume of economic activities, extent of quality of governance, the flexibility of business regulatory environment and better labour-law compliance negatively influences the quality of employment. The fundamental finding is that, despite a consistently high rate of economic growth the quality of employment in India is poor. This may be because of the proliferation and expansion of informal sector, which perhaps is the result of limited generation of quality employment. This could be due to a bias of the government policies (pro-business policies) towards the capitalists. Capitalists driven by accumulation motive would have an inherent tendency to informalize parts of their production chain to reduce input costs. This informalisation undermines labour protections, wage improvements, social security measures, labours bargaining power etc. All these adversely affect the quality of employment. Thus, this paper suggests that the policy environment and the economic growth pattern drag the quality of employment in India. Given this, we suggest a variety of countervailing policy options and the role of civil society and politics in this context.

Spatial Analysis of Unemployment – A Study of Indian States

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Economic growth over the last few decades in India has been high but unequally distributed, as reflected by the growth rate differentials and disparity across various states. Several studies have observed spatial differentials in growth and employment potential across states. Regional unemployment rates are considered an important indicator of the socio-economic performance of regions. Regional differentials in unemployment have attracted considerable interest in the economic literature. Regardless of this interest, spatial unemployment differentials do not constitute the core of regional economic development. Primarily, the majority of these studies concentrate on the growth and convergence issues across the regions/ states. Developments in new economic geography (NEG) have opened up new dimensions for the study of economic agglomeration. It suggests the possibility of the existence

of multiple equilibria- with main focus on income instead of employment/ unemployment. Similar to recent advances in NEG, the field of economic history has also been realigning, using the framework provided by NEG to analyse and relook at the initial stages of industrialization. Also, the new economic geography—according to which multiple equilibria may exist—focuses attention on income rather than on unemployment. However, an ample number of empirical studies attempted to expound the differences between unemployment rates and geographical regions. These studies reported some noteworthy facts like; significant difference in the labour markets across regions; unemployment levels are more persistent in some regions as compared to others; reasons for the persistence of unemployment in a region can be due to poor wage flexibility and low mobility. Regional labour market issues have been widely researched in the regional economic literature. The studies on regional unemployment have been primarily focused on the existence of unemployment differentials and its determinants, using time series data and standard parametric and non-parametric statistical methods. This paper explores the spatial contours of unemployment across major Indian States using spatial econometric methods—based on spatial autocorrelation techniques—to explore the geographical distribution of unemployment across major Indian States over the years. An attempt is being made to test time and spatial persistency in the Indian labour market. Methodology Spatial econometrics incorporates spatial interaction (spatial autocorrelation) and spatial structure (Spatial heterogeneity) into regression analysis. There has been an increase in the focus on location and spatial issues in applied as well as theoretical econometrics. Earlier its usage was primarily in regional science, urban studies used data that was collected with reference to location measured as points in space. Each regional unit is a location, a point in space. Spatial dependence hence leads to the use of Spatial Econometrics. Spatial objects tend to relate with one another and the common types of spatial association are: Spatial autocorrelation: similar (dissimilar) values in space tend to cluster together Spatial heterogeneity: spatial regimes, and space is not homogeneous. Autocorrelation and heterogeneity are closely related Presence of spatial association violates an important OLS assumption of independence. Spatial association/dependence in data means that in location space one observation (i) is associated with other observation (j) and i ≠ j. Observations closer in location space would indicate a greater degree of spatial dependence than those which are far away. The strength of spatial dependence is inversely related to the distance, i.e. it would decline as distance increases across observations in location space. Distance and Contiguity are important for measuring spatial dependence. The Spatial Association has also been measured through Moran I. Local Indicator of Spatial Association (LISA) is the local version of Moran's I Data The data has been used from the Consumer Pyramids dx database which provides detailed data on employment/ unemployment status. The paper is structured as follows: an introduction is followed by theoretical constructs of regional unemployment disparities in labour markets. The next section presents some underlying characteristics of Indian labour markets. The following section introduces the statistical models and the data used in our empirical application. In the final section, the empirical findings are presented and interpreted followed by a conclusion.

Revisiting India's Struggle for a Credible Industrial Policy towards Growth and Employment since Colonial Times Insights from Tamil Nadu's Experience

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In no other realm of public affairs were the difference between British and Indian perspectives as wide, indeed as fundamentally irreconcilable as in that of economic philosophy and financial and industrial policy. To begin with, the British allowed mercantilism to be the guide; after 1813, free trade became the standard viewpoint. Mercantilism protected British manufacturing and shipping from Indian competition and this principally served British interests. After British cotton manufacturing became the most efficient in the world, protective policies were no longer necessary, and through free trade inflicted a devastating influence on Indian manufacturing. By way of recompense. later, the British sought to improve the economy of India through programmes of capital investment, agricultural technology, and public works but these were never notably successful. The beginning of the 20th century saw the rise of a nation-wide agitation for economic self-sufficiency - the Swadeshi movement - with renewed and vociferous demands for fiscal reform, especially tariff protection for indigenous industries and discriminating intervention in favour of Indian industries. While there was acceptance later of the need for the state to intervene positively to promote industrialisation following protests from locals, the colonial state was reluctant to translate intentions into fruitful action even when industry was declared a provincial subject. This was discernible in the inadequate fiscal/financial autonomy provided to the provinces. What also comes out clearly from a reading of the colonial documents is the inability of the state then (as of now) to involve the private sector/indigenous entrepreneurs in the process of planning for industrial development even after realising that the successful implementation of any plan would require the active collaboration of the private sector. While the colonial government's agenda was never about making India an economic power house, our examination of the attempts at economic development through industrialisation in post-independent India, with Tamil Nadu as case, illustrate in no uncertain terms the abject lack of coherence in the different components that were put together as constituting an industrial policy. The attempt in this presentation is to bring together insights from papers written over a considerable period that begin by tracing the rudimentary evolution of an industrial policy in erstwhile Madras Presidency followed by attempts to foster industrial development by examining some specific aspects of the growth and development of industry in Tamil Nadu in the post-independence period. Besides, issues germane and integral to achieve growth and development, namely, human resource development in terms of education and skill development, including the role that gender has played in such development, are also covered. The central argument of the above exercise is to concretely illustrate a point emphasised by scholars such as James A. Robinson, namely, that, while there are good reasons to believe from economic theory that industry policy may be socially desirable and may stimulate growth and development, yet, the difference in outcomes among nations following similar policies lies in the politics of the different societies that adopted the policies. As pointed out by these same scholars and borne out by our papers, policies driven by the desire to maintain political power are generally inconsistent with economic growth. Good economic policies are necessary but fail miserably when not proposed in a way for them to be endogenously chosen by those with the political power to do so.

TECHNICAL SESSION 2.2

Transcending Boundaries: Global Value Chains, Structural Transformation and Labour Market Outcomes

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The issue of global value chain (GVC) has paramount importance and has become a key structural phenomenon of recent world trade and payments. It (or, trade in intermediates) offers natural advantages to economies that possess comparative advantage at various fragmented stages of production. Broadly speaking, a developing country can engage in GVC in two ways: (i) either by domestically producing at different stages of production and then importing the intermediate input for the remaining stages so that it can finally sell the goods in the world market and/or (ii) just produce and export intermediates or fragments to another country. The first aspect of GVC as mentioned above is similar to that of vertical specialisation as shown long ago by Sanyal (1983). It shows the import of intermediate inputs from abroad to produce the final exportable product. This is also known as "Backward GVC". The second aspect is known as "Forward GVC" which is the export of intermediate products by the home country to the rest of the world. The aim of this paper is to theoretically examine, whether participation in GVC helps alleviate some of the fundamental structural issues in a developing economy. In so doing, we develop a general equilibrium model of GVC trade. Our analysis of the model reveals that engaging in trade within the Backward GVC exacerbates the wage disparity between skilled and unskilled workers and fosters the informalisation of the workforce. Conversely, trade within the Forward GVC diminishes informalisation, yet its impact on wage inequality remains ambiguous. Notably, in the case of the Forward GVC, the decrease in informalisation does not translate entirely into increased formalisation, as a segment of the workforce ends up in the agriculture sector. These outcomes stem from the structural characteristic wherein the exportable intermediate sector is capitalintensive, while the urban informal sector is unskilled labour-intensive. Thus, trade participation in GVC may not produce symmetric outcomes in the labour market if the general equilibrium interlinkage effects, as well as the factor-intensity distinctions between GVC and non-GVC sectors, are carefully

dealt with. Moreover, our findings also indicate that capital owners will prefer participating in Forward GVC rather than backward GVC since their return on investment will be greater in the former. Another crucial aspect of our model is that augmenting investment (rise in capital stock), coupled with increased trade in intermediates, becomes essential for the system to amplify the benefits derived from GVC trade. This is because, given the factor-intensity of sectors, with an increase in capital stock, the capital-intensive formal sector expands while the labour-intensive informal sector contracts without affecting the agricultural sector. consequently, increased investment results in a reduction of informality, reflected in the formalisation of the workforce without diverting labour to the agricultural sector. Furthermore, we find that such an increase in investment leads to an endogenous increase in trade participation in Forward GVC. Interestingly, we show that trade participation in one type of GVC may crowd out trade in the other form of GVC. For, instance, a higher trade participation in Forward GVC is found to crowd out trade participation in Backward GVC. In our robustness check, this crowding effect intensifies to the extent that one GVC sector shuts down or vanishes while the other expands. The results of the paper are robust to the specification test of the model.

Gendering the Gravity Model of Migration in South Asian Context: Evidence of Capabilities-Growth Nexus

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The present paper examines the drivers of women's migration from South Asia and changing patterns of women's mobility that is shaped both by economic and non-economic determinants. Often the migration analysis has often looked at pattern and forms of migration and classified migrants as 'South' or 'North'. While the former is considered to be belonging to low income, poor skilled manpower, those from the latter as high income and high human capital labour. This distinction has entrenched the understanding of the larger theorisation of migration processes. While the explanation of Global North labour has been addressed in migration theories, conceptualisation of Global South migration continues to be at the nascent stage. One of the main reasons for the changing economic structures in the Global South was the comparative advantage that the Newly industrialized countries (NICs) and other late-industrialising countries sought in terms of abundance of cheap and flexible labour. Women in South Asia are more likely to be concentrated in informal and unorganised sector occupations. This sector is typified conditions of flexible specialisation, organising through sub-contracting, sweatshops, and home-based production systems where workers often do not fall under the purview of the state regulations making them vulnerable and insecure in job, work, skill reproduction and representation in the labour market. Increasing casualisation, contractualisation, rise in self-employment and home-based activities and feminisation of the labour force are visible as a structural dimension that is common across most economies. This paper focusses on "South Asian Migrant", it reflects on the complex process of how contiguous boundaries, ethnic commonalities, historical linkages have been shaping lives and well-being of the migrants in general and women's mobility in particular. The

analytical analysis provides critical perspective of the limitation of contemporary migration theories for India, Bangladesh and Nepal. The gravity model estimates for panel data (since 1990) examines determinants of migration using the Lewer and Van der Berg, (2008) the gravity equation. Evidence shows that women migrants follow similar pathways but yet are distinct in their choice of destination. The hypothesis is tested for effects of human capabilities and human capital determinants. We find that female migration and rely significantly on socio-cultural determinants and level of human development in destination. Qualitative dummy variables like the political stability and cultural affinity are extremely crucial in determining women's migration. The empirical panel data analysis highlights that the clubbing of the most developing countries with an umbrella nomenclature Global South, has created a monolithic understanding of migration process. While the aggregate understanding has contributing to distinct categories across North and South; the camouflaging of all the southern countries into a single category has oversimplified the analysis. Given the complex processes, the paper calls for South Asian dialogue on migration to reorient itself these dynamic determinants of migration for women to protect and promote their global mobility. Even more discerning is the fact that the gender analysis has narrow representations of male and female groups. Such a narrow conceptualisation has impacted data systems that have often failed to enumerate population groups due to ethnic commonalities. Thus, the regional policy on understanding female migrants also needs to relook at them away from the gaze of 'distressed, victimised, and trafficked' individuals who follow their husbands upon marriage to agents of their own, who make proactive choice of participating in labour market opportunities.

On Declining Academic Standard of Higher Education in Contemporary World

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The paper examines the global trends in quality and standard of higher education, its curriculum and academic research over the post-war decades or particularly since the 1970s in major western countries such as the USA and UK. It is found that excessive pro-market ideas/ideology, policy and reforms (including privatisation) in the wake of the increasing dominance of neoliberal ideas, precepts, policy, and practices in the sphere of higher education/university have set off – not surprisingly – fairly robust temporal (and global) trends of falling academic standard, rigour, and intellectual contributions/capabilities along with rapid growth of higher education both as an industry and prospective propellent of foreign trade and profit. The paper reviews post-war major researches and studies, their findings and revelations pertaining to the quality, standard and rigour in higher education. By very early this century, it became distinctly clear that it is the quality of learning and education in the form of cognitive achievements that matters even more to economic growth than the quantitative expansion of higher education. On the contrary, there has been a voice of disquiet and disappointment since even earlier over declining trends and tendencies in the content and academic quality and standard of higher education especially in USA and UK. Several meticulous studies especially in some parts of the Western world have confirmed about the steady declines in the students' average study-hours

per week and the levels of cognitive achievements in colleges/universities, leading to an overall ambience of 'limited learning', a potential threat to the universally cherished ideal of 'advancement of learning'. And this is largely attributable, among others, to the increasing vocalisation of educational content, intense crave for degrees/diploma combined with rising cost of higher education leading to an increasing practice or need of the students for taking up employment outside campus while pursuing an academic programme, almost indiscriminate expansion of access to higher education along with dilution of both entry standard and curriculum – all being the offshoots of the neoliberal reign in higher education. Influential academics or management experts or bureaucracy, who have been close to political power/administration and been entrusted during preceding half a century, with key role of presiding over high-profiled commissions and committees to recommend about future directions of higher education, have typically tended to assume (often naively) that the highest level of higher education, namely graduate/post-graduate/basic research conducted generally by top-calibre, highly talented, high-paid academics, would remain uninfected by pervasive declines in undergraduate (academic) standard/quality following its massification, privatisation and marketisation. But the abovenoted trend of debilitation of academic quality and standard in college education has not left the higher (i.e. post-graduate) academic programmes and academic research and learning unaffected by the adverse effects of the neoliberal reign that has imposed inter alias the policy of steady withdrawal of public funding in research and post-graduate learning programmes. There is now a growing body of evidence and symptoms that point to a distinct trend of deterioration in the quantum and academic rigour/standard of basic or original or creative research in the universities globally. Indeed, there are now almost indisputable signs of an ongoing comprehensive process of what we call 'intellectual retrogression', which, as argued in this paper, is unleashed by several major planks of a neoliberal reign and policy in higher education across the globe.

Economic Growth and Inequality of Opportunity in India

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In recent times, India has emerged as a significant player in the global economy, experiencing rapid growth and undergoing a unique structural transformation process. Despite the visible impact of the 2008 financial crisis, the overall growth performance of the Indian economy has been impressive compared to global standards. However, this growth has also led to a rise in inequality, primarily due to the jobless nature of the expansion. Although the economy has expanded, the benefits have not been evenly distributed, leading to a concentration of wealth in the hands of a few. The lack of job creation and the widening gap between rich and poor have contributed to social and economic disparities, which present challenges to sustainable and inclusive development in the country. In the context of atypical structural transformation and high economic growth, this article is focussed on an analysis of the distributional impact of the growth process in India. In particular, this article investigates the impact of recent economic growth on results inequality and on distribution opportunities in India

using the OGIC framework. Preliminary analysis using India Human Development Survey (IHDS) data identifies 15 distinct types based on key variables and creates opportunity profiles for 2005 and 2012 based on the types, indicating the share of the population and the mean per capita income of each type. Some types, notably the poorest and richest in 2005, and types 2 (formerly type 1 in 2005) and 15 in 2012, have large population shares, while others represent a smaller portion. The distribution of each type within the population is not fixed, but changes over time. The study finds that caste significantly influenced opportunity disparities in 2005, and many of the lowest ranked types had cast heads, particularly in the rural. In 2012, the trend changed slightly; the poorest type is backward households from rural areas. However, in both years, the richest type consistently consists of forwardcaste individuals from the urban. Caste remains a key factor in household opportunities, with forwardcaste households generally having higher mean incomes, although their geographical origins are more varied.

Examining Occupational Shifts in Rural Haryana: Insights from a Primary Survey of Four Villages

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Haryana's economy has undergone massive structural changes in the recent decades. The share of agriculture in the Gross State Domestic Product (GSDP) has fallen sharply, from 42.2 percent in 1993-94 to 17.15 percent in 2019-20, while the share of industry and services has seen a rise. The share of industry has risen from 26.4 percent in 1993-94 to 31.6 percent in 2019-20. The share of service sector has increased from 31.3 percent in 1993-94 to 51.1 percent in 2019-20. The GSDP of Haryana has seen a high year-on-year growth in the last decade, recording a growth rate of 7.5 percent in 2018–19. While there has been high growth of total output and a structural change in the composition of output, the state has not recorded a commensurate rise in employment. This study is based on a primary survey of 300 households conducted in 2017-18 across four villages of rural Haryana, a state with developed agriculture, in India. The paper shows, with the help of primary and secondary data, the levels and patterns of farm and non-farm employment on rural Haryana. This paper shows how the present day labour relations in rural Haryana are fettered with inequality, precarious employment bondage and casteclass inequalities. The author finds the co-existence of various forms of labour contracts: casual wage labour to bonded labour. These villages were earlier surveyed during the 1930s and 1950s. The paper compares labour relations persisting in the present day rural Haryana to those observed historically in the previous surveys. The extent of unemployment in Haryana is extremely high. The survey data and the official National Sample Survey (NSS) data shows that a large proportion of working-age men and women did not find work in 2017-18. Women, in particular, faced acute levels of underemployment in the study villages. They mainly found work as agricultural labourers. Their work, however, was limited to a few tasks in agriculture and mostly low-paid. Women were also engaged in unpaid work in livestock rearing. The primary data from the four villages of Haryana shows an overwhelming dependence of households on the non-farm occupations as a source of employment and income.

These occupations ranged from casual wage employment (construction labour/loading-unloading labour/ rickshaw pullers, and other casual work), salaried jobs in private and government sector, petty shopkeepers in the village to self-employed households in manual and non-manual businesses (ranging from street vendors, sweet shop owners, barbers, plumbers to commission agents, agricultural input dealers, factory owners). The forms of contract of employment were also highly diverse. Men worked in diverse occupation in the non-farm economy ranging from manual work as hired labourers, to selfemployment in petty business, and in salaried jobs. Women had very little work in the non-farm sector. The comparison with previous survey reports of the study villages shows that the levels of farm and non-farm employment has fallen over time, the non-farm employment has become more precarious in nature, the traditional artisanal occupations have become virtually non-existent in the non-farm sector, and dependence of households on multiple sources of income has risen.

Does on the Job Training Matter? The Effect of Training on Productivity and Wages in India

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The role of knowledge and human capital in economic performance has been well recognized in the economic literature. The existing theoretical and empirical studies show that human capital, accumulated by education and training, and knowledge on new products and processes, generated by R&D activities, is a key factor for economic performance at both the micro and macro level. Therefore, many of the studies have analysed the individual's decision to invest in human capital and its consequent effects on earnings (Mincer, 1974; Lillard and Tan, 1986; Barron et al., 1987 and Lynch, 1989). It is important to note that investments in human capital over the whole lifecycle can yield returns in different ways which could be broadly into three categories. One, individuals invest in schooling and formal education to gain the necessary skills and knowledge. Two, more than one half of lifetime human capital is accumulated through post-school investments. Individuals invest in gaining newer skills and knowledge by investing in specific professional degrees even after entering the labor market. In some cases, the governments spend on launching large scale training programs for the educated youth to increase employment and earning opportunities. The third category is of investments are carried out by the firms through formal on-the-job training to increase the efficiency of the workers or to train workers in specific new technologies (Bartel, 1991, 1994, 2000; Black and Lynch, 1998; Barrett and O'Connell, 2001; Dearden et al., 2006; Ballot et al., 2001; Conti, 2005). Firms also invest in training when there are skill mismatches between the academia and industry. While there are many studies that investigates the returns to investment in human capital has focused on education, the issue of accumulation of human capital through the lifelong training of workers and, more specifically, on the effects of training on productivity has received relatively little attention until recently (Colombo and Stanca, 2014). This is

possible due to lack of longitudinal data on training practices at the firm level which made it difficult to control for unobserved heterogeneity and endogeneity of training. Over last two decades, a number of studies have tried to fill this gap by analysing the impact of training on productivity using firmlevel data. However, most of the existing studies are confined to developed country experiences with relatively little evidence available in the context of the developing world except Liu and Lu (2016) for China. We argue that an analysis of the impact of on-the-job training on productivity and wages in the context of developing countries assumes importance for two important reasons. One, in the developing world, a relatively less number of firms invest in training their employees as compared to the firms in developed countries. Two, labor markets in general are considered imperfect indicating that wages do not equal marginal productivity. The extent of these imperfections is relatively high in developing countries. This paper, therefore, tries to address two questions that are highly relevant: First, does on-the-job training have a significant effect on productivity and wages? Secondly, whether the effects of training on productivity is industry-specific? Third, does female-headed firms are more inclined to provide training to employees? The first question can be investigated where the typical firm assesses the costs against the returns of training its workers. The second question addresses the core of the current debate on how countries can improve productivity and economic performance. This paper for the first time exploits a unique cross-country dataset brought out by the World Bank, called World Bank Enterprise Survey (WBES hereafter). Our analysis shows that about 30 per cent of sample firms invest in training the workers. We found that the proportion of firms investing in training varies across industry groups and size class. Large firms and high-tech firms train more compared to small and lowtech firms. Further, our analysis shows that training intensity considerably varies across manufacturing and services. The results of the generalised Heckman model that corrects for self-selection problems shows that on the job training has a significant effect on improving labour productivity. However, we do not find any statistically significant effect on wages. Our results suggest that the returns from on the job training are accrued to the employer.

Inequality, Employment and Human Capital in India: Challenges for Achieving SDG

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This paper aims to assess inequality in various dimensions within India, employing a variety of metrics including nutritional sufficiency, assets ownership, incomes, night lights, and many similar indicators. The paper further examines labour markets and social sectors like education and health in the context of inequality. The paper draws data from multiple sources to present a multidimensional picture. The paper found that the extent of inequality varies widely between states and also between population groups. Next, when compared internationally, the overall deprivation levels seem to be very high. Hunger seen through malnutrition is not encouraging as well, and in addition to adding to human misery, it affects the labour markets through reducing the Disability Adjusted Life Years (DALY). In

terms of employment, the numbers employed have not kept up with the population in the employable age-groups over-time; specifically there is large withdrawal of women workers from the labour force. Additionally it is seen that there is labour redundancy. Such a tendency raises economic dependency, thereby increasing vulnerability at the household level. In regard to the social sectors, both the education and health sectors lack in quality and are of high cost. Also, both embed in-built inequality. For example, the cost of staying in school increases with each grade, a situation worsened by increased privatisation of educational sector. In health as well, excessive privatisation has increased the cost of availing health services. The insufficient focus on inclusivity in the overarching development process is evident in how certain facets overtly marginalise larger segments of the population, whether in employment, education, or health. Each of these is an anti-thesis of the canons of sustainability in development and human welfare. The issue is exacerbated by the historical neglect of social sectors, which has allowed the population to grow excessively large. There is no silver bullet that would bring about greater inclusion. One way ahead to bring about improved inclusion spatially, by gender and by population groups, could be through massive investments in human development and cheapening all of its components.

TECHNICAL SESSION 2.3

Education-Occupation Mismatches and Earnings in the Indian Labour Market: An Analysis of Returns to Education

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Wage gap due to segmentation in the Indian labour market has been documented in literature. But most of the previous studies have not considered one aspect which can affect the wage gap across different sectors, that is, the way workers match their acquired education to the one required to perform their job. Using the Employment and Unemployment Survey (EUS) of the National Sample Survey Office (NSSO) for the year 2011-12 and the Periodic Labour Force Survey (PLFS) for the year 2017-18, we examine the incidence of education-occupation mismatch and its earnings effects in the Indian labour market. The analysis is carried out across different sectors of employment -RSWE and casual sector. For 2017-18, the self-employment sector is also taken into consideration. Moreover comparing returns between 2011-12 and 2017-18, will shed some light on the changes that have taken place in the labour market for skills during the period under review. Educational mismatch is modelled using the Realised Matches approach. Returns to actual years of education are measured using Mincerian approach. The ORU model is used to examine returns to years of required education, overeducation and undereducation. We also address sample selection bias by using DMF1 model proposed Bourguignon, Fournier and Gurgand (2007), which is a relatively newer method and is an extension of the Heckman (1979) model. Estimates of the ORU specification reveal that the relationship between education and earning is not monotonic (relationship between education and earnings as linear and strictly increasing) as shown by the conventional Mincerian earnings specification because the presence of overeducation and undereducation result in lower returns than the years of education required for a specific occupation. The differences is even more noticeable when analysis is carried out across different sectors of employment. RSWE receive highest returns to actual education, required education and overeducation. However, they face the highest penalty for each year of deficit schooling. Moreover, we find that casual workers are doubly penalised since in addition to lower returns to years of actual education, they face a second penalty associated with lower returns they obtain because of the divergence between the workers' actual years of education and the level of

education required for performing their job. We also find evidence of self-selection which indicates that the individuals' unobserved characteristics play a significant role in determining the employment choice and thus OLS is not an appropriate method for estimating earnings. The findings thus show that accounting for selection is critical in analysing the unbiased returns to education. Moreover, we find that education-occupation mismatch in the Indian labour market is explained by the assignment model. This implies workers' productivity levels (and hence wages) in the Indian labour market are determined by a combination of the job characteristics and a worker's educational attainment. As there is evidence of assignment-type education-occupation mismatch in the Indian labour market, we argue that the higher than average public expenditure on education is a welcome measure but better allocation of workers to jobs is also needed to increase overall labour productivity. Early studies on education-occupation mismatch in the Indian labour market did not analyse its effects on returns to education across different sectors of the economy. Previous analysis was simply restricted to wage workers. Hence this study tries to address this gap in literature and is a novel attempt to examine the wage gap across different sectors of employment by taking into consideration the presence of education-occupation mismatch. We adopt a relatively new method for correcting sample selection given by Bourguignon, Fournier, and Gurgand (2007). This accounts for the possibility that our sample may not be a random subset of all the individuals in the labour market. To the best of our knowledge, no other study has applied this method using EUS and PLFS data sources.

Reality of Local and Regional Government Employees in Nepal and Bangladesh under Decentralization

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This paper focuses on Nepal and Bangladesh to understand the implications of changing governance structure of a country on the local and regional government employees. Also referred to as SNG or sub-national government employees (those who do not work for the central government but at lower strata of government), they are crucial to multiple public administrative functions including service delivery to the citizens. Globally, decentralization has been a key policy reform adopted by many countries to improve the overall efficiency and accountability of provincial and municipal services. Decentralising administrative, fiscal and political powers to lower tiers of the government has also been accompanied by privatization leading to outsourcing and subcontracting in provision of public services. While scholars and policy makers have focussed upon the quality of services, effectiveness and accountability, the working conditions of the public servants at the SNG levels has not received due attention. This research investigates the impact of decentralization and privatization on public sector employment that has historically offered secure and protected jobs with due labour benefits in most countries. It scrutinizes how the nature of public sector employment has evolved and the consequent working conditions of SNG workers. This sheds light on the quality and quantity of such employment, labour regimes, and workers' rights and access to social security within the broader paradigm of decentralized governance. It specifically examines work contracts, wages and social security provisions, collective rights and workers' representation. It further explores whether public sector employment has become more inclusive over time in terms of gender equality and non-discrimination at work. The two countries (Nepal and Bangladesh) studied are both classified as lower-middle income countries by the World Bank, though Gross National Income or GNI per capita (WDI 2022) of Bangladesh (2,820 USD) is more than double of Nepal (1,340 USD). They are closer in terms of human development with medium HDI or Human Development Index (UNDP 2021). Despite both functioning as parliamentary republics, their government configuration is quite different. Nepal has shifted to a federal government system as recently as 2015 while Bangladesh has continued as a unitary state since post-independence. The research is based on a literature review of diverse secondary sources such as government reports and policy documents and legal provisions for the SNG labour force. It has also consulted national labour force surveys, including data generated by international organizations (such as the World Bank and ILO). Since availability of government data is limited in the public domain and there is a dearth of reliable information on SNG workers, it has also undertaken in-depth qualitative interviews of local authorities, SNG associations, trade unions and international development agencies. The paper uses both primary and secondary data to present a coherent and comparative picture of public sector employment at the sub-national government level. The key finding is the shift towards precarity among the SNG workforce with increasing use of the private sector in delivery of public services and a lack of clear mandate and responsibility of different tiers of government. In Bangladesh, the number of permanent employees has reduced drastically and been replaced by various short-terms contractual forms of jobs with little or no benefits. In Nepal, the transition towards federalism has not been supported by well-defined strategies for devolution of powers to SNGs. This has posed challenges for the workers with an overall lack of clarity of division of work and benefits to be received by the employees.

Employability of Graduates and Unemployment in India

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Employability of graduates is one of the emerging challenges with respect to the higher education systems and labour markets across the globe and in India. Technological change-induced disruption in the labour market are changing the structure of workforce, nature of jobs, skill composition, standards and work practices and enhanced the skill intensity and requirements leading to the need for skilling, re-skilling and upskilling the workforce in order to be sustainable in the competitive environment. The higher education eco-system across the globe is on massification trajectory and it is rapidly expanding and increasing the supply of higher education graduates to the labour market. The employment opportunities are increasing in varied sectors, but still there are numerous positions lying vacant in the labour market due to shortage of skills and competencies matching with the job requirements. Despite the fact that young individuals around the world are more educated than ever, large number of people are unemployed and unemployable due to lack of necessary skills to fill the current jobs as well as the skills that will be required in the future. On the other hand, the over- or under-supply of graduates which the job market cannot absorb and the skill mismatch leading to open and/or disguised unemployment in the economy. The employers' expectations in the labour market have shifted in tandem with the rise in graduates. It is examined in this paper the employability of graduate and unemployment situation in India. Employability of educated particularly the graduates is an emerging challenge in the labour market, while decelerating population growth and declining labour force participation rate particularly the latter owing to increase in education participation among the youth partly explain the decelerating rate of growth in labour force in India and thereby declining employment elasticity to growth. Unemployment rate in the labour force in India by educational level has been another cause of concern because it is increasing with the level of education; it is highest among the graduates with secondary level of education or above. Although the National Education Policy (NEP(-2020 promises to address the skill-gap in the labour market by transforming and re-shaping the educational institutions in the direction but addressing ground level constraints is challenging. Higher education systems face challenges of teaching students both general and discipline specific competencies while also preparing for the labour market throughout the world. Competition in the field of research, growing student populations and diversity, and dwindling funding, make it more difficult for the higher education institutions to emphasise on providing employability skills to the graduates. There is a mismatch between occupational requirement and the skill equivalent and representative educational qualifications possessed with the workforce engaged in occupation. Under-qualified presence is recursive for India in demonstrating global competencies in the context of unleashing fourth industrial revolution. Therefore, this paper emphasises on the concept of employability, higher education system, industry perspective of the changing skill expectations from the graduates and the unemployment situation in India. Analysis in the paper is based on unit record data of Periodic Labour Force Survey (PLFS)-5 (2021-22). A positive relationship has implications for quality of education and employability of graduates.

Female Migration and Labour Market Participation in India: Examining the Changes Over Mid-2000 to 2020

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In 2019, there were more male migrant workers (99 million) than female (70 million).. Also, the labour force participation of migrant men was higher than that of migrant women. However, the labour force participation rate of migrant women was higher than that of non-migrant women in high-income countries but lower in low-income countries. In the last five decades, while there has been an increase in female migrants who are migrating independently for education, work, and as heads of households, a large share of female migration is dependent in nature. Thus, the labour market decisions of migrant female lies at the intersection of factors affecting labour market participation decision, migration decision, and structural factors. Migration theories suggest higher returns to migration due to access to more productive jobs. Thus, these choices would allow economic mobility to migrant women in terms of their work status. However, female entry and exit from the labour market are more frequent. Based on this backdrop, this paper aims to test the hypothesis of economic mobility of migrant females and analyse the factors associated with their entry and exit from the labour force. India presents an interesting setting where though migration rate of women is high, employment related migration rate among women is very low. So, in addition to individual, household, and labour market characteristics, migration characteristics and related factors are also important in determining their labour market decisions. This paper addresses three questions: first, it examines weather migration allow economic mobility to women in terms of their work status (in an environment which is less restrictive and have better opportunities on offer in non-agricultural sector in urban areas); second, what are the factors associated with entry and exit of female migrants from the labour force; third, is there any change in the last one and a half decade, during which female labour migration rate has increased? We used the labour force survey data for India to understand this phenomenon. Additionally, the changes in the labour market participation of migrant females post-migration is analysed using two rounds of survey data on migration, comparing mid-2000 and 2020-21. The analytical sample consists of migrant female of age 15 to 60 years who migrated to urban areas. We consider both migrants for economic and non-economic reasons. Logistic regression models are used to analyse the entry and exit decisions of the workers. Female migration accounts for almost one-third of internal migration in India. However, only 9 percent move for employment as the primary reason. Though it is predominantly dependent, the growth rate in economic migration among females is increasing and has been higher than that of males during the 2000s. We find a higher entry rate and lower exit from the labour market among female migrants in India during the recent period. While female labour force participation remains very low, moving toward urban locations provides women with wider choices of paid work

opportunities. The result suggests the presence of children, marriage, caste identity, own educational attainment, spouse's education and work status, and household income level play important roles in explaining the employment decision of adult migrant women. Further, those moving for long-term or permanently have a higher likelihood of entering; however, culture distance (higher for those migrating from another district or another state) increases the odds of exit from the labour market. This paper provides important evidence for a lower middle-income country.

An Exodus Affluent Indian Taking Citizenship in Other Countries is a Concern for the Country

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In the growing human civilisation, India persistently promulgated a long history of migration around the globe. At present, Indians have got citizenship in 135 countries. Indians migrated to other countries primarily for the purpose of employment. however, it was through migration that human culture and grassroots-level life perspective got expanded. The paper examines the aspect of Indian diaspora in relation with the happening incidence of the exodus affluent Indian those taking citizenship in other countries. In the last decade is appalling for India where more than 1.6 million Indians have renounced their citizenship and over two lakh Indians have renounced their citizenship that is serious concern. The study deals with mix method approach which utilised sample qualitative interview and carried out an online survey with the persons who renounced their passports. It highlighted an important socioeconomic incidence as a change that cause for non-resident Indians to renounced their citizenship. In addition, it also revealed the magnificent nexus between the country of origin and other host counties relations with India.

People have always migrated for their own development; such migration is a never-ending process that has continued even today. For example, many Indians have gone abroad and this trend of going abroad is rising even today. People go abroad mainly for two main reasons i.e., either for higher study and to explore new job opportunities. India is not only a growing economy but it also witnessed the huge employment opportunities for Indians at the cross border. India has a worldwide image that India is a country of intelligent people. Apart from having intelligence, we also learn essential skills, so Indians get job opportunities abroad very quickly through their diasporic social-networking. Furthermore, the non-resident Indians (NRIs) not only make progress abroad but also represent India over there. Hence, there is great curiosity about Indians abroad and foreigners also have an affinity towards NRIs. Why to study the issue of diaspora in today's India because in the last decade is appalling for India where more

than 1.6 million Indians have renounced their citizenship and over two lakh Indians have renounced their citizenship as per Lok Sabha 2023. Thus, the exodus of the super-rich from Indian citizenship to other countries is a prime concern for India, which has leapfrogged to become the fifth-largest economy in the world. A country like United States of America (US), which is a world superpower, is called a country of immigrants or outsiders. Immigrants from different parts of the world have made a huge contribution to the culture, economy, and society of the US. This paper aims to evaluate the key aspect as nexus between Indian moving abroad and renounced their citizenship. Moreover, it examines their relation with the international migration synergy in coming days. It use mix method approach of sample qualitative interview to build some case studies. In addition, it also included an online survey with the persons who renounced their passports using sample identification process. One thing that has been noted is that those who migrated from India to host countries and who accept citizenship in host countries are basically moved from their country of origin for the purpose of employment. It may be that Indians can get bigger opportunities outside India than within country because it has a huge population and many competitors in every sector. Indian diaspora is promoting greater ties with their country. Also, they are closely associated with and have had a substantial impact on the regional economics, global level of politics, and cultural environments tie-up with other countries in which they currently reside.

Growing the Wrong Way: Exploring the Growth-Employment Nexus in India using Simulated Scenarios

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When India embarked upon the path of Structural Adjustment Programme (SAP) in early 1990s, it was expected that the removal of structural barriers would lead to a jump in the macroeconomic growth rate. It was also canvassed at that time that this increase in output will take care of India's abundant labour, i.e., growth will take place along with labour intensive technology, thereby expanding employment proportionately. However, three decades on the line, we see a different picture. Gross domestic product (GDP) has increased at a steady rate during these thirty years, but employment has grown only at a sluggish rate, so much so that instead of making inroads into the backlog of unemployment, we have been adding to the pool of unemployment consistently. Employment rate, defined as proportion of labour force that are employed, has gone down in 2021 below the 1993 level for the major states. Employment elasticity of output has declined drastically from 0.5 during 1993-2004 to 0.3 in 2004-2011 and further to 0.2 during 2011-2021. The mean share of primary sector in employment has declined from 61.2 percent to 48.8 percent during this period. This slack was not picked up by the secondary sector whose share has increased by about five percentage point only. Stagnancy in secondary sector employment and output has resulted in tertiarization of the Indian economy and the labour market, which is often considered to be a distress phenomenon. This puts up a question mark against the neo-liberal prescription that a laissez-faire economy with high economic growth will cure the unemployment malady. The second but related issue is regional disparity within

India in terms of both economic growth and employment expansion. While it is true that "India grows when the states grow", blaming lagging states for dismal employment expansion in the country may not be a correct thing to do. While higher growth in the states would surely create more jobs, this does not always translate to labour market improvement in a scale that is significant. That is so because of two factors - the employment intensity of the growth process (or employment elasticity of growth); and, the sectoral distribution/growth of output. In this paper we explore and compare the roles of these three factors, namely - growth, employment elasticity, and sectoral distribution, in explaining the sluggish employment growth in the country in recent decades using a Simulation cum Decomposition method. It is observed that more than three-fourth of output and employment are concentrated in states where employment elasticity is low, i.e., where there is a disjoint between the production sector and the labour market. Also, close to half of employment is in states that are worry-spots – stagnated states with both low economic growth and low elasticity of employment. It thus transpires from our Simulation/Decomposition analysis that the incremental employment would have been highest if the technology were similar in all the major states, followed closely by what would have happened if the sectoral structure of their economies were similar. In both cases, employment in 2021 would have been more than 11 percent higher than what it actually was. On other hand, removal of regional disparity in economic growth would have raised employment by less than 5 percent. Thus, economic (output) growth alone can do very little; it is the nature of the growth which is important. A more labour-intensive growth process and more output from secondary sector would have created substantial additional employment.

Female Labour Force in India: **Understanding the Dynamics**

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The question of the participation of females in the labour market is at the centre of the discourse on gender equality, women empowerment, and social development. In India, as in other South Asian countries, labour force participation of females is traditionally low. Researchers have advanced many interrelated socio-economic causes, such as gendered norms of employment, low pay, a disproportionate burden of household work, measurement error and social norms for their low engagement in productive activities. However, recent data from the Periodic Labour Force Survey (PLFS) throw up some interesting developments in the changing female labour market in India. This assumes importance in the context of the post-COVID recovery of the Indian economy. The paper goes into detail about the temporal and spatial trends and patterns of labour force participation of females over time and across

socio-economic groups. It seeks out the reasons behind the recent observable trends and also discusses the challenges in light of recent data and evidence. Finally, as policy recommendations we emphasise the creation of more opportunities for women outside agriculture, broadening the definition of women's work by recognising their unpaid work, and improving their access to social security benefits at the workplace. The question of the participation of females in the labour market is at the centre of the discourse on gender equality, women empowerment, and social development. In India, as in other South Asian countries, labour force participation of females is traditionally low. Researchers have advanced many interrelated socio-economic causes, such as gendered norms of employment, low pay, a disproportionate burden of household work, measurement error and social norms for their low engagement in productive activities. However, recent data from the PLFS throw up some interesting developments in the changing female labour market in India. This assumes importance in the context of the post- COVID recovery of the Indian economy. The paper goes into detail about the temporal and spatial trends and patterns of labour force participation of females over time and across socioeconomic groups. It seeks out the reasons behind the recent observable trends and also discusses the challenges in light of recent data and evidence. Finally, as policy recommendations we emphasise the creation of more opportunities for women outside agriculture, broadening the definition of women's work by recognising their unpaid work, and improving their access to social security benefits at the workplace.

TECHNICAL SESSION 2.4

Labour Absorption in Agriculture: Aggregate Trends and Inferences from Village Studies

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How much of the work force can agriculture accommodate? Conventional wisdom suggested that the share of work force employed in agriculture would decline with a rise in per capita income. However, with the increasing inability of the non-agricultural sectors to adequately absorb the underemployed agricultural work force in the 1970s and 1980s, scholars of rural India debated if agriculture itself could become more employment intensive. This was in the context of the green revolution, when the assemblage of irrigation and new technologies resulted in a net rise in labour absorption in agriculture in countries like India. Later stages of agricultural growth – marked by increasing levels of mechanisation from the 1980s onwards - were largely labour-saving, though with marked differences across male and female workers. Yet, shifts in cropping pattern towards more labour-using crops, rising yields and the expansion of groundwater irrigation rendered the aggregate story on net labour absorption more complex; a fall of labour use in one crop was accompanied by a rise of labour use in another, new crop. Over the past decade, however, changes in the methods of cultivation have unequivocally turned labour-saving even in crops that previously showed promises of a rise in labour use. In particular, there was a rise in the use of harvesters and weedicides – alongside the continuing rise in the purchase of tractors and tillers – that have led to a sharp fall of labour use across crops and regions. This paper documents and analyses these shifts using secondary data as well as quantitative and qualitative data from a set of village studies in Maharashtra. In the context of the more recent and retrogressive movement of workers from the non-agricultural sectors to the agricultural sector, the conclusions in this paper point to certain disquieting outcomes and prospects in India's rural labour market.

Exports, GVC participation and Jobs: Estimates for India

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This paper investigates the number of jobs tied to India's merchandise and services exports from 1995 to 2018 using Input-Output (IO) analysis. IO analysis offers a distinct advantage by capturing both direct employment within exporting sectors and indirect employment arising from backward linkages with other domestic sectors. The results demonstrate a rising trend in total export-supported jobs from 1995 to 2012, increasing from 35.7 million in 1995 to 75.6 million in 2012. This growth was followed by a gradual decline as export growth slowed after 2012 (58.2 million jobs in 2018). The manufacturing sector exhibits the highest contribution to export-related jobs, followed by services and agriculture. Furthermore, gender disaggregation in 2017-18 indicates that exports supported approximately 43.4 million jobs for males and 14.7 million for females. Educational attainment analysis reveals that 37.5% of export-related jobs require relatively higher qualifications (secondary/higher secondary: 21.4%, diploma/graduate/post-graduate: 16.1%). Notably, manufactured exports contribute to 76% of jobs requiring secondary/higher secondary education, while services account for over half of jobs requiring higher qualifications. This implies that an export-oriented strategy has the potential to generate greater employment opportunities for women and those with higher educational attainment compared to a solely domestic market focus. Furthermore, employing panel data on domestic value added (DVA) and export-related jobs across 112 sectors, the study establishes a positive effect of stronger backward Global Value Chain (GVC) participation (utilization of imported inputs for export production) on gross exports, DVA, and employment. This finding implies that India can benefit by implementing policies that enhance its backward GVC participation. This paper investigates the number of jobs tied to India's merchandise and services exports from 1995 to 2018 using Input-Output (IO) analysis. IO analysis offers a distinct advantage by capturing both direct employment within exporting sectors and indirect employment arising from backward linkages with other domestic sectors. The results demonstrate a rising trend in total export-supported jobs from 1995 to 2012, increasing from 35.7 million in 1995 to 75.6 million in 2012. This growth was followed by a gradual decline as export growth slowed after 2012 (58.2 million jobs in 2018). The manufacturing sector exhibits the highest contribution to exportrelated jobs, followed by services and agriculture. Furthermore, gender disaggregation in 2017-18 indicates that exports supported approximately 43.4 million jobs for males and 14.7 million for females. Educational attainment analysis reveals that 37.5% of export-related jobs require relatively higher qualifications (secondary/higher secondary: 21.4%, diploma/graduate/post-graduate: 16.1%). Notably, manufactured exports contribute to 76% of jobs requiring secondary/higher secondary education, while services account for over half of jobs requiring higher qualifications. This implies that an export-oriented strategy has the potential to generate greater employment opportunities for women and those with higher educational attainment compared to a solely domestic market focus. Furthermore, employing panel data on domestic value added (DVA) and export-related jobs across

112 sectors, the study establishes a positive effect of stronger backward Global Value Chain (GVC) participation (utilization of imported inputs for export production) on gross exports, DVA, and employment. This finding implies that India can benefit by implementing policies that enhance its backward GVC participation.

Growth and Employment in the Indian Economy: Some Analytical Issues

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Ever since the Great depression in the late 1920s, the link between output and employment has received centre-stage attention not only in policy circles, but also among economic theorists and development economists in both developed and developing nations. At the 99th session of the International Labour Conference, constituents endorsed the need to promote a 'pro-employment' macroeconomic framework. It was realised that macroeconomic stability is necessary, but by no means sufficient to ensure inclusive, job-rich growth particularly in the developing world . In order to generate decent employment at the required scale, countries will have to achieve sustained and inclusive growth, which in turn critically depends on supportive macroeconomic policies. According to classical/neoclassical economic theory, full employment in the labour market automatically obtains when those who are willing to work at the existing market wage rate find job in a free enterprise flex-wage economy. Following the Great Depression that gripped the industrialised world during the 1930s, and publication of John Maynard Keynes's General Theory of Employment, Interest, and Money (1936), his traditional consensus was challenged. Keynes argued that pessimistic expectations by capitalists, translated into anaemic investment in plant and equipment, can become self-fulfilling, trapping an economy in a downturn. Involuntary unemployment occurs when those who are willing to work at the going wage rate do not find adequate quantity of jobs. In the context of the beneficial link between globalisation and economic growth, experience suggests that the final outcome depends on the nature of growth. Maintaining adequate rates of economic growth requires sustainable improvements in three areas: (1) expanding investment in productive capacity, (2) raising labour productivity (that is, the amount of output produced for a given quantity of labour), and (3) securing adequate demand. James Heintz (2006) estimated the "employment elasticity of growth" for the formal manufacturing sectors of 51 countries during two time periods: (1) the 1960s and 1970s, and (2) the 1980s onwards. In majority of the countries listed by him, the estimated employment elasticity in manufacturing activities dropped in the later period, often significantly, suggesting thereby that, for a given level of growth, the industrial sectors of many, but not all countries produced fewer jobs in recent years compared to the past. Some countries – e.g., Asian "tigers" like Korea and Singapore – experienced rapid growth rates that helped compensate for the decline in the employment intensity of that growth. However, a significantly large number of countries, both developed and developing, experienced both slower growth and a decline in the labour intensity of that growth in their industrial sectors.

'Informant Bias', a Key Factor Behind Underestimation of Women's Work: Evidences from Capturing Women's Work Study

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With the widespread acknowledgement that the official statistics inadequately capture women's work and this inadequacy affects both the perception around women's economic and non-economic contribution and the policies around it, the measurement of women's work has gained attention in the mainstream discourse around gender inequalities. The accurate measurement of women's work, aiming to identify and comprehend the diverse, and simultaneous activities women are engaged in, is expected to ultimately enhance women's economic empowerment and agency. However, there exist a number of challenges which affect comprehensive capturing of women's work, and 'informant bias' is a significant one among those. In the usual labour force surveys, 'informant bias' is an identified non-sampling error arsing due to the reliance on respondents/informants who answer on behalf of the individuals being surveyed. This proxy reporting, where one member provides information for others, is a common practice in most national surveys, excluding those dealing with sensitive data such as reproductive health or violence. Frequently, men in households respond for their female counterparts or other members. However, studies indicate that women's self-reported workforce participation exceeds proxy-reported estimates by six percentage points, while men's estimates show minimal differences. This reporting variance, termed as 'informant bias', reflects the potential distortion of information due to personal perspectives, prejudices, or misinterpretations. Although psychology and personality constructs believe that observers who have casually observed an individual in their daily life can accurately judge their personality, there is a recognised limitation to informant reports. Regardless of the accuracy of target individuals reporting on their perceived personalities, informants inherently lack as much information about the actual respondent. Various studies globally have explored respondent identity in measuring labour market outcomes, consistently revealing differences between self-reported and proxy measures. For instance, a Tanzanian study found lower proxy-reported employment for men compared to selfreports, and a similar pattern emerged in a Malawi study for both men and women. Ambler et al.'s (2021) work, and a recent Indian study by Abraham et al. (2023), point towards the crucial need to discern whether these differences stem from random measurement errors unrelated to individual or household attributes, asymmetric measurement errors related to the definitional understanding of employment and gender norms, or asymmetric information errors where different information sets are available to men and women about each other's activities.

Migration, Livelihoods and Income in Rural Odisha

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In the context of a changing rural economy and society, this chapter studies the role of agriculture, non-agriculture and remittances among livelihoods undertaken by households in rural Odisha. Based on data from a primary survey and qualitative case studies, we examine the distribution of household income and explore how individuals and households combine multiple sources of livelihoods and income. The study finds that local non-agriculture emerges as the most important source of income, followed by agriculture, migration and government transfers. Nearly one-third of households have migrants, but remittances contribute only 14.3 per cent to average incomes. Contrary to the mainstream migration and development literature, we find that households with migrants have lower incomes than households without migrants, suggesting the distress-oriented nature of migration from rural Odisha. Further, we develop livelihood and income-based household typologies to find that the type of livelihood matters: income levels and distribution of income vary significantly among agriculturebased households, non-agriculture-based households, remittance-based households and government transfer-based households. The qualitative case studies, embedded in the analysis of household-based livelihood typologies, complement the survey data to better understand the processes of livelihood creation and diversification in rural Odisha. In the context of a changing rural economy and society, this chapter studies the role of agriculture, non-agriculture and remittances among livelihoods undertaken by households in rural Odisha. Based on data from a primary survey and qualitative case studies, we examine the distribution of household income and explore how individuals and households combine multiple sources of livelihoods and income. The study finds that local non-agriculture emerges as the most important source of income, followed by agriculture, migration and government transfers. Nearly one-third of households have migrants, but remittances contribute only 14.3 per cent to average incomes. Contrary to the mainstream migration and development literature, we find that households with migrants have lower incomes than households without migrants, suggesting the distress-oriented nature of migration from rural Odisha. Further, we develop livelihood and income-based household typologies to find that the type of livelihood matters: income levels and distribution of income vary significantly among agriculture-based households, non-agriculture-based households, remittance-based households and government transfer-based households. The qualitative case studies, embedded in the analysis of household-based livelihood typologies, complement the survey data to better understand the processes of livelihood creation and diversification in rural Odisha.

A Recounting of the Evolution of Labour Market Intermediaries in India

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Known as thekedaar, sardar, mistry, kangani or jobber, the labour contractor has been a crucial intermediary in employment relations in India. Of late, more sophisticated entities such as human resource companies (HRCs) are undertaking the functions and roles of labour market intermediaries (LMIs) and are gaining prominence in forging employment relations. Although centred around staffing, the other activities of HRCs includes labour recruitment, including pre-recruitment activities such as data-base searches, sussing out the potential candidates, candidates' verification, job-interviews, and post-recruitment activities such as payroll and compliance. By catering to these recruitment and workforce management activities, the HRCs are reducing transaction costs of various types — search, information verification, monitoring, compliance etc. and they are said to help increase the ability of both workers and employers to adjust to changing labour market conditions. In an attempt to understand how the HRCs perform these functions, we ask the following research questions of: a) what explains the continued existence of labour market intermediaries in India? b) What are the processes in intermediation and the various costs that this address? and c) How does a formal and registered company affect the heterogenous labour contractor landscape? By studying one such human resource company, the paper provides nuanced insights into the functions that the intermediary is addressing. For data collection, we relied on the methodology of work ethnography and worked in a HRC based out of Bengaluru, India, for more than six months. The methodology of work ethnography provides an in-depth and closer understanding of the 'everyday-ness' of how work is organised and how, in turn, work itself organises people and their societies. More importantly, it helps straddle the micromeso organisational level insights (within which most work is embedded) and contextualise the macro societal phenomena around labour. The extant paper looks at the vertical of HRC that provides staffing solutions for highly skilled and technically niche roles for various sectors. Amongst this, the biggest vertical that caters to the staffing needs of IT sector was chosen to study closely. Further, the paper offers insights into the processes involved in the task of intermediation, unravels the transaction costs addressed in this process and hones down on the specific costs. The study also gives insights into how these costs are shared between the parties involved and who bears what share. While the study relied on the labour market of a highly skilled workforce for building this understanding, we recount the continuities and discontinuities of the labour market intermediaries in its current form from their earliest predecessors in unskilled/semi-skilled labour market. From the analysis, it is clear that HRCs today embody the labour market intermediary that addresses all the costs of search, information, bargaining and enforcement costs. In this process, they are akin to the traditional labour market intermediaries who also, in their capacity, have addressed all these costs through various mechanisms. The paper also discusses how the share of costs have shifted between the principal employer and the intermediary in the current arrangement as compared to the predecessors.

TECHNICAL SESSION 2.5

Wage Productivity Link in India. What causes the wedge?

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The recent updates on employment scenario in India is encouraging with an increasing employment growth, increasing women LFPR and rising regular wage employment. However along with this encouraging story is the worrying trend of real wage stagnation in employment across board, especially in regular wage employment. Yet, the single most important factor that affects wages, namely labour productivity, has shown significant growth during the same period. Labour productivity growth, which ideally should be considered as the contribution of labour to the total value added, seem to be de-coupled from the wage growth. What causes this delinking with wage? Using data from the NSS, PLFS and the KLEMS, we present an updated version of this paper for the period 2011-12 to 2021-22. We present the employment and wage growth trends during the period, followed by the labour productivity trends during the same period. We further analyse the productivity wage trends at the aggregate, sector wise and state wise. From the analysis it can be inferred though this wage productivity link is weakening across sectors. But there seems to be much inter state variations on this regard. Trying to explain this decoupling, we primarily approach the problem from two angles, one is the factors that drive up productivity which need not affect wages; another is the factors that could depress wages without affecting productivity. In the first set are factors such as capital intensity and technology diffusion that could drive labour productivity. This set of factors could have both scale and substitution effect on overall demand for labour, with rising demand for skilled workers and declining demand for unskilled workers. Thus, wage stagnation may be masking a widening skill- based wage gap. On the other hand, there could also be macro-economic factors such as over supply of labour due to various factors including demographic factors, weak demand conditions and labour market structure that may be affecting the wage growth. We test these alternate arguments to analyse the factors that affect the observed wage productivity linkages.

Debilitating Impact of COVID-19 on Rajasthan's Micro Enterprises: An Analysis of Output, Employment and Wage Payments

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Micro, small and medium enterprises (MSMEs) in India have been contributing to India's overall growth by not only generating output but also by providing employment and export contribution. However, they have remained exposed to a variety of operational constraints. Their limited scales of operation and fragile wherewithal have always acted to their disadvantage. With limited access to technology, finance and other required infrastructure, survival of these enterprises has been at stake and they have remained exposed to a variety of market competition which has made them fragile over time. Sudden onslaught of COVID-19 pandemic shook them further. Frequent lockdowns, closure of business activity, labour migration and disruption of input and output market linkages proved fatal for these enterprises delayed payments and credit crunch squeezed them further. Rajasthan being no exception, the MSMEs, in general, followed all-India trend. Here, too the MSMEs experienced business deceleration. In such situation, this study, focussing on micro enterprises, makes an inquiry on three fronts: first, what has been the impact of COVID-19 on economic output for Rajasthan's micro enterprises, i.e., how severe has been the economic shortfall and what factors have conditioned this shortfall among Rajasthan's micro enterprises; second, what has been the impact of COVID-19 on employment and how disparate has it been for male and female workers; third, how COVID-19 pandemic has impacted the magnitude of wage payments. In fact, there has been a limited research on Rajasthan MSMEs' growth and survival dynamism during the COVID-19 pandemic period. Given such research gap, this study examines in depth the growth and survival dynamics along with inferring employment and wage payments situation draws insights from primary information collected from 1000 micro enterprises which are spread across ten major industry groups, viz., 1) agro & food products, 2) textiles, 3) handicrafts, 4) metals, 5) mineralbased industries, 6) stone-based industries, 7) engineering, 8) electronics, 9) readymade garments and 10) gems & jewellery. More than half (58.5%) of these enterprises are situated in rural areas and urban areas account for 41.5 percent of these enterprises. Methodically, the study applies two regression models in order to infer the determinants of economic shortfall. In the process, it conducts various econometric tests to build an appropriate regression model that justifies the key assumptions of 'Ordinary Least Squares Regression' model. Similarly, it conducts bi-variate descriptive analysis besides building up 'Reward Differential Index' to examine adequacy of wage payments. Analysis is mainly conducted at inter- industry level. By analysing the trend growth in output for last five years, the study observes an incidence of severe deceleration among Rajasthan micro enterprises. In some industries like handicrafts, textiles etc., this deceleration has been significant. Further introspection through regression analysis infer about various factors that have conditioned such outcomes. The study has observed a significant fall in employment across all the industry groups during the COVID-19 pandemic period. Similarly, the study finds the existence of high reward differential measured as the gap of actual wages with the minimum wage and such incidence is found across various industries surveyed by the study.

Wage Collapse and Gender Differences in Earning in India

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There is a wage collapse in the labour market in recent years, which can be attributed to a series of 'policy shocks' to the economy, such as demonetisation and the introduction of Goods and Service Tax (GST). Himanshu (2018) agrees that 2004-05 to 2010-11 was marked as a period of high wage growth, and this high growth lasted only a short time as wages started decelerating since 2013-14. In this backdrop we have developed three primary objectives in this paper. Firstly, we would like to understand the notion of wage collapse and, if so, what contributed to the wage decline after 2011-12. We compare the wage rates for a considerable period from 1983 to 2022 using various National Sample Survey (NSS) rounds, and all the values are adjusted to 2019 prices. Secondly, to explain the nature of gender wage differences in India and to analyse whether wage collapse affected men and women equally. Thirdly, to analyse the wage inequality within various sub-groups and how it contributed to the overall inequality. To this end, the Gini index is decomposed into within-group and between-group components, and a third component provides insight into the degree to which wages of various groups cluster by gender and education level. The analysis of this paper primarily draws from the Employment and Unemployment Surveys (EUS) of the National Sample Service Office (NSSO). We have used wage data for the large (thick) rounds of NSS since 1983. These are the 38th round (1983), 43rd round (1987-88), 50th round (1993-94), 55th round (1999-00), 66th round (2009-10) and 68th round (2011-12) conducted by the NSSO. We have also used the wage data of PLFS. For the years 2017-18 and 2021-22, in the absence of a better deflator, the study used the Consumer Price Index (CPI) for agricultural workers to make the wage rate in rural areas for different rounds comparable across various years. Similarly, the CPI for industrial workers makes the urban wage comparable across time. The study is restricted to working-age males and females aged between 15 and 59 years. The study found that the average daily wages almost increased three times between 1983 and 2021-22 in rural and urban areas of the country. The average wages rose more rapidly for women than men. We have observed that the wage growth of casual workers increased much faster over the years, reflecting less fluctuation than regular workers. However, at the same time, the growth rate of regular workers has collapsed several times, and in the recent period, the collapse was almost complete. From the analysis of Gini and decomposition, we observed that wage inequality has come down in India between 2011-12 and 2021-22, and much of the differences in earnings are explained by within-group factors. The share of within-group and between-group inequality in overall inequality remains the same between the two periods. The within-group inequality accounts for the bulk of overall inequality in both years. The domination of within-group terms indicates a wide variation in the characteristics of male and female wage earners, contributing to wage inequality within the gender groups. In both the years within-group, inequality was generally higher among the urban groups than their rural counterparts. The higher inequality in urban areas is mainly due to job polarisation, skill difference and technological progress in urban areas, and due to these facts' wages are more unequally distributed in urban areas.

Employment Intensity of Growth in Rural India

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This paper provides estimates on employment elasticity in rural India – both aggregate as well as sector specific — using two different approaches. National Sample Survey Organisation (NSSO) 2011-12 base year gross domestic product (GDP) data at constant prices has been used to calculate percentage changes in GDP over time. Employment data has been gathered from NSSO 68th round and six annual Periodic Labour Force Surveys (PLFSs) to calculate percentage change in employment. Two different methods—arc elasticity and point elasticity—are used to obtain robust estimates of employment elasticity. The percentage change in employment that arises from one percentage point shift in economic growth is known as employment elasticity. The employment elasticity gauges how well an economy can provide enough jobs to employ its labour force. An analytical tool for examining the interaction between employment and economic production growth across time is employment elasticity. They may also provide insights into how job creation varies for different economic activities/sectors and demographic subsets in an economy. It is significant in the identification and analysis of structural changes in employment over time. When predicting future job growth across several industries, employment elasticities can be a valuable tool and enable policymakers to make appropriate policies. Employment has always been the most crucial link that transforms high growth into Human development process. High employment growth along with high GDP growth rate is inevitable for the attainment of inclusive and sustainable growth. India's average GDP growth rate of 6-7 percent in last one decade (2014-15 to 2023-24) is impressive. Moreso, in 2023-24, Indian economy has overtaken that of the United Kingdom to become the fifth biggest in the world. Census of India, 2011 states that with a population of 1.2 billion India is second most populated country in the world after China and it is expected to become most populous country leaving behind China very soon. Still, 68.84 percent of total population resides in rural areas and remaining 31.16 percent resides in Urban areas. The working age group (15-59 years) comprised 735 million of India's total population in 2011. According to the Report of the Technical Group on Population Projections for India and States 2011–2036, this population group is predicted to grow over time, reaching 988.5 million in 2036. It is followed by fall in dependency ratio from 65 percent in 2011 to 54 percent in 2036. PLFS 2022-23, shows that dependency ratio in rural areas has already reclined to 53.6 percent. Changes in the size of working-age population and dependency ratio plays a key role in determining the size of labour force. Gross domestic product growth is sustainable and inclusive when work force participation rates are high and moving in tandem with growth rates. This is crucial for harnessing the benefits of demographic window that India is facing at present. Against this backdrop, this paper aims to analyse employment elasticity for rural India, over the decades 2012-2022. It is against this backdrop that this paper attempts to provide estimates on employment elasticities for different sectors and gender for rural India by using NSSO data. The aggregate employment elasticity estimates for rural India have declined between 2011-21 and 1022-23. It varies from 0.16 (arc elasticity) to 0.18 (point elasticity) during the concerned time periods. Sector-wise, agriculture has witnessed negative elasticity but services including construction have positive employment elasticity. Manufacturing employment elasticity has hovered around 0.3 only. Growth during this decade have been more employment oriented towards female as compared to males with females in rural areas having higher employment elasticities as compared to males. Employment intensive growth is crucial for India to meet the demographic dividend challenge as dependency ratios are predicted to decline drastically between 2011 and 2036.

Does National Origin Matter?: Collective Skill Formation in a Manufacturing SEZ in South India

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This paper describes the initial findings from an ongoing research project on skill formation in a manufacturing Special Economic Zone (SEZ) in Tirupati district, Andhra Pradesh. The project examines differences in the participation of manufacturing firms in collective skill formation programmes based on their national origin. Counterintuitively, preliminary findings suggest that foreign-owned firms demonstrate greater willingness to collaborate with state institutions and other firms in collective skill formation programmes, as compared to domestic firms. Based on interview-based qualitative fieldwork, we examine different explanations for this puzzling finding. Potential explanations include differences in: organisational culture at the firm-level; bureaucratic norms vis-à-vis foreign-owned and domestic firms; and the level of a firm's embeddedness in local society. This research brings three very disparate fields of study into conversation with each other: a) the field of vocational education, which focusses on curricular interventions and their effects on young adults; b) organisational studies focussing on trajectories of learning-by-doing and innovation within manufacturing firms; and c) economic geography, which focusses on institutionalised interdependencies between the state, private firms, and non-governmental actors operating at a regional scale. In short, this research project envisages a simultaneous engagement with two closely linked processes: a) knowledge production within a territorially embedded skilling ecosystem, and b) capability acquisition by firms and workers in hierarchically organised global value chains. This project proceeds from the conviction that India's lacklustre performance in manufacturing cannot be entirely explained away by 'hard' constraints such as a) labour costs and inflexible labour regimes; b) poor infrastructure delivery or high logistics costs; or c) the lack of domestic demand for manufactured goods. As an alternative to these conventional explanations, there is reason to believe that the inability of the Indian state to rapidly improve the skills of the manufacturing workforce constitutes an important 'soft' barrier to manufacturing-led development. While the "crisis" in India's skilling ecosystem is widely recognised, empirical research on skill development efforts, either in the form of detailed case studies or quantitative research, is still at a rudimentary stage. Much of the recent scholarship on Technical and Vocational Education and Training (TVET) focusses primarily on recent changes in the policy architecture (such as the Skill India Mission), without generating any empirical evidence on the implications of these changes on the functioning of skilling institutes, labour markets and manufacturing firms. This project relies on qualitative case study research, consisting of interviews with various stakeholders, such as trainees, trainers, manufacturing workers, and managers. The primary research sites consist of skilling institutes and manufacturing firms operating in and around Sri City. In skilling institutes, we focus on the extent of employers' involvement in technical education in terms of funding and human resources, curriculum design and delivery, and instructor training. By studying the curricular practices of skilling institutes with differing levels of employer involvement, as well as the aspirations of trainees

and their learning experiences, we hope to be able to evaluate the nature of knowledge produced and transmitted in these sites. The purpose is to examine how learning processes in the skilling institute and the workplace might inform each other to generate dynamic interdependencies between skill development and the acquisition of new capabilities by manufacturing workers on the shopfloor.

Exploring the Complexities and Underlying Challenges in the Rural Labour Market in India

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This study attempts to analyse the complexities and emerging employment challenges in the Indian rural labour market and its association with individual and household characteristics based on unit level Periodic Labour Force Survey (PLFS) for the year 2019-20, 2020-21 and 2021-22. It attempts to understand and compare the pre-COVID scenario with the more recent situations, to provide an extensive picture on the intersectionality between occupational vulnerability and other forms of social and economic vulnerabilities. The paper employs two separate binomial logistic regressions to analyse the determinants of employment and unemployment, as well as regular salaried employment on a set of individual and household variables such as sex, age-group, educational qualification, social group, religion, and household size. Cross-sectional analysis of two time periods i.e., 2019-20 and 2021-22 has been carried out. Empirical results reveal that female labour force participation rate (LFPR) and workforce participation rate (WPR) is relatively low and has shown drastically low growth rates as compared to males. Rural labour market is dominated by a high proportion of self-employment, followed by casual employment and declining regular jobs in India. Gender-wise analysis shows that a high proportion of females engaged as unpaid family workers, followed by self-employed own account workers and casual labour. On the other hand, a high proportion of males were self-employed as own account workers, followed by casual labour in other works and regular salaried workers. A relatively high proportion of females in self-employment reflects upon their vulnerability and participation in low productive and precarious economic activities. The overall participation rates in the labour force are higher for lower castes in rural areas. Proportion of scheduled tribes (STs) engaged in unpaid family work was comparatively higher while scheduled castes (SCs) were mostly engaged as casual labour in public and other works. Recovery was relatively low for STs owing to their higher concentration as unpaid family workers and decreased regular employment in the last three years, signifies the vulnerability of the ST households in seeking quality employment in rural areas. Additionally, with income class analysis proxy by monthly per capita consumer expenditure (MPCE), rural females have been worse off after the pandemic. An interesting observation was the females between 15-29 years were in the highest MPCE quartile from 2020-22. In the last 3 years, it can be noticed that ST households have been concentrated in the lower MPCE quartiles as compared to other social

groups. The analysis also highlights the complexities and challenges of specific demographic groups in seeking employment and regular salaried employment. In rural areas, males, mostly middle age group individuals and others, except for the youth, belonging to smaller households, mostly from ST and other backward class (OBC) social groups, with lower levels of general and technical education are more likely to be employed. Therefore, females and the youth have been less likely to be employed. Also, those with higher levels of general and technical education are less likely to be employed, directly points towards lack of availability of jobs for the educated in the rural sector. In context of quality of employment, regression results indicate that prior to the pandemic, females were more likely to be engaged in regular salaried employment compared to males. However, this trend shifted during the pandemic, reflecting the disproportionate impact on female employment during the crisis. Youth, although low in proportion in total rural employment, are more likely to get engaged in regular salaried employment. This can also be related to the higher levels of education, both general and technical, needed to seek regular salaried jobs. SC are mostly engaged in regular salaried employment while ST and OBC have higher likelihood of seeking employment, but not as regular salaried. In conclusion, the findings of the paper shed light on the evolving dynamics of the rural labour market in India. The observed changes in employment patterns, the increasing prevalence of self-employment, and the disproportionate impact on female employment underscore the complexities and vulnerabilities within the Indian labour market. The study also emphasises the role of education, skill and vocational training in shaping employment outcomes and highlights the multi-dimensional nature of vulnerability in the labour force. The paper also calls for immediate policy responses to address these challenges including a robust social security system, which is long due.

TECHNICAL SESSION 2.6

Impact of Covid 19 on the livelihood Opportunities of Marginalized Workers and Their Present Position - A Case Study of Hyderabad District - Telangana

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One event which has rocked every country in the world compared to any other event after the great depression of the 1930s was none other than the COVID-19 pandemic. The pandemic has caused a global multidimensional crisis, one of its impacts being the crisis on the informal economy. The present study is aimed at assessing the impact of COVID-19 on marginal workers in the Hyderabad district of Telangana state in terms of loss of employment. The study is an analytical and descriptive type, based on both primary and secondary data. The primary data were collected from about 100 marginal workers in different occupations in the Hyderabad district by administering a structured and pretested questionnaire. Descriptive statistics along with chi-square and ANOVA were used with the help of SPSS to analyse the data. The findings of the study reveal that total loss of income among all the surveyed respondents. Maximum income loss was felt by Kirana shop merchants. More than 63.83% of the respondents have lost their employment in their selected occupations and those of the respondents 36.17% who are continuing have no possibility of revival in their continuation as the market has become competitive. The study suggests that the government should ensure to provide free access to loans, especially for women who do not have any access to continue their profession. One event which has rocked every country in the world compared to any other event after the great depression of the 1930s was none other than the COVID-19 pandemic. The pandemic has caused a global multidimensional crisis, one of its impacts being the crisis on the informal economy. The present study is aimed at assessing the impact of COVID-19 on marginal workers in the Hyderabad district of Telangana state in terms of loss of employment. The study is an analytical and descriptive type, based on both primary and secondary data. The primary data were collected from about 100 marginal workers in different occupations in the Hyderabad district by administering a structured and pretested questionnaire. Descriptive statistics along with chi-square and ANOVA were used with the help of SPSS to analyse the data. The findings of the study reveal that total loss of income among all the surveyed respondents. Maximum income loss was felt by Kirana shop merchants. More than 63.83% of the respondents have lost their employment in their selected occupations and those of

the respondents 36.17% who are continuing have no possibility of revival in their continuation as the market has become competitive. The study suggests that the government should ensure to provide free access to loans, especially for women who do not have any access to continue their profession.

Revisiting International Emigration and Inward FDI Debate of India: Empirical Evidence from Panel-data Simultaneous Equation Modeling

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The dynamics of international factor mobility, including international emigration and inward Foreign Direct Investment, have become crucial in shaping India"s economic landscape within the context of globalization. Therefore, in this study, we have examined the determinants of Indian bilateral emigration and inward FDI stock and examined the substitutability or complementary relationship between the two variables. The empirical estimation of this study employed single equation model techniques such as pooled ordinary least squares, fixed effects, random effects, Hausman-Taylor regression, Two-Stage Least Squares instrumental variables approach, and Poisson pseudo-maximum likelihood approach. This study also minimizes the gap in econometric modeling by employing simultaneous equations model techniques such as seemingly unrelated regressions and three-stage least squares to address the endogeneity issue with a panel dataset considering India as a reporting country with 88 partner countries for the period 2001-2020. This study has found that certain determinants such as GDP source, common language, remittances, trade openness, infrastructure quality, employment rate of host countries, and unemployment rate of source country have strong positive and significant effects on the bilateral emigration stock of India. On the other hand, GDP host, distance between source and host, common border, and trade openness of source have substantial adverse effects on Indian bilateral emigration. This paper has also found evidence that certain determinants such as GDP source and host, common language, common colony, trade openness of source, exchange rate volatility, inflation rate, and corporate tax of host country have a strong positive and significant impact on bilateral inward FDI of India. On the contrary, distance, common border, wage differences between source and host, trade openness, and financial development of host have a strong negative and significant impact on bilateral inward FDI of India. Moreover, we have found that the 2 Indian bilateral emigration stock to the 88 partner countries positively correlates with bilateral inward FDI into India from 88 partner countries and vice versa. This result implies a complementary simultaneous relationship between Indian bilateral emigration and inward FDI stock. Thus, effective policies that harness these interactions can improve the economic benefits for India and contribute to its long-term prosperity.

Social Norms, Intergenerational Influence, and Social Capital in Shaping Young Women's Time Use

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The integration of women into the workforce is marked by a complex interplay of social norms, intergenerational influences, and the leveraging of social capital. Studies show that household decisions regarding women's employment are deeply entrenched in social norms, with studies emphasising the decisive role of broader cultural values in shaping women's post-marriage career choices. Patriarchal norms and religious practices are identified as significant deterrents to female labour force participation, while the presence of parents-in-law is associated with reduced participation, reflecting the impact of gender norms combined with filial piety. Contrastingly, the presence of working mothers or mothersin-law is found to increase female labour force participation, challenging traditional gender norms within households. Furthermore, the experiences of previous generations, particularly working mothers, play a crucial role in shaping attitudes towards women's employment, influencing future generations to be more accepting of women in the workforce. The number of siblings, family size, and birth order are identified as additional factors impacting women's attitudes towards work, with larger families and later-born women exhibiting more conservative beliefs. However, the presence of working elder women in the household is identified as a source of social capital, facilitating information-sharing and enhancing younger women's access to employment opportunities. The paper argues that the relationship between adult working women in a household and the workforce participation of younger women operates through the dual mechanisms of weakening gender norms and strengthening social capital. The presence of a generation of employed elderly women is posited to bring about a positive change in social beliefs and attitudes, thus increasing the workforce participation of younger women in the household. Additionally, the employment status of adult women is identified as a form of social capital that empowers younger women within the household, potentially increasing their autonomy and decision-making power. Working women act as conduits for social networks, facilitating younger women's access to employment opportunities and influencing their labour supply decisions. Utilising the Time Use Survey (TUS) 2019, we observed that young women in households with working adult women are more likely to be engaged in work compared to those in households with non-working women. This trend is not evident among young men in the same households. Analysing time allocation, we found that while young women spend more time on economic activities, it comes at the expense of increased time in caregiving and reduced time for learning and socialising.

Political Economy of Migration in the India Bangladesh Borderlands: Identity, Labour and Affect in the former Chhit Mahals in Cooch Behar

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Large number of households from villages in the India Bangladesh borderlands are migrants to Indian cities, particularly to the National Capital Region (NCR) of Delhi. Migration from Cooch Behar, an industrially backward district in the northern part of the state of West Bengal in India sharing border with Bangladesh and the Indian state of Assam, have been a regular practice as subsistence agriculture fails to provide the landless agricultural labourers continuous employment and competitive wages as compared to informal sector employment in the Indian cities. Based on ethnographic study in Delhi NCR and the former Chhit Mahals (the name for the former border enclaves in Bengali) in Cooch Behar in the period immediately following their exchange, of historically marginal migrant households in the Delhi NCR who work in the construction industry, belonging to the former Chhit Mahals, i.e., border enclaves of Bangladesh and India that were exchanged between the two states in August 2015 and are now Indian villages, whose residents had opted for Indian citizenship, this paper explores migration from these former enclaves with a relational political economy perspective. It analyses broader socio-cultural, economic, political processes and interests which interact with migration to demonstrate how the migrant's labour value is determined at the intersection of identity and affect, with marginalisation of the migrants from the India-Bangladesh borderlands emerging as a product of struggles and a dynamic of cultural reconstruction. Large number of households from villages in the India Bangladesh borderlands are migrants to Indian cities, particularly to the NCR of Delhi. Migration from Cooch Behar, an industrially backward district in the northern part of the state of West Bengal in India sharing border with Bangladesh and the Indian state of Assam, have been a regular practice as subsistence agriculture fails to provide the landless agricultural labourers continuous employment and competitive wages as compared to informal sector employment in the Indian cities. Based on ethnographic study in Delhi NCR and the former Chhit Mahals (the name for the former border enclaves in Bengali) in Cooch Behar in the period immediately following their exchange, of historically marginal migrant households in the Delhi NCR who work in the construction industry, belonging to the former Chhit Mahals, i.e., border enclaves of Bangladesh and India that were exchanged between the two states in August 2015 and are now Indian villages, whose residents had opted for Indian citizenship, this paper explores migration from these former enclaves with a relational political economy perspective. It analyses broader socio-cultural, economic, political processes and interests which interact with migration to demonstrate how the migrant's labour value is determined at the intersection of identity and affect, with marginalisation of the migrants from the India-Bangladesh borderlands emerging as a product of struggles and a dynamic of cultural reconstruction.

Intertemporal Labour Market Participation of **Married Women in Germany**

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Female labour supply is an important part of a country's resources and remains the focus of policy debates. In developed countries, population ageing causes a significant slowdown in labour force growth, which leads to challenges to the sustainability of economic growth. One of the key countermeasures could be to increase the participation of groups, such as women, that are currently underrepresented in the labour market. However, studies are still sparsely available on women's labour market participation in economically advanced countries. Women in these countries still face adverse labour market outcomes such as a lower probability of labour force participation, few working hours, and lower wages. This paper analyses the intertemporal labour force participation behaviour of married women in Germany by combining the survey data from the National Educational Panel Study (NEPS) with the administrative data from the Institute for Employment Research (IAB). A predominant characteristic of annual labour force participation behaviour is the high persistence in individual participation decisions popularly known as 'inter ☐ temporal persistence'. Persistence occurs mainly due to (i) state dependency and (ii) individual heterogeneity. State dependency is defined as an individual's current labour force state depending on his/her past labour force state. In a series of works, Heckman distinguished between true and spurious state dependencies. Therefore, persistent employment decisions may be caused by state dependence (whether an individual's propensity to participate is changed because of past participation), and (b) serial correlation. Several sources of state dependence have been considered in the literature. The source of labour market persistence has important policy implications. Therefore, being able to distinguish among these sources is important because they have different implications for labour market policies. This study aims to use different dynamic frameworks to understand women's labour market participation in Germany. The robustness of identifying alternative sources of persistence to various econometric model specifications was examined using longitudinal data on about 1500 women for a period of 10 years (2012 \, 2021). We emphasised the relationship between women's labour market participation and their fertility decisions. The novelty of the study is that it takes into consideration different indicators of an individual's employment perspective. We considered both employment from intensive and extensive margins and defined three different proxies for labour force participation for our empirical analysis. The empirical analysis was conducted using three different estimation techniques: (i) the linear probability model with random effects, (ii) the dynamic probit model with random effects, followed by (iii) dynamic panel estimation using the Arellano ☐ Bond technique. One of the important findings of the study is that, in most of the specifications, we found significantly strong state dependency in women's labour supply behaviour. This implies that the persistency in

married women's labour market participation behaviour in Germany is determined by endogeneity. Therefore, the experience of participation itself causes persistence in participation behaviour. Besides, we also found that the fertility decision has a major role in labour force participation in that, having more children significantly reduces the probability of women's labour force participation. From the methodological perspective, although, different employment proxies provided similar findings across econometric techniques, employment measured in terms of annual labour earnings was the most accurate indicator for women's labour force participation. Besides, different estimation techniques do not differ in their findings only except for the Arollano□Bond technique where we did not see consistent state dependency across different employment types. The study, therefore, further enhances our understanding of intertemporal labour supply and is likely to have a greater application to other advanced economies.

Technology, Productivity and Employment Shifts in India

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Over the past two decades, technological breakthroughs, particularly in information and communication technologies, have profoundly shaped economic growth through its impact on productivity, employment and sectoral linkages. Overall productivity growth results from productivity growth within sectors and the reallocation of labour across sectors with varying productivity levels. Productivity gains within a sector stem from workers shifting from low to high productivity tasks, facilitated by learning by doing and on-the-job training, without altering the workforce size. Productivity growth from labour movements between sectors occurs as workers transition from low to high productive sectors. Technological advancement, by enhancing productivity, allows the production of the same output with fewer workers, leading to reduced labour demand, particularly for less skilled and unskilled workers. Additionally, technological change fosters new enterprises and sectors, creating demand for non-tradable activities in various sectors through a multiplier effect, prompting workers to move within and between sectors. In India, economic reforms were heavily focussed on increasing the productivity of manufacturing industries through capital and technological inflows. The tangible nature of manufacturing output allows quantification of technological change for this sector. With this background, the present study aims to identify technological change in manufacturing industries, determine the change in employment pattern within- and between-sectors, and establish causal relationship between technological change in manufacturing industries and employment shifts within—and between—sectors. The study is primarily based upon the secondary data collected for the period 2001-02 to 2011-12. In order to identify the change in technology and examine the employment shifts, the study period was divided into two sub-periods: pre-2011-12 and post-2011-12. Technological change was measured using the proxies R&D intensity, investment in information and communications technology (ICT), patent counts and royalty and license fee to total sales ratio. Employment shifts were examined using shift-share decomposition approach. The causal relationship between technological change and employment shifts within—and between—sectors is established using pooled regression method. The explanatory

variables used were technology index, mean years of schooling, share of urban population, female to male ratio in labour force. The study reveals that within-sectoral shifts exhibit a positive impact, contributing to growth, yet between-sectoral shifts carry a significant negative effect, resulting in an overall net negative growth impact. This discrepancy is particularly evident in the transition of less skilled workers from agriculture to non-agricultural sectors, emphasising the challenges posed by technological advancements and the need for adaptability. The manufacturing sector experiences a positive effect from between-sectoral shifts but faces a negative impact from within-sectoral shifts, indicating a demand for highly skilled workers. The service sector, however, presents positive effects from both types of shifts, underlining its potential to cater to diverse skill levels. This shows the importance of training and technical advancements to enhance productivity. Similarly, the construction sector show positive outcomes from within-sectoral shifts, emphasising the gradual development of technical abilities. Conversely, the negative impact of between-sectoral shifts in construction is linked to the fluctuating engagement of casual labour based on demand. The estimates confirm the impact of technological changes on employment shifts between-sectors in agriculture and manufacturing, and within-sectors in construction and services. The negative effect of urbanisation on between-sectoral shifts in agriculture and its positive impact on within-sectoral shifts in manufacturing, construction, and services emphasise the importance of concurrent development of all sectors. The gender ratio in labour force show a positive effect on within-sectoral shifts in agriculture and a negative effect on both within—and between—sectoral shifts in construction sector. This highlights the influence of local-level factors, encompassing social, economic, and mobility constraints. The study concludes that within-sectoral shifts contribute positively to growth contingent upon workers possessing a threshold of adaptability to technological changes. However, shift towards low-productivity sectors, particularly distress-type shifts, pose challenges. With technology absorbing routine tasks, education alone is insufficient; additional abilities like logical reasoning and critical thinking are crucial for employability. The findings highlight the necessity for simultaneous development across all sectors and locations, as lopsided growth impedes individuals from seizing opportunities and hampers optimal human potential utilisation. These effects manifest in aggregate productivity and ultimately impact the overall economic growth of the country.

African Migrants in India: Economic and Non-economic "Productive" Strategies

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The paper discusses the challenges of African migrants migrating to India for educational and economic growth and opportunities. I argue that the African migrants travel to Bengaluru inspired by a global narrative of "international quality" education and work opportunities in the IT sector. However, these aspirations are barely realised as they experience subpar education at the hands of degree mills, strict immigration policies, and meagre economic opportunities. Yet, unsettling the landscape of power structures, the African students pursue economic and non-economic "productive" strategies to keep

pursuing mobility and maintaining hope for future prospects. Amidst the precarious opportunities, African migrants desire to earn money and find economic opportunities in self-actualisation businesses that are embedded in non-economic social relations and spatial engagements. These complex relations are built on inevitable contradictions of trust and mistrust, pretense and honesty, legality and illegality, and morality and immorality. In the process of successful economic negotiations, careful consideration, and caution to avoid unwanted attention and potential harm is imperative. However, the shock of loss, betrayal, and fraud is part of the complex identities of African migrants that encourage them to keep maneuvering, negotiating, and moving forward in their journey in India. In this paper, I argue that growth and employment are parameters for understanding economic progression but also shapes the less tangible complex social networks and intimate connections that become foundation to the migrant's sustainability and survival in the host country. The paper discusses the challenges of African migrants migrating to India for educational and economic growth and opportunities. I argue that the African migrants travel to Bengaluru inspired by a global narrative of "international quality" education and work opportunities in the IT sector. However, these aspirations are barely realised as they experience subpar education at the hands of degree mills, strict immigration policies, and meagre economic opportunities. Yet, unsettling the landscape of power structures, the African students pursue economic and non-economic "productive" strategies to keep pursuing mobility and maintaining hope for future prospects. Amidst the precarious opportunities, African migrants desire to earn money and find economic opportunities in self-actualisation businesses that are embedded in non-economic social relations and spatial engagements. These complex relations are built on inevitable contradictions of trust and mistrust, pretense and honesty, legality and illegality, and morality and immorality. In the process of successful economic negotiations, careful consideration, and caution to avoid unwanted attention and potential harm is imperative. However, the shock of loss, betrayal, and fraud is part of the complex identities of African migrants that encourage them to keep maneuvering, negotiating, and moving forward in their journey in India. In this paper, I argue that growth and employment are parameters for understanding economic progression but also shapes the less tangible complex social networks and intimate connections that become foundation to the migrant's sustainability and survival in the host country.

TECHNICAL SESSION 2.7

Realising Inclusive Growth: A Critical Examination of Recent Trends in Real Wages and Wage Convergence in India

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In discussions on India's economic policy, the crucial indicator of real wage growth has been consistently overshadowed by debates focussed on less relevant metrics, notably unemployment figures. This neglect is particularly concerning as unemployment data often fails to address the economic well-being of people experiencing poverty. On the other hand, real wages directly impact workers' lives, with a rise indicating improved earnings and living standards. The researchers contend that a sustained increase in real wages indicates economic growth, translating into creating better-quality jobs. This background underscores the need to shift attention to real wages for a more comprehensive understanding of the impact of economic policies on individual prosperity. This study analyses the regional and aggregate level real wage trend and the likelihood of wage convergence or divergence for the construction, general-agricultural and non-agricultural labour market. Data The study is based on secondary data. The data have been compiled from the annual report "Handbook of Statistics on Indian States" published by the Reserve Bank of India, Government of India. The primary source of data is the labour bureau. Both direct measure of convergence (coefficient of variation) and indirect measure of convergence (sigma and beta) have been used. This study examined the real wage trend and growth rate for construction, general agricultural, and non-agricultural workers from 2014-15 to 2021–22 at the regional and aggregate (all-India) levels. In conclusion, our exploration into the nexus of real wages and wage convergence in India underscores the critical importance of a nuanced understanding of the country's economic landscape. Firstly, while examining the trend in the wage rate among three occupations, a large degree of heterogeneity has been observed across the states over the study period. In terms of all India levels, the real wage growth rate has been recorded as highest in general agricultural occupations; on the flip side, the real wage growth rate was lowest in construction occupations during the last eight years. Further, during the last eight years, some low-wage regions/states (Odisha and Madhya Pradesh) have achieved a higher pace of real wage growth rate compared to high-wage regions (Kerala, Tamil Nadu, Punjab, Haryana and Gujarat) in all occupations. Our findings highlight the significance of sustained increases in real wages as a

barometer for genuine improvements in the quality of life for workers. However, the convergence statistics (direct and indirect methods) reveal expected results. The coefficients of variation (CV) statistics estimate suggests that variability has declined over the study period and provides evidence that workers' wages across states have converged. In conclusion, our exploration into the nexus of real wages and wage convergence in India underscores the critical importance of a nuanced understanding of the country's economic landscape. As India continues to bask in the glow of its stellar macroeconomic performance, the imperative to channel this success towards inclusive growth cannot be overstated.

Economic Growth and Employment: Evidence for Indian States

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The focus around employment often revolves around key metrics such as labour force participation rates, unemployment rates and worker population ratio. Although, employment and growth are both significant macroeconomic indicators a not so widely discussed measure is the employment intensity of growth that captures the effect of growth on employment. Employment elasticity is the numerical representation of how employment varies with economic output and measures the percentage change in employment for a one percentage point of economic growth. Employment represents the number of employed persons arrived from the worker population ratio and not hours of work. The paper contributes to the gaps in literature on employment intensity of growth in India by studying the impact of growth on employment at the State level and effect of growth on male and female employment as well as on rural and urban employment. From a policy perspective, examining differences across States and gender in terms of the employment intensity of growth can provide deep insights for policy making to address the twin issues of employment and growth. The paper studies the employment elasticity of growth using PLFS data for the age group 15-59 years over the period 2017-18 to 2022-23 and finds that all the India level the employment intensity of growth has increased to 1.43 and this has been accompanied by an increasing in the worker population ratio from 46.8 percent to 59.5 percent over the same period. The employment elasticity of female workers at 3.09 is much higher than that of male workers at 0.82. Likewise rural employment elasticity of 1.18 is much higher than that of urban elasticity of 0.94 over the period or male workers . This increase has been supported by an increae in the male and female worker population ratio by 9 percentage points and 16.5 percentage points respectively. The picture at the State level shows that Gujarat, Himachal Pradesh, Jharkhand, Uttar Pradesh, Uttarakhand and the North East States of Arunachal Pradesh, Mizoram, Nagaland and Tripura have seen high employment elasticities as compared to other States. Thes are also States where female as well as rural elasticity is higher as compared to other States.

A Re-estimation of Employment and Income Loss Due to Lockdowns in India

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As a matter of policy in India, successive lockdowns were imposed as a countermeasure against the unhindered spread of the novel coronavirus since 2020; the first and most stringent one being put in place between April-June 2020 followed by a second, less stringent one, during the second wave between April-June, 2021. Of course, the strictness and duration of the implementation during both varied widely state to state. While this was indeed a difficult but a laudable measure that could prevent the virus' contagion and the subsequent loss of life, it also resulted in an immediate near-collapse of economic activities in 2020; a considerable loss of employment and livelihood at a national scale ensued as shown by various scholars. Yet, surprisingly, the annual aggregate unemployment rate (UR) as reported by the Periodic Labour Force Surveys (PLFS) until the recent one, did not reveal any substantial increase - not only did the UR based on current weekly status (CWS) showed virtually no increase at all between 2018-19 and 2019-20, remaining stagnant at 8.8 percent, it even reduced to 7.7 percent in 2020-21 to 7.5 percent and further down to 6.6 percent in 2021-22. This, then, seems of be at odds with the deplorable state of the workers reported by the several scholars through their primary surveys at the time. In this context, this paper seeks to understand this puzzle of contradictory scenarios. This is especially important because PLFS remains the largest and most reliable official survey on the employment-unemployment situation in the India. In the existing literature, it is pointed out that this puzzle can possibly be explained by the sudden drop in the labour force participation rate (LFPR) owing to the lockdown and/or by increase in the number of employed with zero income (considered employed due definitional constraints of CWS) considered employed under the lockdown. However, a detailed unit-level assessment of the PLFS data reveals that the officially reported annual URs based on CWS are not comparable with the previous estimates primarily due to the change in the average work-hour in the last seven days due to the COVID-19 induced lockdowns. It is estimated that if the available average daily work hour would have remained the same as the pre-lockdown situation (i.e., 47.8 hours per week), then the unemployment rates of 2019-20, 2020-21 and that of 2021-22 (PLFS years from July to June) would become 14.4 percent, 13.4 percent and 13.4 percent respectively, instead of the reported figures of 8.8 percent, 7.5 percent and 6.6 percent respectively. Further, it was also found that estimation of the income loss using the same data according to the business as usual scenario, the potential loss of wages would be 3.85 percent of gross domestic product (GDP) in 2020-21, and to the tune of 3.76 percent of GDP in 2021-22. There were approximately 11.7 percent and 12 percent estimated losses of aggregate earning of the Indian workforce in 2020-21 and 2021-22 financial years, respectively, due to the COVID -19 induced lockdowns. It was also found that the poorer sections of the workforce and the wage-earners were disproportionately affected by the exogenous shock caused by the COVID -19 induced lockdowns in India.

Rural Households' Reliance on the Farm Sector for Livelihood: Analysing the Distribution of Farm Income in India

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The objective of the article is to examine the rural households' reliance on the farming for their livelihood. We used numerous criteria to analyse inter-state differences in it. The rural household's reliance on the farm sector varies depending on the parameters used. Agriculture households account for 54.0 percent of all rural households, while households with agriculture as their primary source of income account for 38.8 percent. Out of total agriculture households, 38.9 percent are entirely dependent on farming for their income. Approximately, 56.6 percent of agricultural households earn more than 50.0 percent of their household income from farming. In 2019, at the national level, the average contribution of farming to agricultural households' income was 53.4 percent. It varies greatly depending on the amount of land possessed. The contribution of farming to agricultural households' income grows with the size of land possessed by the household. It has been clearly established that when land size is smaller than 1.0 hectares, farming contributes less than 50 percent of agricultural households' income. Farming's contribution to agricultural households' income varies widely, with Kerala having the lowest percentage (26.4%) and Punjab having the highest (70.9%). A comparison of 2013 and 2019 shows a decline in the percentage of agriculture household as well in the share of income that comes from farming. There are two types of transition that are visible: 1) households migrating away from farming and 2) agriculture households diminishing their reliance on farming. Agriculture household's share fell from 57.8 percent in 2013 to 54.0 percent in 2019. During the same time period, farming's share of the total income of agriculture households fell from 59.8 percent to 53.4 percent. To ascertain the magnitude of a household's dependence on agriculture, we have computed the equivalence household fully dependent on farm income. According to this estimate, in 2019, the equivalence of fully reliant agriculture households is 47.3 percent of total agricultural households, down from 51.8 percent in 2013. As the proportion of total rural households, it is 25.4 percent in 2019 compared to 29.9 percent in 2013. An examination of monthly farm income obtained by agriculture households in India presents a very dismal picture of agriculture households. Only a small percentage of agriculture households in India receive a monthly farm income greater than ₹10,000. Only 1 percent, 2 percent, and 3 percent of agriculture households in the states of Jharkhand, Odisha, and West Bengal, respectively, receive a monthly farm income of more than ₹10,000. Furthermore, nearly 70 percent of agriculture households in these three states earn a farm income less than ₹2000 per month. It would not be incorrect to argue that agriculture households in these three states in general are unable to earn a subsistence income from farming. The situation in other states is not much better. At the national level, 77.6 percent of agriculture households have a monthly farm income that is less than the official poverty line. On a level of income equivalent to subsistence, farming is predicted to be able to feed 688.6 lakh households out of the 927.3 lakh agriculture households. The remaining 238.7 lakh agricultural households are a kind of excess burden. This is roughly 25 percent

of total agricultural households in India. Therefore, even with subsistence income, 25 percent of total agriculture households in India must find alternative sources of income other than farming. For a long time, India's rural workforce has been shifting away from agriculture. Since the early 1980s, researchers have attempted to investigate the process of this transformation as (a) distress-push, in which the poor are driven to seek non-agriculture employment due to a lack of adequate employment opportunities, and (b) demand-pull, in which rural people are able to respond to new opportunities. The present study makes it very evident that rural transformation is mostly a distress-push phenomenon. The vast majority of agricultural households are unable to receive the monthly farm income equivalent to the official poverty line. The demand-pull phenomenon does not hold in this situation. Due to the fact that farm income is insufficient to meet household's fundamental needs, agricultural households are compelled to look for alternative sources of income. This claim is confirmed by the higher reliance on farm income of agricultural households with large land sizes.

Unveiling Social Disparities in Employment and Wages: A Labour Market Segmentation Analysis of India's IT Industry

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Using the insights of labour market segmentation theory, this study investigates caste based inequalities in employment probabilities and wage rates in India's information technology (IT) industry. This industry is one of the fastest growing industries in the country. It has a crucial role not only in terms of its contribution to gross domestic product (GDP), but also in terms of job creation for educated youth of the nation. Besides the spillovers of growth in the IT sector reaches to several sectors of the economy including education, hospitality, banking and insurance, and tourism. The labour market in the high paying job sector, such as IT sector, is often touted as performance and merit driven, choosing candidates purely on the basis of their skills and rewarding them as per their productivity. Specifically, this study undertakes an investigation into the disparities prevalent in employment probabilities and wage earnings based on caste within India's burgeoning IT industry. The primary objective is to apply labour market segmentation theory to comprehend the mechanisms contributing to restricted access for marginalised populations to secure high-productivity job opportunities. Employing data sourced from the National Sample Survey (NSS) rounds conducted in 2011-12 and 2020-21, this research employs linear and logistic regression analyses to estimate both employment probabilities and wage differentials. While IT industry remains the main target of educated youth for their employment, the data suggests that the opportunities in the IT labour market do not seem to be accessible to all the sections of the nation equally. The share of IT industry in the total service sector employment has increased from 2.9 percent in 2011-12 to 4.7 percent in 2020-21, while the share of lower castes groups, such as scheduled castes (SCs) and scheduled tribes (STs) have fallen from 13 percent in

2011-12 to 9 percent in 2020-21 despite a rise in their literacy rate. Within such a context, our study attempted to examine the validity of the castelessness claim underlying the IT sector industry's job market. We utilised the NSS 78th round (2020-21) and 68th (2011-12) round to obtain an individual level cross-section dataset, which we analysed using linear and logistic regression estimations. Our regression analysis estimates the employment probabilities of lower caste individuals in comparison to upper caste individuals to be engaged in the IT sector, and assesses the wage differentials between these social groups. We recognise the role of education/skills and other individual characteristics in determining employment probabilities and wage earnings of individual persons, and account for the same by including a set of control variables. The findings of our study show that the log-odds of the marginalised group are lower by -1.24 as compared to that of the upper caste group. The differential remains significant even after accounting for education control variable. Surprisingly, the differential nine years ago in 2011-12 was only -1.13. Moreover, we find that lower caste graduate pass-outs have only 13 percent probability of being employed in IT sector as against 41 percent of the upper caste graduate pass-outs. This is an indicative of caste based labour market segmentation, which is an alarming signal for policy makers as the widening differentials have surfaced at a time when the discourse on inclusive growth has taken centre stage in policy circles at the national and state level. Our results were consistent even when we stratified our sample between male and female, and between rural and urban categories. The results show that females and rural individuals are more vulnerable to such a labour market segmentation problem. Finally, the findings of our wage analysis shows that SCs and other backward classes (OBCs) are earning lesser by 24 percent and 22 percent, respectively as compared to that of the upper caste individuals even when we keep their levels of education constant. This result does not change significantly when we control for the nature of employment arrangement of the individuals, thus offering robust evidence of caste based labour market segmentation in Indian IT sector.

Economic Growth and Occupational Segregation: A Post 2000 Analysis

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India's growth story after the 2000s has been characterised by significant economic expansion, technological advancements, and social changes. All these factors contributing to growth are capable of weakening the grasp of caste system in labour market. In India, caste system is a carefully manufactured system of social stratification revolving around occupation. This paper aims to examine the changes in occupational segregation in post 2000 era. We aim to answer the following questions in this paper. 1. Is impressive performance in education sector in terms of higher literacy rate, higher school enrolment etc. instrumental in reducing occupational segregation? 2. Has segregation declined from 2004-05 to 2019-20? The gender based occupational segregation, intra group and inter-group is also looked in to. The study is based on Nationally representative sample data on employment and unemployment situation

in India and the periodical labour force participation survey. Various segregation indices are used in this paper such as Dissimilarity index, crowding index and modified Bergman index is used. Occupational crowding research is used to assess the degree of under- and over-representation of a deprived group in an occupation given the group's expected level of representation. The paper shows that scheduled caste (SC) worker's occupational structure is becoming increasingly dissimilar with respect to general (GEN) category in urban and rural areas. Scheduled tribe (ST) and other backward classes (OBC) shows a convergence in occupational structure. Among highly educated workers (12th and above), a quarter of SC rural workers are working in the elementary occupation in 2011-12 and it declined to 16.1 in 2019-20. At the same time Only 4.8 percent of GEN rural workers are engaged in elementary occupations. The share of high educated workers in Grade 1 occupations hovers around 30 percent for all the social category. 30 percent of the educated SC workers are in the bottom three professions and 16 percent of the GEN educated workers are in bottom three of the occupational hierarchy. In case of Grade1 jobs, the share of different social classes range from 25 to 31 percent. A disturbing observation from 2019-20 data is the increasing share of elementary occupation in urban sector and this trend is consistent for all the social groups. Caste based segregation in India is larger than that of gender based occupational segregation. The crowding index indicates that; the deprived categories are still tied to the caste assigned traditional occupation even though that link has weakened over the years. It is true that many of the 'traditional occupations' disappeared, but the social group which engaged in such occupations shifted to other low paying unskilled jobs like Agricultural labourers, domestic help etc. ST workers also are over- crowded in elementary jobs in urban areas unlike in rural areas. A detailed analysis in to The paper also discusses reasons for the segregation and probable solutions. Employment segregation is reality of present day labour market. Even after an impressive gross domestic product (GDP) growth achievement and stride in the social sector A large section of the SC workers are still casual workers, year wise analysis shows that, occupational segregation among SCs seems to be falling. But crowding of deprived categories in low quality low paid occupations are still a reality

Economic Growth and Female Employment Nexus in Haryana's Labour Market: The Demand Side Story (1993-94 to 2019-20)

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The decrease in female workforce participation rates that occurred during 1993-94 to 2019-20 cannot be fully explained by the supply side analysis, hinting towards the need for attention to demand side analysis related to effects of structural changes on gendered employment. It is a matter of concern that how female employment is getting affected due to the structural change in Haryana, a state which was predominantly agrarian and a huge proportion of female workers were involved in agricultural activities. In this context, this paper examines the current demand-side crisis by describing Haryana's sectoral GDP and employment growth, as well as the consequent "employment elasticity" of growth in

various sub-sectors of the economy for female and male workers individually. According to the Lewis theory (1954), "when economies grow, the structure of production evolves in such a way that the share of agriculture decreases and the share of industry increases (typically up to 50 per cent), followed by an increase in the share of services". The employment pattern also changes as a result of these structural changes. The workforce shifts in a symmetrical pattern "from agriculture to industry to services". On a spatial level also, there is a shift in production and employment from rural to increasingly urban areas. This overall dynamic leads to a rise in overall wages in both rural (non-farm sector) and urban areas. In a nutshell, Lewis theory states that as structural changes occur, employment patterns changes as well where labour moves from agriculture to modern sectors, leading to increase in overall wage rates. Over the previous few decades, the Indian economy has undergone structural changes. However, in India, relative changes in employment have not kept pace with changes in sectoral composition of output, and in reality, employment transformation has been slow. The Indian economy grew at rates of over 7 percent per year in the first decade of the 21st century, up from average growth rates of approximately 5 percent in the 1990s. These high rates of output growth, however, have not been matched by increased employment. The inadequacy of India's strong growth rates to provide enough job possibilities was first brought to light in the late 1990s, when aggregate employment generation slowed dramatically. Although, in recent years, employment patterns have also begun to catch up.

TECHNICAL SESSION 2.8

Labour Market Relations across Technology and Size Classes in India's Organized Manufacturing Sector

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This study is carried out in the backdrop of severe crisis in investment in the Indian industry and manufacturing sectors, whereby capital formation has significantly slowed down in the second decade of twenty first century. The study adopts the theoretical approaches of heterodox schools of thought to understand the determinants of investment in the organised manufacturing sector in India. Through exploratory analysis, the study identifies that rate of profit and investment rate move together over time, pointing to a close relationship. Further, the study decomposes rate of profit into its component parts — profit/wage share (distribution), capacity utilisation (demand) and capacity-capital ratio (technology). We then identify that, despite the fall in demand and the slowdown in technological growth, the decline in wage share and increase in profit share, which increased significantly in the first decade of 21st century, was sustained without a fall in the second decade, which has contributed to keeping the investment rate afloat. We identify that such a trend was achieved due to the extremely slow rate of growth of real wages of workers even as labour productivity increased sharply, which facilitated the maintenance and sharpening of dominance of capital over labour. The study empirically demonstrates the relationship between rate of profit and investment rate. The study also reveals that the struggle between capital and labour is the most important determinant of investment in the long run. We also extend the analysis to various size classes of firms (large, medium and small). The analysis shows that among the small size class, the struggle for capital to gain dominance over labour is the primary driver of investment, which puts the focus on theoretical debates related to small enterprises, whereby it is argues that they play a key role of extending the exploitation of labour to a relatively less organised class of workers, for the progression of capitalist accumulation. Based on the analysis of empirical results and global scenario, we explore policy interventions, whereby we suggest for the need for an active and functioning State in the economic sphere, with greater involvement in public research and public investment.

Caste and Gender in the Indian Labour Market: **Disparities and Discrimination**

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The Indian labour market has been changing dramatically from low women labour participation to further low level of participation. One of the important features of the Indian labour market is the segregated nature not only based on economic factors but also based on social factors. One such factor is gender among others. Gender differences in other countries have also played a pivotal role in labour market outcomes, but the Indian labour market is more complex. The gender differences in the Indian labour market are further layered and intensified based on caste. The patriarchal norms restrict the participation of women labourers which is a general phenomenon across the world. However, the way these norms have been formulated in India is different because of its interaction within the framework of the caste system. Ambedkar neatly explains these complexities in his pioneer work 'Annihilation of Caste'. Putting this in his own words, the caste system determines the division of labourers rather than the division of labour. In the last few decades, a growing body of literature indicates discrimination in the Indian labour market based on caste identity. In this context, a few research questions have been formulated to understand disparity and discrimination in the Indian labour market through the lens of caste and gender. These include: Whether gender disparities in employment have declined. What factors contributed to the decline or increased gender differences? Are gender differences in the labour market similar across social groups? Does the caste hierarchy exist among female workers in terms of employment opportunities, the type of occupations and industries they work and the wages they receive? This paper examines the caste and gender disparity and discrimination in the Indian labour market. In specific, an attempt is made to understand the quality of workforce participation from a comparative perspective of gender and caste. These objectives are analysed based on the NSSO Employment and unemployment survey 2011-12 and Periodic Labour Force Survey 2018-19. These two large-scale surveys on employment and unemployment in India provide information on caste and gender of the workers. The workers in the age group of 15-59 years are considered active members of the labour market. Employment and unemployment indicators compared to understand gender differences in the labour market. To understand the differences or disparities between male and female workers in the Indian labour market—disparities in characteristics of workers at the individual level as well as at the household level are analysed. These include social groups, household type, education, economic activity, and per-day wages earned. Discrimination is estimated using the Blinder-Oxaca model to understand the contribution of the endowment (explained by the individual attributes) and unexplained factors between male and female workers. The results show an increasing trend in gender disparity during last two decades. The gender differences in work participation and wage earnings have been attributed to endowment factors such as skill and education. However, discrimination is also a major factor accounting to more than 86 percent. Gender discrimination how is larger among the upper caste than among lower castes.

The Nexus between Technology and Employment: A Quantitative Assessment from the Indian **Manufacturing Sector**

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The discussion surrounding the impact of technology on productivity and employment has persisted over time, presenting a two-sided argument that is complicated and argumentative. On the one hand, proponents highlight technology's capacity to generate employment, while the opposing viewpoint suggests its potential to reduce jobs. As a result of this, numerous studies conducted thus far have yielded mixed and contradictory outcomes. However, in today's era of globalisation and digitalisation, this ongoing discourse has taken a fresh and different route. Again, when coming to India, most of the studies on technology and the employment nexus have been carried out at the aggregate level, while disaggregate and unit-level work has been done at the global level. Based on that research gap, this study delves into the critical role of information and communications technology (ICT) in driving employment within the Indian manufacturing sector. Focussing solely on five-digit manufacturing firms, the study uses an unbalanced panel from CMIE Prowess from 2005 to 2022. Employing System GMM, the research establishes a strong link between technology, particularly ICT, and increased job opportunities within these firms. The study also took imported capital as another proxy for technology and carried out the research accordingly. The study evidenced a negative and significant relationship between technology and manufacturing employment when considering imported capital as the representation of the former. In addition to the aggregate analysis, the role of ICT was also carried out in the disaggregate analysis. From the disaggregate analysis, the study has found that medium-tech firms align with the employment-generating hypothesis, showcasing a positive correlation between technology adoption and job creation. However, in the case of high-tech manufacturing firms, the empirical results align with the employment-reducing hypothesis, indicating that advanced technology use in these firms tends to displace labour. Interestingly, when considering imported capital as a measure of technology, the empirical results slightly differ across the categories of firms. Low-tech manufacturing firms, however, do not strongly align with either hypothesis for both forms of technology. The employment trends of the low-tech manufacturing firms are less affected by technology adoption in their production process. Moreover, it also identifies the influential role of firm-specific factors like size, age, and exports along with technology on employment generation in manufacturing firms. All the firm-specific variables play a crucial role in the employment generation of the firm. The impact of other firm-specific variables on employment generation remains consistent across all categories of firms. These variables demonstrate similar effects on job creation within each category, indicating their stable influence on employment dynamics. Given technology's significant and positive impact on bolstering employment, policymakers should swiftly introduce and encourage its adoption among manufacturing firms to enhance job prospects in the Indian manufacturing landscape. Technology's positive and

notable impact on employment in Indian manufacturing firms suggests that the government should actively encourage its adoption. This would not only facilitate technological integration but also aid in absorbing the surplus labour prevalent in the country. Accordingly, they should actively support the implementation of technology when it fosters job creation and exercise caution or restrain its use when it leads to a reduction in employment opportunities. This nuanced approach can help leverage technology to optimize employment prospects within the Indian manufacturing sector.

A Study of Employment Concentration and Wage Distribution Patterns in Textile and Apparel Industry of India

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This study analyses, firstly, the spatial employment distribution pattern in the textile and apparel industry of India among its various states using data from Periodic Labour Force Survey (PLFS) for year 2021-22. Secondly, the wage distribution pattern is studied, followed by a study on gendered wage which is observed in both textile and apparel industry of India. Thirdly, employment concentration is calculated along with a sectoral specialisation index formulation. Finally, the Mincerian wage equation is estimated to observe the factors influencing the wage distribution. To observe the distribution of employment the PLFS sample figures are multiplied by the final weight to observe the total number of person engaged textile and apparel industry of each state. The different type of principal activity statuses are also considered and are compared among the states. A concentration and sectoral specialisation index has been generated following the methodology of Franceschi and Pelloni (2009) which uses the concept of mass from physics to calculate the regional industrial mass using regional industrial density and regional industrial volume. This measure uses the geographic size so as to provide an unbiased estimate of the level of concentration. The differences among the states are observed and their relative position to the global industrial concentration is also considered in order to observe the states having relatively higher employment concentration. Following this methodology again a sectoral specialisation index is constructed to observe the specialisation of each state among all the manufacturing units but in this study only the specialisation for apparel and textile industry are shown. The Mincerian wage equation is estimated following Jacob Mincer's (1974) wage model which observes the returns to education, age, religion and other factors on the determination of wage. It is observed that states of Tamil Nadu, West Bengal and Uttar Pradesh have very high employment in both textile and apparel industry of India. Gujarat also has very high employment in textile industry and Maharashtra has very high employment in apparel industry. Both formal and informal employment is observed to be present in these industries of India. It is further observed that employment distribution is higher among the states having wage nearer to overall India's median. Higher mean wage and lower mean wage states have scarce or moderate distribution of employment. The female wage is lower than the male counterparts because the female employment is considered as a supplementary income to the breadwinning men and hence they are offered a lower wage for the same type of employment status. However, the wage difference is lesser among states having higher gender ratio. The sectoral specialisation suggests that Tamil Nadu has a specialisation of apparel industry, while West Bengal and Uttar Pradesh have a specialisation in textile industry. Overall, in India there is a specialisation of the agricultural sector but, as this study is concerned with textile and apparel industry so the specialisation index of only those industries are given in the study. It observes the effect of age, religion, social group, sector (rural/urban), gender and general educational level on the wage distribution. It is observed that return of higher education is higher compared to below primary education but, the return is higher in the textile sector for both regular wage earners and self-employed workers.

Does Automation of Jobs Contribute to Decent Work? A Case Analysis of IT-BPM Industry

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In the wake of the fast pace of technological progress, it is imperative to know whether the progress is also improving the nature of tasks and making the work decent. In the past decade, heavy investment has been undertaken by firms and the Government to purchase the latest technologies that can improve productivity and also makes processes efficient. Technical progress plays an important role in the growth and development of emerging economies. Many countries in South and East Asia have comparative cost advantage in skilled labour. With the advent of fourth industrial revolution, faster growth in output and productivity has been forecasted in all the technologically advanced and emerging economies. Fourth Industrial revolution (I4.0) is set to change the way we work in the 21st Century. Invented by us (humans), it is ironical to not prepare for the technological changes that have been developed for the greater good of the society. India has also begun experiencing the waves of I4.0. Robotics, artificial intelligence, internet of things, automation is being combined with existing production processes in many industries. Its magnitude depends on the cost structure and varying capital deepening in the Indian industries. In the service sector, the Banking, Insurance, Retail, Analytics and Information Technology industry are witnessing fast technological changes over the last three decades in India as well as abroad. This study is focussed on analysing the impact of automation on skills and employment and aims to link the findings with the decent work agenda. Empirical data has been collected using a well-designed questionnaire to examine the impact of technical progress on skill of youth employed in IT-BPM Sector. Data of 120 employees has been collected and qualitative interviews are currently being undertaken for in-detailed analysis. Inferences generated suggest the presence of skill gap among workers and industry. Findings also suggest deficits in decent work in certain parameters, though there are evidences of employer's active role in employee engagement and upskilling which is an indicator of decent work. Detail policy analysis has been undertaken to link the

two important policy priorities: decent work and technical progress. During deliberations with industry experts and employers, it has been found that almost all the start-ups and companies in IT-BPM Sector are trying their best to adapt to the fourth industrial revolution technologies as therein lies the 'future of work' for the sector and economy as a whole. The most trained and highly skilled workers have the potential and expertise to be best adapted to automation and would thus benefit widely from technological achievements. In addition, because of technological advancement, citizens whose wages, skills, and resources are already high would be further favoured by substantially increasing the value of their properties. Low-skilled employees, on the other hand, would face unemployment and persistent downward pressure on their salaries and their earnings. The employees most impacted by the Fourth Industrial Revolution would be those who might now feel invulnerable to robot rivalry, i.e. those whose jobs involve moderate skills such as customer service that can easily be replaced by Artificial Intelligence. Researchers believe that Industry 4.0 is more likely to change substantially the nature of jobs, future workplace and labour force. On the one side, a lot of existing jobs will be replaced by a set of new jobs because of the digitalisation and automation of many work activities. On the other side, with a transition to Industry 4.0, demand for highly-skilled workers will increase while demand for the low and medium-skilled workers will fall.

Labour Market Reallocations, Output Growth and **Employment Adjustment Costs: The Indian Experience**

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The current paper develops a simple general equilibrium set up containing features of both specific factor and Hechsher-Ohlin model of trade. With the help of this model, we try to analyse the impact that trade liberalisation or reduction in tariff rates in one of the sectors will have on the wage rates of the workers in the economy. We build up a model where same factors are used in one industry and rest of the economy is captured in another industry. When tariff is reduced in one sector, given the possibility of substitution, factors move to the other sectors within the industry. We propose that when a sector contract following a decrease in import tariff, the reallocation of workers from one sector to another becomes smoother if the sectors use closely related factors of production. We also find that when the tariff rate is reduced on goods that are capital intensive in nature, the real wages of both the skilled and unskilled workers rise. On the other hand, if the tariff reducing sector is labourintensive in nature, the wages of all the workers decline. However, in both the cases the industry as a whole expands. Our result goes against the conventional wisdom that tariff reduction is harmful for the growth of the economy, in particular developing countries like India. Since demand for labourers are closely associated with the wages they receive, we use the changes in wage levels as an indicator of the changes in the employment level. Following Brulhart (2000), we use the absolute value of the

changes in employment level as a proxy for employment adjustment costs. Applying the two-stage least squares (2SLS) method of estimation we then proceed to examine empirically the validation of the theoretical analysis in India between the time periods 2001-02 to 2018-19. Our analysis reveals that sectors which use similar factors of production, proxied by sectors that witness greater intra-industry trade have experienced lower employment adjustment costs. Factors such as increase in skilled and unskilled real wage rate, skilled worker intensity and trade openness have also positively contributed to rising adjustment or reallocation costs. On the other hand, variables such as increasing productivity and the output level have significantly reduced the reallocation expenses. The study concludes by stating a policy initiative that need to be taken to enhance the productivity of workers so that net welfare can still be increased in face of growing import competition. Through an analysis of seven major traded sectors, the current paper observed that sectors characterised by MIIT have undergone lower adjustment costs. The analysis also indicates that several other factors such as rise in productivity and number of firms can also reduce the transition costs. The findings of the current analysis are of crucial policy relevance for a developing country like India. There is need to encourage augmentation of skill and consequent increase in productivity through appropriate policy measures under 'Skill-India', National Skill Development Corporation (NSDC) and other initiatives. The government needs to introduce various retraining and reskilling programme s so that the retrenched workers can quickly get absorbed in the existing units. The reported Foxconn initiative in partnership with the Taiwanese government to use Taiwan Education Centre (TEC) across the country to train the local workers with their proprietary technical materials is a welcome development

Assessing the Health of Labour Markets of Indian State: **An Iceberg Decomposition Approach**

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Effective labor market policies are essential for fostering the development and growth of an economy as well as the achievement of SDGs. Decent employment opportunities are vital for driving economic growth and development worldwide. Over the past thirty years, the Indian economy has undergone a remarkable transformation in its growth patterns. A notable aspect of this transition process is witnessed in terms of the moderation effect in the level of employment, population change, poverty, and inequality. In this regard, the population's changing age composition can be advantageous for a nation's economy and overall well-being. A country's population changes over time as a result of high to low birth and death rates, increasing the proportion of people who are working age. This process is commonly referred to as the demographic dividend, and it significantly boosts economic growth. The Indian economy was experiencing a period of favorable demographics, with a high proportion of the working-age population. An examination of the employment sector reveals a less than sanguine picture. The Indian economy is grappling with the issue of youth unemployment and a low labour

participation rate. The limited influence of economic development on the creation of jobs and the alleviation of poverty has therefore been labeled as the phenomena of "jobless growth" and the prevalence of a significant number of individuals classified as the "working poor". In India, youth unemployment has arisen as a daunting challenge over the past decades One of the major hurdles faced by policymakers in achieving faster and more inclusive growth in recent decades is the creation of quality employment opportunities beyond the agriculture sector. One of the limitations of the labor force participation rate is its inability to distinguish between individuals who are unemployed and those who are not economically active. The lack of distinction presents a notable obstacle due to the considerable differences in the access to employment opportunities for these two groups. This calls for the implementation of focused policies to efficiently engage these demographic segments. This study has utilized a parsimonious approach to examine the state of the labour market situation in India using the iceberg decomposition approach at a national level and sub-national level over the past four decades (1993-94 to 2021-22). While employment policy in the Indian context has traditionally prioritized addressing unemployment (the tip of the iceberg), there is a significant portion of inactive individuals (below the waterline) that often goes unnoticed. Therefore, this study point to an approach utilizing the unemployment-to-population ratio and the inactivity-to-population ratio as two highly appropriate and complementary measures. We show that the ratio of these two indices varies greatly across the states. However, the further subdivision of the inactive group into underlying groups such as early working age group 15-64 years, pensioners who have retired early and domestic workers, can provide an even better indication of what areas labour market-related reforms should target in the context of India. The trend shows that the percentage of the population that aren't actively engaged has been rising from 1993-1994 to 2017-2018. After that, it started to fall. The submerged Iceberg represents India's 42.0% inactive population to the total working-age group in 2021-22. Domestic workers, who are typically considered to be out of the labor force, make up 24.9% of the treated inactive population. This meant that in the Indian context, the supply-centric strategy should be adopted.

Boosting Self-Employment Through e-Government Ventures: CSC Scheme for Income Generation and Women's Empowerment in India

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The Common Services Centres (CSCs) program, initiated by the Indian government in 2006, is an important avenue for both employment generation as well as improving the reach of government services. Women often take up these online-based activities as entrepreneurs, enabling them to achieve greater economic empowerment as well as improved social standing. In addition to their earnings from this scheme, they also gain improved decision-making power within their families and communities.

Such a scheme has several benefits over existing women entrepreneurship development schemes in the country, as current efforts by the government focus primarily on skilling, education or credit support. This does not address the issue of marketing that many small entrepreneurs face. The CSC scheme, by allowing small service enterprises to offer registration for crucial government services, addresses this issue of marketing to a significant extent. Furthermore, by providing such services, CSCs generate visibility for the other services that they may offer, such as photocopying and sale of stationery, further boosting their incomes. However, the extent to which such a program benefits women depends on their capabilities, which in turn is a function of the inputs they are given and the conversion factors that are present (Sen, 1993). The question arises as to which factors limit the performance of women in this regard, especially in an urban setting where internet use is relatively more prevalent. Despite better internet access, are the skills for online entrepreneurship still limited among the population? What are the important inputs, conversion factors, and business strategies that foster success in these enterprises? Are there specific obstacles that women face that need to be addressed? To answer, this paper analyses primary survey data collected from urban Karnataka. A sample of 200 male and female CSC entrepreneurs was collected through stratified random sampling, with the two strata being divided into a large metropolitan centre (Bangalore) and smaller non-metropolitan urban zones (Mandya, Ramnagara and Anekal). The paper provides a background of the CSC scheme, an analysis of the current status of operation of CSCs surveyed in urban Karnataka, a regression exercise identifying the determinants of enterprise profitability, a study of the impact of COVID, and a propensity score matching exercise to rigorously measure the differences in profits between men and women entrepreneurs. The regression exercise was carried out using monthly profits as the dependent variable, and pertinent explanatory variables which are classified into inputs, conversion factors, business choices, and demographic indicators. The findings suggest that tangible assets are important inputs, and their effectiveness is mediated by family support. Traditional advertising methods were found to work best in attracting new customers. The onset of the COVID-19 pandemic had a severe effect on CSCs' functioning, where around 61% of these enterprises had reported being forced to close down, and incomes among those that stayed open dropped by 64% on average. However, businesses recovered quickly, and currently provide significantly more income than even before the start of the crisis. Moreover, women are able to perform as effectively as men, indicating that these businesses are important avenues for women's empowerment.

TECHNICAL SESSION 2.9

Global Value Chains and the Informal Economy in Developing Countries

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Since Lewis's influential model of 1954, it has been expected in much of the development literature that economic growth and expansion of modern industries in developing economies (henceforth DEs) will facilitate the transition from employment and production in traditional/ pre-capitalist/ informal sectors towards employment and production within the modern formal capitalist sectors. However, the experience of most of the DEs, particularly from the regions of Africa, Latin America, and a large part of developing Asia shows that despite decades of high economic growth, and the expansion of the modern sectors, the expected transition has not occurred. Although labour is getting released from the traditional agricultural sector, a large part of it has still not been able to get absorbed in the modern-formal capitalist sectors, but is engaged in the informal economy. Two of the major factors contributing to the persistence of the informal economy in DEs have been attributed to the phenomena of premature deindustrialisation and the lack of formal jobs in the modern sectors of the economy. One particular hope of transition from the informal to formal economy in DEs and the absorption of surplus labour in modern formal sectors came from the rise of Global Value Chains (GVCs). It has been argued that the shift of labour-intensive tasks from developed economies to the DEs via GVCs may not only promote rapid industrialisation and economic growth in the latter economies but also create employment opportunities for a vast pool of surplus labour in these economies. However, there has been vast evidence that the informal economy in DEs is integrated with GVCs, through both direct and indirect linkages. This raises questions about the potential of GVCs in facilitating the transition from the informal to the formal economy in DEs. Furthermore, the growing linkages of the GVC participant lead firms with the informal enterprises and workers in DEs have raised serious concerns over the relationship between GVC integration and the incidence of informal employment and output in DEs. Despite the increasing concerns over the growing linkages of GVCs with the informal economy in DEs, there is a dearth of empirical work exploring the relationship between participation in GVCs and the size of the informal economy in DEs. This paper presents an analysis of the association between participation in GVCs and the size of the informal economy in DEs. Incorporating data from 73 developing countries from the regions of Asia, Europe, sub-Saharan Africa, Middle-East and North Africa, and the Latin American and Caribbean region over the period 1993-2018, we regress

both employment and output-based indicators of the size of the informal economy over three crucial indicators of integration within GVCs: backward GVC integration, forward GVC integration and overall GVC integration. The results of our analysis provide evidence that on average increasing levels of forward GVC integration have been positively associated with both the share of informal employment in total employment and the share of informal output in total output in DEs. Although backward GVC integration displays a negative correlation with both employment and output-based indicators of the size of the informal economy in DEs, on average the impact has not been significant so far. While the overall GVC participation index does not display a significant association with the indicators of the share of informal employment in total employment, it displays a (weak) significant positive association with the share of informal output in total output.

Economic Growth-Female Labour Force Participation Nexus: Evidence from South Asia

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Despite numerous legislative efforts globally, work participation and the gender pay gap are the greatest social injustices of the 21st century. Even though women comprise almost half of the population, the disparity between male and female labour market outcomes has proven to be a damaging reality of global labour markets. Women's labour market outcomes are crucial for the nation's economic development and achieving the Sustainable Development Goal of Gender Equality. According to the Global Gender Gap Index (2023), South Asian countries have been able to close only 63.4 percent of the gender gap and stand second lowest among the other regions. The worsening situation of female labour force participation in South Asian countries has been highlighted by its poor performance in the Economic Participation and Opportunity sub-index of the Global Gender Gap Index, where it has closed only 37.2 percent of the gender gap. Past studies have widely discussed an U-shaped relationship between economic development and female labour force participation, popularly known as the feminisation U hypothesis. According to this relationship, female labour force participation rate is found to be high in low-income and high-income countries and relatively low in middle-income countries. This U-shaped relationship has been found in South Mediterranean countries, the United States, the Middle East, and many other groups. As highlighted by Bertrand (2018), statistical discrimination is another factor that plays a vital role in retaining the wage gap and thus adversely affects female labour market opportunities. Such discrimination exists because of asymmetric information and signal extraction problems rather than the actual differences between men's and women's abilities and competence. Employers consider women as less capable and reliable towards their labour market responsibilities compared to men. Based on the above discussion, the major aim of this study is to examine the impact of economic growth on female labour force participation in South Asia from 2005 to 2019. The study has used real gross domestic product (GDP) per capita as an indicator of economic growth and other

determinants of female labour force participation. The study employs a fixed-effect panel regression model to investigate the relationship and the Driscoll-Kraay method to robustly estimate the standard errors of fixed-effect coefficients. The panel causality test by Dumitrescu-Hurlin (2012) is used as a short-run diagnostic check. The major finding of the study shows that an inverted U-shaped relation exists between economic growth and female labour force participation in South Asian countries. Further, urbanisation, fertility, unemployment, and political empowerment of women are found to have a positive impact on female labour force participation. The short-run diagnostics test reveals that economic growth has no impact on female labour force participation in the short-run, whereas female labour force participation boosts economic growth. The findings of this study indicate that economic growth alone is not sufficient to improve female labour outcomes. Thus, other determinants of female labour market participation need to be considered so that the disparity between male and female labour market outcomes can be narrowed down and sustained and inclusive labour force participation can be achieved in the long run.

Assessing the Post-COVID Landscape for Low-Wage Manual Labour Workers: A Probit Model Analysis of Financial Security, Health Awareness, and Reverse Migration

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The profound repercussions of the COVID-19 pandemic on low-wage manual labour workers have prompted a comprehensive examination of their challenges, resilience, and decision-making in the wake of the crisis. This paper aims to delve into the multifaceted dimensions of this impact, exploring financial security, health awareness, and the likelihood of reverse migration. Recognising the gravity of the situation, the government has implemented schemes facilitating reverse migration and the subsequent reintegration of these workers into the post-COVID economy. One crucial aspect under scrutiny is the financial security of low-wage manual labour workers, a group disproportionately affected by the pandemic. The economic disruptions and lockdown measures have left this demographic vulnerable to financial instability. The paper utilises data collected from the United Nations Food and Agriculture Organization (FAO), sourced from the World Bank Microdata Library, and employs the probit model to analyse financial resilience. The second dimension under scrutiny is the likelihood of reverse migration among low-wage manual labour workers. The paper recognises the importance of understanding the determinants that shape the decisions of these workers regarding returning to their place of origin. The severity and awareness of COVID-19 play a pivotal role in migration studies, and the findings aim to shed light on the factors influencing the propensity for reverse migration. Another pivotal dimension explored is the health awareness of these workers. The awareness of COVID-19 in migration studies is an underexplored area, and this paper seeks to bridge that gap by examining the density of active COVID cases in specific geographic regions at particular times. This approach provides insights into the urgency or plight of migrant workers to return home for subsistence living. In the context of panel data, the research focusses on assessing COVID awareness among respondents, unravelling the intricacies of health considerations in the decision-making process. Data for the model has been meticulously collected from reputable sources, ensuring the robustness and reliability of the analysis. The FAO, drawing from the World Bank Microdata Library, serves as a comprehensive dataset for this study. The application of the probit model allows for a nuanced analysis of the three dimensions: financial security, reverse migration, and health awareness. The paper not only highlights the immediate impact of the pandemic on the financial resilience and health awareness of low-wage manual labour workers but also delves into the determinants shaping their decisions regarding reverse migration. This dual focus provides a holistic understanding of the complex dynamics surrounding this vulnerable demographic in the post-COVID landscape. The findings presented herein are instrumental in informing policymakers, researchers, and stakeholders about the challenges faced by low-wage manual labour workers. By gaining insights into the determinants influencing their decisions, policymakers can tailor interventions and support mechanisms to address the specific needs of this demographic. This targeted approach is essential for fostering a resilient and inclusive post-COVID economy. In conclusion, this paper contributes valuable insights into the profound impact of COVID-19 on lowwage manual labour workers. By examining financial security, health awareness, and the likelihood of reverse migration, the research provides a nuanced understanding of the challenges faced by this vulnerable demographic. The findings aim to guide informed policy decisions, ultimately fostering a deeper understanding of the complex dynamics surrounding low-wage manual labour workers in the aftermath of the pandemic.

Rethinking the Making of the National Rural Employment Guarantee Act (NREGA) in the Light of the Gramscian **Concept of Integral State**

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The National Rural Employment Guarantee Act (NREGA) was approved in India, after an animated debate, in 2005 by a ruling coalition (UPA I), which had embraced neoliberalism, with a commitment to implement it in a so-called 'socially sensitive way'. This commitment was coherent with the 'shifts' occurred in the neoliberal agenda for the state in the developing world since the late 1990s, namely the 'shifts' form the Washington Consensus (WC) to the Post Washington Consensus (PWC) and, subsequently, to the Inclusive Growth (IG) paradigm, where the latter had been the bearers of a socalled socially sensitive approach to 'market-led' development. Against this background, this paper aims at contributing to the comprehension of the social dynamics underlying the elaboration and the first years of implementation of NREGA, by adopting the Gramscian concept of 'integral state'. This concept designates, in essential terms, the dialectical union of the state coercive apparatuses and the state hegemonic apparatuses, and entails an understanding of the state both as an instrument of

organization of class power, and as a terrain of class struggle, or a locus of struggle for hegemony, which involves the creation of 'counter-hegemonic' moments. Starting from this concept, this paper intends to focus on the political tensions, conflicts and mediations underlying the process of elaboration of NREGA at an all-Indian level, unfolding between governmental and non-governmental actors, bearers of different agendas on social policies in general and labour policies in particular. This means exploring the tensions, which unfolded within those components of the Indian society supporting a formulation - and implementation - of the Act informed by a structural understanding of the causes of poverty and an ensuing comprehension of social policies as one of the means through which highlighting the contradictions of the capitalist relations of production on the one hand; and, on the other hand, those social components of the Indian society geared towards the government of poverty and inequality under the neoliberal social order.

Remittance and GDP Interconnections in India: Revelation to India's New Economics of Labour Migration

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India is one of the fastest-growing economies in the world and also one of the leading countries in terms of remittances. The New Economics of Labour Migration (NELM) considers remittances as a positive factor in economic development if economic policies are nurtured properly (Taylor, 1999). Demand for Indian labour is increasing in the global markets. India's white and blue-collar workers are in great demand all over the world and these migrant workers send a huge amount of remittance to India which also improves the economy. With the efforts of these remitters, India became the highest remittance-receiving nation in the world as India is the major source of factory labour supply in the world. (RBI Remittance Survey, 2021) Remittance plays a major role in improving the income of households which they spend on the purchase of goods and services which leads to an increase in demand in the nation as well as it also improves the economic output of the nation. It is important to understand the bilateral effects of remittance and GDP in India for better policy recommendations as the trends in remittance is showing a continuous upward shift and it has a positive impact on the economy. The main objective of this study is to analyse the long term relationship between GDP and remittances in India for which the data is collected from 1975 to 2022. We have used the Vector Autoregression (VAR) method to analyse the data. Before doing that Dicky-Fuller test and Johansen cointegration test was also conducted. Through this analysis we have explored inter-connections between remittances and GDP in India and vice versa which offer some guidelines for India's New Economics of Labour Migration (INELM). Time series data is being used to analyse the relationship between variables. India's data is being extracted from the site of World Development Indicators, World Bank. In India, GDP per capita has been increasing continuously from 1980 to 2020, a slight dip can be seen in 2020 reason can be COVID-19. Personal remittance is also increasing in India. Currently, India is at the top in remittance-receiving nations. The Dickey-Fuller unit root test is being conducted to test the stationary; the null hypothesis is that data is non-stationary (Mushtaq, 2011). The alternative hypothesis is that data is stationary. In table 1, t value is higher than the 5% critical value, so we reject the null hypothesis. And conclude that data is stationary.

Growth and Employment: A Tale of Three States of India

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Generally high growth rate of gross domestic product (GDP) leads to high growth rate of employment of a country. There is also structural shift of working population from primary sector to secondary and tertiary sector or shift from the low labour productivity sector to high labour productivity sector as Colin Clark (1940) showed the relation between economic growth and occupational structural of a country. In case of India, several studies examined the linkage between economic growth and employment growth. This paper tries to examine the linkage between economic growth and employment growth rate in respect of three states (West Bengal, Gujarat and Sikkim) of India during 1999-2000, 2009-10 and 2020-21. For this purpose, states are stratified in to three categories - low growth states (Net State Domestic Product [NSDP] growth rate < 7%), medium growth states (NSDP growth rate: 7% to < below 9%) and high growth states (9% and above) on the basis of NSDP growth rate during 1999-2000 to 2009-10. West Bengal is selected randomly out of low growth states; Kerala out of medium growth states and Medium out of high growth states. This study is based on secondary data and existing literature. NSDP data of three states: West Bengal, Kerala and Gujarat has been calculated from the hands book statistics of Indian Economy, Reserve Bank of India and employment data has been calculated from Government of India, (2001): 'Employment and Unemployment Situation in India, 1999-2000', NSS 55th Round, Report No. 458, Government of India, (2011): 'Employment and Unemployment Situation in India, 2009-10', NSS 66th Round, Report No. 537 and Government of India, (2021): 'Annual Report, Periodic Labour Force Survey (PLFS) 2020-21'. In all three states, the service sector contributed the highest portion of NSDP followed by secondary sector (manufacturing and construction sector) during the reference periods. In respect of employment, the highest proportion of rural working people engaged in agriculture and allied activities even in high growth state - Gujarat. This indicates the slow structural transformation in Gujarat. But in medium growth state – Kerala, the highest portion of the rural working population engaged in service sector followed by secondary sector. So the structural transformation in Kerala is better than Gujarat and West Bengal where the highest portion of rural working population engaged in agriculture and activities. With the increase in growth of NSDP, the employment growth rate increases in high growth state – Gujarat. So, the high linkage between employment growth and economic growth is found in Gujarat. In case of middle growth state – Kerala, the employment growth rate declines with the decline in NSDP during the reference periods. Thus, the growth rate of NSDP and employment is highly correlated in case of Kerala also. But in case of low growth state - West Bengal, the employment growth not increased

with the increase in growth rate of NSDP of West Bengal. In case of two states: Gujarat and Kerala, the growth rate of NSDP and employment growth rate is highly correlated. Therefore, to increase the growth rate of employment, there is need to increase the growth rate of NSDP of states. At all India level, there is need to increase the growth rate of GDP, to increase the employment growth rate of our country.

Nutritional Status of Under-five Year Children in Odisha: A Study from Human Capital Perspectives

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Health is an important ingredient of human capital and nutrition enriches human health so that it can perform physical work effectively. On that account, health should be given a great importance. There is a strong relationship between the formation of human capital and a child's height as well as their nutritional levels. Again, there are three stages in the progression of one's life expectancy. The first phase consists of advancements made in nutrition. There is a need to focus more on the first phase, i.e., enhance the nutrition. India had one of the highest numbers of severely malnourished children in the world. It was estimated that around 93.4 lakh children had severe acute malnutrition (SAM) as per National Family Health Survey (NFHS)-4 (2015-16). The NFHS-5 (2019-2021) states that malnutrition among children under-age five has reduced as compared to the NFHS-4 (2015-16). The present paper deals with the backward region, i.e., Kalahandi-Balangir-Koraput (KBK) districts in Odisha state of India. If we take children of the age group of under-five years of age, Odisha has 29.2 percent children who are under-weight (under-weight is low weight for age), 29.1 percent children are stunted (stunted is low weight for low) and 13.9 percent children are wasted (wasted is low weight for height). The main objective of the present study is to examine the nutritional status of children in India and Odisha from human capital perspectives. Further, the paper evaluates Odisha's district-wise nutritional status of under five years' age children, highlighting the status of KBK districts. The present study tries to make use of data from NFHS-4 (2015-16), NFHS-5 (2019-2021). The stunted, wasted and under-weight are the continuous variables and the district is a categorical variable. KBK and non-KBK are the two levels of the districts in Odisha. Therefore, the data values are analysed for the year 2015-16 and 2019-21 with the help of a parametric test, i.e., independent samples t-test and Welch t-test. Total number of observations is 30. Regression analysis is used to find the factors that are affecting the nutritional status. For the study of nutritional status, stunting, wasting and under-weight (stock variables) are considered as the health measures of human capital. Comparing both the years, it is observed that in the KBK districts, higher number of children were stunted and under-weight as compared to the non KBK districts. For the year 2019-2021, there is a decrease in stunted and under-weight children in KBK districts which is an indication that there is an improvement in stunted children. However, KBK districts continue to lag behind in stunted and under-weight status as compared to the non KBK districts. It is observed that in the KBK districts, higher numbers of children were wasted (2015-16)

as compared to the non KBK districts. But, for the year 2019-2021, there is a decrease in wasted children in the KBK districts and there is no difference in wasted children between the KBK and non-KBK districts. In the KBK districts, though there is an improvement for under-weight and stunted children in the year 2019-2021 as compared to the previous year 2015-16, still they are lagging behind as compared to national average. The low outcome of health nutritional status in KBK districts, i.e., under-weight and stunted children, is an indication of low human capital. The low human capital via nutrition cannot be utilised effectively through employment, health services and hence cannot enhance the productivity in human beings. Therefore, proper policies and implementations are needed for the underdeveloped region like KBK districts.

Alienation of Women in Indian Corporate Leadership

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Gender parity in leadership roles has been a persistent challenge across many developing and developed countries. Despite substantial progress in recent years, the female labor force participation in India remains much below 30 percent. Their representation dips to 6-8 percent when it comes to attaining leadership roles. Even though India had some of the first women party presidents and prime ministers, it couldn't sustain the momentum and attain it at all levels. This phenomenon is just not an outcome of public policy deficit, infrastructure, or education rather it includes a multifaceted and complex nexus of barriers that impede women's progress in attaining decision-making roles. This paper delves into the insights gained from interviews conducted with 20 women occupying diverse leadership positions across various industries in the private and public sectors. The majority of the women are from the 35-45 age bracket, working in the IT sector. We performed thematic analysis and sentiment analysis using Nvivo. The interviews illuminated a spectrum of barriers that hinder women's advancement into decision-making roles. The process of socialization in the office as well as at home leads to the alienation of women. Discrimination surfaced as a recurrent theme, manifested in various forms. The socialization process within organizations was cited as a primary obstacle, exemplified by glass ceilings that curtail upward mobility and systemic gender biases prevalent in promotion processes. These socialization practices not only limit opportunities for women to access decision-making roles but also foster an environment that undermines their credibility and potential. Women are also found to adopt masculine behavior to perform leadership roles, which comes at the cost of many names calling and to quote that "she is not women enough". Another notable barrier was the intersectionality of challenges. Women from underrepresented communities faced compounded obstacles, experiencing a double bind of gender and caste, biases. The convergence of these intersecting identities increased their obstacles towards leadership roles, further deepening the disparity in decision-making roles. Work-life balance emerged as a pivotal concern for women navigating leadership roles. The absence of supportive infrastructure and ingrained societal expectations often force women to grapple with

the relentless tug-of-war between professional advancement and personal responsibilities. Quoting a respondent "Girls must know their kitchen" is such a loaded term with expectations and responsibilities pulling women behind. This imbalance not only affects their ability to progress but also perpetuates a prevailing myth that leadership roles demand a sacrifice of personal life, dissuading many from aspiring to such positions. Additionally, the absence of mentorship and sponsorship opportunities emerged as a critical impediment. The scarcity of influential advocates and mentors further alienates women from key networks, inhibiting their exposure to opportunities and guidance critical for navigating the complexities of reaching decision-making positions. The findings from these interviews show the multifaceted and deeply entrenched nature of barriers obstructing women from reaching and sustaining decision-making roles. Addressing these challenges not only requires the women's reservation bill as recently passed in the Indian parliament but it requires the gender strategy from creating supportive infrastructure, and care economy to change in perception about women in leadership roles in offices as well as families. It demands a concerted effort encompassing policy interventions, cultural shifts within organizations, targeted mentorship programs, and advocacy for inclusive leadership models.

TECHNICAL SESSION 2.10

Does Feminisation U Hypothesis Hold? A Discussion on Women's Work Participation in Rural India

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Claudia Goldin's Nobel Prize achievement in 2023 has drawn attention to issues related to women's employment and access to work. The 'U-shaped feminisation hypothesis,' now integrated into development economics textbooks, has been a game-changer for a discipline that has traditionally exhibited a male bias. Formulated based on historical data from the Unites States of America (US), Goldin demonstrated that women's labour market participation follows a U-shaped pattern in the long run, with high participation during the initial stages of economic development, a decline during the onset of growth and sectorial transformation, and a subsequent increase in the final stage. However, similar to many other frameworks rooted in the Western perspective, blindly applying this concept across space and time is problematic. This article attempts to comprehend the intricacies of women's work participation in India from a bottom-up perspective and reflect on conventional wisdom in development economics. Through the analysis of village studies conducted in different parts of the country, it was found that women's work participation outcomes are influenced by a complex interplay of economic necessity and social prestige. These considerations may not align with the toolkit of mainstream economic theory. This is further illustrated with data and insights from fieldwork conducted in two villages in 2018 in the state of Tamil Nadu—namely, Veerasambanur and Vinayagapuram, for with baseline data is available for 1994 thus giving room for an analysis of changes and change processes over 25 years. The study shows that when emphasising the role of patriarchal and castebased social norms in regulating women's involvement in paid work outside the home, the way these structures function to influence women's labour market outcomes is strictly context-dependent. It is also observed that the meaning of work and work participation greatly differs between Dalit women and dominant caste women. Women from land-owning dominant caste households are reported to have a higher workload of unpaid family labour on their farms, while Dalit women are free from this burden, providing more leeway for their own decisions regarding work participation. An increase in income and living standards of the household is associated with women's withdrawal from the labour force. However, this may not always be due to the pressures of patriarchal social norms but could also be a voluntary decision, especially in the case of Dalit women, who historically have faced multiple forms of marginalisation at work. The role of social welfare programme s is also crucial in deciding

whether women should engage in paid work. In the case of interventions like the Public Distribution System (PDS) and other complementary schemes, they have empowered Dalit women by increasing their assertiveness in the labour market, whereas there is no clear pattern observed in the case of dominant caste women. However, if state intervention comes in the form of employment generation programmes like the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), it is found to encourage women to join the workforce under these schemes. While MGNREGA has become a preferred choice for women, it may have also contributed to a decline in their labour offerings to cultivating households, especially in the case of Dalit women.

Labour Intensity in Indian Manufacturing: Navigating the Impact of Economic Crises of 2007-08

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Capital accumulation is widely acknowledged as the predominant catalyst for higher productivity and economic growth in the industrial sector. Notably, the growth rate in capital intensity across global economies surpasses that of labour intensity, with labour share income reaching its lowest level since the Second World War. This downward trajectory in labour share income is attributed to the impact of globalisation, as evidenced by a plethora of recent studies. Consequently, there is an observable widening gap in the distribution of factor income between labour and capital relative to output growth. Factor intensity and the share of income attributed to labour in the production function have been pivotal topics in macroeconomics since the 1980s. This discourse has gained prominence in academic discussions, serving as the foundation for estimating the United Nations Sustainable Development Goals (SDGs) and as an effective measure of inequality. In developing economies with surplus labour, the challenge of labour participation intensifies due to the high elasticity of substitution between labour and capital. This renders labour easily replaceable, risking a scenario where employment and wages lag behind economic growth. While increased capital input can boost output quantity, concerns arise regarding the distribution of income and inclusiveness in economic growth. Various factors, including trade, economic openness, and crises, influence the substitution between labour and capital in production. While the impact of trade and economic openness on higher labour share income has been extensively discussed in the literature, the consequences of global instabilities, such as financial crises, which are common in the era of globalisation, have received less attention. These instabilities have the potential to alter the production function by affecting aggregate demand, as theorised in the Keynesian Cross framework. In this context, this paper aims to investigate the changes in factor intensities (i.e., amount of labour and capital employed in production) in Indian manufacturing industries during pre and post-economic crisis of 2007-08. The central question guiding this inquiry is whether the economic crisis and the subsequent decrease in foreign direct investment (FDI) and export demand have had any discernible impact on factor intensity in Indian manufacturing industries. We hypothesise that labour

intensity in manufacturing industries has diminished in the post-crisis period due to an increase in unplanned inventory stocks resulting from disparities between actual and expected demand, as posited by the Keynesian Cross model. To test the hypothesis, we employed the Cobb-Douglas production function and estimated the coefficients of labour and capital for both pre and post-crisis periods. The study analysed data from 1974 to 2020, considering both the entire period and sub-periods representing different economic phases. The sub-periods include 1990-2020, 1990-2006, and 2007-2020. Additionally, a Chow test was conducted to assess whether there is a statistically significant difference in the labour coefficient estimates between the pre and post-crisis periods. The analysis reveals that the model coefficients are statistically significant, indicating a strong correlation between inputs (labour and capital) and output. Additionally, the model exhibits high R-squared values, suggesting that the model effectively explains the variations in output. When analysing the entire period (1974-2020), the model aligns with the Cobb-Douglas production function, with the sum of α and $(1-\alpha)$ approximating unity. However, when the analysis is performed for the sub-periods 1990-2020, 1990-2006, and 2007-2020, the sum of α and (1-α) deviates from unity, indicating a departure from the traditional Cobb-Douglas production function during these periods. Furthermore, the regression results reveal that the coefficient of labour input is higher in the post-crisis period (2007-2020) compared to the pre-crisis period (1990-2006). This observation suggests that labour intensity may have increased in the post-crisis period. Despite the observed differences in labour coefficients in pre and post-crisis period, the Chow test indicates that these differences are not statistically significant. The study's findings suggest that the impact of economic crises on factor intensity is complex and may not be straightforward. While the regression results hint at a potential increase in labour intensity in the post-crisis period, the Chow test does not provide conclusive evidence to support this claim. Further research is warranted to fully understand the intricate relationship between economic crises and factor intensity.

Do Institutions Matter for Firm and Employment Growth? Evidence from India's Organized Sector

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In antitrust law, definition of a market is what determines the economic sphere in which anti-competitive conduct is measured. A market transaction may include goods, services, information, currency, or any combination that passes from one party to another. In short, markets may be understood as arenas where which buyers and sellers can gather and interact. Given the rise in income inequality worldwide, the role of firms as modern drivers of the economy for propelling growth of employment and ensuring economic stability has become the central focus of policy discussions. This paper examines empirically,

the institutional complementarities between labour, finance and product market regulations along with their role in influencing the growth trajectory of employment and firms in India. In India the growth pertaining to the size of a firm is largely constrained by stringent labour and product market regulations. As per the assertions put forth by existing literature impact of financial market development on the growth of firms has been heterogeneous across all industries. On the contrary, labour market effects of these institutions are disparate. Using the transaction cost approach, this paper assumes that the optimal production strategy entails a combination of capital and labour force that would be at the production possibility frontier. A firm could use both of these inputs depending upon its marginal productivity as well as their rate of substitution. It is also assumed by this paper that the firm would always attempt to internalize these costs so as to avoid production losses, provided all markets are perfect. This paper further analyses the heterogeneity in product and labour market regulations as well as the varied development of financial markets across all the states of India. Further, the differential impact of financial market development combined with product and labour market regulation on the growth in the size of the firm as well as on the employment has been assessed. The dataset, provided by CMIE-PROWESS is composed of small, large and medium-sized Indian firms and covers a span of eighteen years from 1998-2016, with varying information for twenty-one Indian states. The central argument of this paper is that the effect of financial market development is stronger for stimulating inherent or intra-firm growth compared to product and labour market regulations. Albeit, it prima facie appears that labour market regulation could decelerate the growth of a firm's size, it has been established in this paper that upon controlling the macro trends the estimated coefficient turns out to be almost negligible. Due to removal of credit constraints and elimination of the regulatory compliance burden, firms were able to reallocate resources for augmenting economic growth. This paper infers that the growth of Indian firms is more or less affected by their capacity to attract external funds to bolster investment and the possibility to adapt the dynamic workforce, assuming the presence of a stringent institutional framework. The results are robust to alternative specifications that control for industry and firm-level characteristics and address the concern of potential reverse causality. Keywords: financial development, labour and product market institutions, growth, capital investment, firms, India

Outmigration for Livelihood: A Case of Rural Men from West Bengal, India

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India is experiencing rural out-migration to different urban informal sectors and the nature of migration is diverse. The present study uses the latest National Sample Survey (NSS) unit level database on outmigration (64th round) and field survey results of 323 male migrants from a backward region of West Bengal, India. The study explores why men out-migrate for livelihood? What are the popular work destinations and how migrants are absorbed in construction sector in different urban areas of India. The paper aims to look into the main determining factors that initiates and further helps to continue the migration process of men from an underdeveloped district i.e., Uttar Dinajpur in Indian construction sector. It also looks into the most popular work destination of these migrants outside the state and their labour absorption process in construction industries. The study argues that very poor economic conditions, irregular employment at the origin and a comparative wage difference between the origin and the destination are the primary reasons that compel able-bodied men to move out for work in the urban construction sector, this is followed by the factors like advanced payment to the workers before migration, strong social network, availability of thikadars/agents at the origin, development of new mobile/cellular network tower/availability of mobile phones and new transportation routes that help men to continue the outmigration process. Further at the destination demand of cheap labour for construction work, developments of urban infrastructure are also some important factors. Hence it conceptualises that there are broadly three factors that work in the out-migration process are the primary factors which initiate migration, linking factors that help to carry on/perpetuates migration and the rest are the secondary factors that work at the destination. The paper also gave a broad picture of the migration history of the men from Uttar Dinajpur which explained the preferred work destinations of the migrants. The first and the current place of move of the migrants are represented through maps. The two maps depict a change in the preference of the destinations, broadly between Northern and Southern states/regions. It is found that the northern region remains the popular work destination for the migrants in construction work, where Delhi is the preferred destination because of the available work in metro-line construction, over-bridge /Subway, shopping malls etc, followed by the adjacent growing city of Ghaziabad, under NCR region, where the growing demand for labour in the construction sector is huge. The new change is that compared to the years before 2013, about one out of six men now migrate to the Southern region of the country mainly in Kerala (during 2013-2015), where they get engaged in building luxurious private homes. The paper further highlighted the engagement of migrants in different layers of construction work. It is found that migrants are absorbed in four types of work systems in the urban construction sector — Dadan system, daily contract work, weekly contract work and monthly salaried work. In this very process, young men enter in manual work at an early age, some get entrapped by the agents and work under vulnerable conditions.

An Exploratory Study of Socio-economic Conditions of Pension Beneficiaries; Non-beneficiaries in India.

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Volatile and uncertain world highlights social security to protect workers against risks. Social security includes social insurance and assistance programmes, universal programmes, mutual benefit schemes, national provident funds. It comprises other arrangements including market-oriented approaches

that, in accordance with national law or practice, form part of a country's social security system. Pension, a form of social security benefits in India are subject to the kind of employment, especially to formal sector. These benefits include pensions, gratuity, and maternity leaves and so on offered to formal sector workers. Data of social security available in the Periodic Labour Force Survey (PLFS) conducted by the Government of India is used. The paper aims to study the eligibility conditions to receive pension and its impact. The PLFS data provides information only for those workers who have been classified under the status code 31 (regular wage/salaried employees); 41 (worked as casual wage labour: in public works); 51 (in other types of work), and are occupied in the nonagricultural sector. As per the Annual Reports of PLFS, 2017-18, 2018-19, 2019-20, and 2020-21 more than 50 per cent of the regular wage/salaried employees are not eligible for the social security benefits and this poses a grave concern. The paper uses logit panel model to evaluate aspects related to pension beneficiaries and non-beneficiaries. First point analysed by the study observes that people with pension have twice per capita expenditure compared to those who do not suggesting a better standard of living with pension. Following the paper finds that the probability of being a beneficiary of pension increases if one is a graduate male, belonging to Other social groups, living in urban areas, working with government bodies with contracts of more than three years, eligible for paid leaves, and with increasing age and level of household consumption expenditure. The PLFS data solely captures social security benefits offered to the organized sector. However, there are multiple schemes provided by the government to unorganized sector, not covered in PLFS, thus creates a half picture of social security system in India.

Who Stays Unemployed for How Long in India? Evidence from the PLFS Data

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In developing nations, the analysis of unemployment is limited to absolute measures based on some summary indicators. The literature on unemployment in India did not pay much attention to capture the severity or intensity of unemployment. Unemployment spell is one of the well-developed indicators to capture the unemployment intensity. This paper explains that unemployment duration offers insights into the intensity and impact of joblessness. Prolonged unemployment can have socioeconomic consequences like skills obsolescence, poverty, and social exclusion. After reviewing relevant theories like human capital, job search, reservation wage, and institutional perspectives, the paper summarises empirical evidence on how individual characteristics like education, gender, age, and region influence unemployment duration. The data analysed is the nationally representative Periodic Labour Force Survey (PLFS) household surveys from the years 2020-21, 2021-22 and 2022-23. The analysis examines India's overall unemployment rate before delving into the characteristics

of those facing unemployment spells and the duration of these spells across the three years. Duration is categorised as short-term (<1 year), medium-term (1-2 years) and long-term (2+ years). Key findings reveal that while national unemployment rates have fallen from 4.21 percent in 2020-21 to 3.17 percent in 2022-23, signalling economic recovery, certain groups still face higher unemployment rates and duration. Smaller households, higher expenditure groups, youth aged 15-29 years, unmarried individuals, and the more educated segments displayed disproportionately high unemployment, pointing to potential mismatches between qualifications, aspirations and available jobs. More critically, the results show a worsening of medium- and long-term unemployment among these vulnerable sections over the three years, even as short-term joblessness reduced. This highlights the need for targeted interventions to address the risk of prolonged unemployment. Geographical analysis uncovers significant variations across states. Some states like Uttar Pradesh and West Bengal exhibited consistent unemployment declines from 2020-23 reflecting resilient economic conditions. However, other states like Bihar saw increased unemployment in 2021-22 indicative of localised challenges. By 2022-23, most states displayed reductions in unemployment rates, marking overall recovery trends. But analysis of duration across states presents a complex picture. While some states showed worsening medium- and long-term unemployment, others recorded declines, underscoring the unevenness in state-level labour market conditions. In summary, this paper enriches the understanding of India's unemployment situation by analysing heterogeneity based on socioeconomic attributes like age, education, household expenditure, and marital status as well as subnational variations across states. The granular examination of unemployment duration, categorised by short-term and prolonged spells, is valuable for policy design. It reveals specific groups like youth, the unmarried and higher educated facing greater risks of medium- to long-term unemployment, despite improving short-term joblessness conditions. This suggests a mismatch between qualifications, aspirations, and available opportunities for these segments. The paper emphasizes that labour market policies must adopt a targeted approach addressing the needs of the most vulnerable. National estimates alone can mask inequities faced by sections like rural households, religious minorities, and marginalised communities. The state-level analysis is also pertinent, highlighting the importance of localised interventions based on regional economic conditions and strengths. Insights from this study can inform nuanced, evidence-based policies to foster an adaptive, inclusive labour market environment. As India's economy evolves and global economic changes unfold, addressing unemployment across all durations remains critical. In conclusion, this paper makes a significant contribution by analysing unemployment through a multidimensional lens encompassing socioeconomic attributes, geographic variations, and different spell durations. The detailed examination provides vital inputs to policymakers on tailoring strategies to assist those most affected by short- and prolonged unemployment. It underscores the need for an employment environment where every individual, regardless of background, has the opportunity for meaningful economic participation and mobility.

Labour Market Power: Trend and Review

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The global decline in labour share has emerged as a recent trend in many countries including developing countries India, being not an exception to this trend, has witnessed a decline in the share of labour in the national income. This phenomenon has piqued the interest of numerous researchers, prompting them to delve deeper into its underlying causes. Apart from technological change, one of the prominent factors contributing to this decline could be the recent escalation of market power held by firms in both product and factor markets. Extensive evidence indicates a surge in firms' market power within the product market in recent times. Simultaneously, attention has been directed towards the factor market, albeit not to the same extent as in the output market and past. So, it's important also to look at the factor market. This study primarily focusses on the trends of markup(markdown) which is a leading indicator in the Indian manufacturing sector. Over the years, the role of labour in the Indian manufacturing sector has undergone significant transformations attributed to technological advancements. The sector has transitioned from being predominantly labour-intensive to embracing capital-intensive and technology-driven processes. Institutional labour regulations, protections for workers, and the presence of labour unions contribute to empowering and safeguarding labour rights. Conversely, the sector also witnesses instances of labour disputes and strikes, often fuelled by concerns related to inadequate stagnant wages and job security. These multifaceted aspects underscore the need to scrutinize and evaluate the extent of labour market power wielded by firms in the Indian context. Given the global decline in labour share and the increasing market power of firms in both developed and developing countries, including India, this study aims to provide a comprehensive analysis of the trends in estimated markup(markdown) for labour in organised manufacturing industries. The objective is to delve into the dynamics of labour market power in the Indian context, considering the period from 2008-09 to 2019-20. In doing so, we aim to bridge the gap between the changing landscape of labour in the manufacturing sector and the escalating market power of firms. The expanded objective of this paper is not only to draw a trend of estimated markup(markdown) for labour but also to contextualise this trend within the intricate fabric of the Indian manufacturing sector. As markup is a major indicator of market power, we have used the production function approach to estimate the markup(markdown) of manufacturing industries. Firstly, by using the production function approach, we estimate the elasticity of output with respect to labour and materials in the 3-digit industries, and then with a given share of factor to the total revenue of firms we try to estimate the markup ratio of each 3-digit and 4-digit industry. Literature found that India has experience the exercise of monopsony power by individual firms in general lowers wages for the average worker by 18 percent. We primarily use the Annual Survey of Industries (ASI) data sets to estimate productivity and market power. The proposed study period is from 2008 to 2019-20. ASI data sets (plant level) cover nearly 70-75 percent

of the total value of manufacturing output which comprises organised industries only. The findings of this study reveal a discernible increase in markup in the factor market of the Indian manufacturing sector over the period from 2008-09 to 2019-20. This surge in markup is indicative of a growing market power wielded by firms in the labour market. Analysing the data from the ASI for organised manufacturing industries, the study employs the production function approach to estimate the markup for labour. The production function approach involves assessing the elasticity of output with respect to labour and materials in 3-digit industries. The observed increase in markup is not an isolated trend but is contextualized within the broader changes in the Indian manufacturing sector. The transition from labour-intensive to capital-intensive and technology-driven processes in the sector has reshaped the role of labour. Furthermore, the findings indicate that the increase in market power is associated with significant structural breaks, such as financial crises and sectoral reforms in India in due course of time. These events have played a pivotal role in shaping the trajectory of markup in the factor market. The Total Factor Productivity (TFP) analysis complements the findings, quantifying the simultaneous impact of market power and technological advancements on the manufacturing sector.

Internal Migration and Migration Network: Does the Migration Network Exclusive in Nature

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The neo classical theory argued that the wage difference determined the decision, pattern of migration. but the neo classical theory failed to explain the process and chain migration system. The process and chain migration system better explained through migration network. It is important to analyse the functionality of migration network in Internal Migration. In the caste ridden society like India, how this migration network develops and working is another crucial factor of this study. The main objective is to investigate the origin and development of different migration networks in Odisha. Secondly, to analyse the impact of these networks on destination occupation and Income? The study has used cross sectional, primary survey to collect the data on migration network, destination occupation and earning. The survey includes 651samplehouseholds out of total 1906 population households. The selected sample is around 34 per cent of population households. There are 2328 working-age individuals among the sample households; 579 individuals have migrated in the last year. The study focusses on migration history, pattern, process, destination occupation and earning of the migrant. It has used descriptive statistics and percentage through cross table to analysis the survey data. The study found six major migration streams, based on socio-economic origin, process and destination occupation of migrant. These six migration streams explaining the nature and process of migration of more than 80 per cent migrant in three survey districts. The migration through labour contractor work more hazardous work with long working hours and earn just lower income than the migrant of other migration network. There are multiple migration networks developed in one locality but the migration net work is divided based on socio-educational group. The migration through labour contractor is open for everyone but it

is more exploitative and supply labour to hazardous activities with low wage earing. The access to social and educational network are confine to respective socio-geographical location. The migration network also effects the destination income and quality of employment in the destination.

How does Financial Inclusion Affect Unemployment? Finding Evidence from Selected Upper Middle and **Lower Middle-Income Countries**

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The main purpose of financial inclusion is not only to provide the basic banking services to the poorest of the poor people, but also extend the bank credits to the small and medium scale enterprises. The provision of micro loan to the small and medium business enterprises of any country can be a very practical mode of job creation. Understanding the internal intent of financial inclusion, this study is trying to empirically examine the impact of financial inclusion on the rate of unemployment. Furthermore, the study has also used a nonlinear term of financial inclusion (i.e., FII2) to ensure an evaluation of threshold level of financial inclusion on unemployment rate. To execute the research idea, the study has considered 31 countries (16 Upper-Middle Income [UMI] and 15 Lower-Middle Income [LMI]), over the period of 2004-2019. Data related to financial inclusion, unemployment and supported control variables are collected for all 31 countries. Financial inclusion data are taken from Financial Access Survey of International Monetary Fund (2020). Similarly, data related to unemployment and other control variables are collected from World Bank Database and Transparency International. For constructing a single financial inclusion index, this study relied on the statistical procedure for the construction of weights of the factors i.e., the Principal Component Analysis (PCA) method. Using the PCA method, financial inclusion indexes for all the 31 countries (16 countries for UMI and 15 countries for LMI) from both the income groups have been calculated. For the empirical analysis, the study has used Fixed Effect, Random Effect, Panel Corrected Standard Errors, Feasible General Least Square and System Dynamic Panel models. Firstly, the study uses both fixed effect and random effect models to measure the impact of financial inclusion on unemployment. Though panel data are mainly based on the two dimensions i.e., time and cross-sectional dimensions; so, there might be the issue of autocorrelation and heteroscedasticity in the dataset. To take care of these issues, the study employs Panel Corrected Standard Errors (PCSEs) and Feasible General Least Square Method (FGLS) for robustness of the results. At the end, both PCSEs and FGLS are not sufficient to solve the issue of endogeneity or any potential problem of variables omission. To overcome these problems, the study relies on the System Dynamic Panel model. The empirical findings suggest that in the overall sample (that includes both UMI and LMI) and UMI countries, financial inclusion plays a significant role to reduce unemployment. The results from the both the overall sample countries and UMI countries demonstrate that the basic level of financial inclusion has no impact on the rate of unemployment, whereas the more intensification of financial inclusion beyond the basic level helps to reduce the rate of unemployment. Similarly, the findings from LMI countries indicate,

financial inclusion has no impact on unemployment neither at the basic level nor at the advance level. With context to financial inclusion and unemployment, this study is a first attempt which empirically examine the inter-relationship between financial inclusion and unemployment among the UMI and LMI countries.

Determinants and Patterns of Vulnerable **Employment in Rural India**

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India has witnessed notable economic growth and demographic change during the last two decades, especially in the labour market. In order to assess the state of the economy, it is imperative that the dynamics of the labour market be closely watched. This is also important because any change in the labour market has a direct impact on the welfare of the economy. The current study looks into the patterns of vulnerable employment and the factors that lead to vulnerable employment in rural India among major states. Using data from the Periodic Labour Force Survey (PLFS) for 2022-23 and the Employment and Unemployment Survey (EUS) for 2011–12, the temporal patterns of vulnerable employment are analysed based on the percentage of vulnerable employment in total employment. Vulnerable employment has been analysed based on the International Labour Organization (ILO) definition. Therefore, the goal of this study is to identify the spatial and temporal variability in the proportion of vulnerable employment to overall employment among India's rural states. The current study makes an effort to analyse a number of aspects of vulnerable employment within this framework. It first reveals the spatial variation in the pattern of vulnerable employment by gender in rural India, as well as the unemployment rate (UR), labour force participation rate (LFPR), and work force participation rate (WFPR) patterns. Second, a details pattern of vulnerable employment across all rural economic activities is also provided in this paper. Third, the research aims to illustrate the employment patterns of vulnerable workers in the rural sector in all of India's states between 2011–12 and 2022–23. And finally we are analysing the determining factors of vulnerable employment by using the binary logistic regression model of rural India. In rural India, with increase in LFPR and WFPR, the share of vulnerable employment is also increasing which is of concern for academicians. The share of own account workers has increased more than unpaid workers in total vulnerable employment. The share of females in vulnerable employment has increased more than that of males. Among the different activities of the rural sector, male participation is highest in agriculture forestry and fishing as compared to all others economic activities, which is engaged in vulnerable employment. In contrast to all other economic activities, where vulnerable employment is involved, wholesale and retail trade has the highest participation rate of female workers. The share of vulnerable employment has been found to be different in different states of India. For example, the share of vulnerable employment has been found to be highest in Mizoram but lowest in Goa. Whereas the highest share of unpaid workers were found in Chhattisgarh and the highest number of won account workers were found in Manipur. In terms of determinants, it was found that variables such as age, marital status, gender, level

of education, social group and religion significantly influence vulnerable employment. The present study provides significant findings for development planners and policymakers to develop proper planning strategies for rural states or regions of the country where the share of vulnerable employment is very high. Therefore, in order to achieve higher and additional sustained economic growth, the Indian government must establish a workable frameworks and reduce the vulnerability that can give the required push to increase employment and productivity, especially for women because female participation is half of that of males in case of India and the types of job they are engaged with are more vulnerable

Growth of Infrastructure and Youth Employability in India

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India's policymakers are optimistic that infrastructure development will improve the economic conditions of the people and help overall economic growth. However, there is a dearth of studies on the impact of infrastructure development on employment of the country's youth. This paper aims to empirically investigate the infrastructure-employment relationship for India's youth population. The investigation considers measures of transport and energy infrastructure such as total and surfaced road length, railway route, availability of power and installed capacity of power. The objective is to understand if and how these measures impact youth (15-29 years of age) unemployment in both rural and urban regions of Indian states, separately, at a macro-level. This paper contributes to the growing literature of understanding the role of public infrastructure expenditure in tackling development problems such as job creation and improving employability of the growing youth population of the country. This paper is based on secondary data. Data on urban and rural youth unemployment rate is calculated from the Employment and Unemployment Survey (EUS) and the Periodic Labour Force Survey (PLFS) of the National Sample Survey. Data on state-wise infrastructure indicators and macroeconomic indicators are collected from the Reserve Bank of India (RBI) database on Indian States and CEIC India Premium Database. The panel consists of 29 states measured annually over a 15-year period from 2005 to 2019. Primarily, dynamic panel data regression models are carried out to analyse the impact of infrastructure growth and youth unemployment in Indian states. The overall infrastructure growth in the country since 2005 has been positive with the development of national and state highways and increasing power capacity. However, the existing between-states infrastructure inequality in the country has constrained the growth and development of various states as they are unable to catch up with the top performing states in employment generation for the growing youth and their employability. It is observed that some of the states with the least developed infrastructure, also have some of the highest youth unemployment rates in the country. This includes states like Assam and other north-east states, Bihar and Jharkhand to name a few. The result from regression estimates suggest that the development of infrastructure has a negative impact on rural and urban youth unemployment rate. States which have attained a higher level of infrastructure growth in transport (roads and railway) and energy have

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experienced lower youth unemployment in both urban and rural regions, ceteris paribus. Investment in transport and power infrastructure creates jobs by attracting new firms and developing existing industries in Indian states. Transport infrastructure development also reduces the transportation cost which not only attracts firms but also improves mobility of labour. Thereby, increasing the youth's chances of getting employment opportunities. Further, factors such as stagnant average real wages, low per capita social expenditure and sluggish output growth and capital investment hinders employment chances of the youth and results in a growing population of unemployed youth in the country. As we march towards the end of the demographic dividend window for the country, it is of utmost public policy importance to ensure the employment of the growing youth population across regions to ensure a healthy long-run economic growth for India and its states. Based on our results, we argue that youth unemployment at a state-level can be reduced by implementing policies to develop and improve the state's transport and power infrastructure.

TECHNICAL SESSION 2.11

COVID-19 and the Recovery of the Employment and Income of the Informal Sector Workers in Urban Kerala

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This study examines the impact of COVID-19 on the income and employment of informal sector workers in urban Kerala. The COVID-19 pandemic has generated widespread socio-economic challenges worldwide, with particularly negative impacts on the most vulnerable members of society. Among other factors, employment is one area affected during the COVID-19 pandemic in Kerala, which requires considerable factors affecting employment and income during and after the pandemic. Therefore, this study has mainly aimed to investigate the factors affecting employment and income loss during the pandemic and post-pandemic situations in Kerala, taking a total sample of 1046 respondents. An empirical analysis of the loss in employment and income is carried out with the help of primary data collected from 1046 informal workers from two urbanised districts in Kerala. They are Ernakulam and Thrissur districts. A multi-stage sampling design is used for primary data collection. In the first stage, the leading informal sector activity was selected based on the impact of COVID-19 due to high job and income loss sectors in enterprises like manufacturing, trade, and services. The paper analyses the impact of COVID I9 on employment and income across variables like gender, age, family size, education, experience, religion, economic activity, and the nature of the occupation of workers. The binary logistic regression indicates that the variables that had the highest marginal effect on the probability of dependency on the impact of employment included experience, economic activity, occupation, and religion. The income-wise analysis 'paired sample t tests' shows that there is no significant effect on informal sector workers daily earnings, monthly earnings, or health expenditures before and after COVID-19. But the indicators like savings and consumption expenditure had significant effects on the urban informal sector workers before and after COVID-19. The majority of workers in the informal sector in Kerala were affected by the pandemic in the short period rather than the long period. They have adopted their own strategies to overcome the burden of COVID-19. Coping strategies refer to the activities that the workers undertake in response to external shocks endangering their livelihoods. Firstly, they reduced their expenditure on food and non-food items. After that, they have adopted strategies like previously saved money, borrowed money from relatives or neighbours, loans taken from various banks, private finance, SHGs, etc. Another interesting fact is that, after the pandemic, most of the workers are very conscious of their weaknesses and health-related

issues. A comparison of the employment situation in the COVID-19 period and post-pandemic reveals that there has been some improvement in their working conditions, and they recovered from the crisis quicker. Lockdown strategies caused many informal workers in emerging and developing nations to lose their jobs. With regard to employment categories, self-employed workers, casual labourers, and contract labourers are more vulnerable to the COVID-19 crisis as they show a higher possibility of adopting more coping strategies. When the pre-COVID-19, COVID-19, and post-COVID-19 employment situations are compared, it becomes evident that there has been a significant rebound in terms of employment levels and income patterns of urban informal sector workers in Kerala. In comparison to before and during the COVID-19 period, the work hours and daily earnings have significantly improved. However, because of the state's prompt and successful policy intervention, the informal workers have only embraced less hazardous and non-erosive coping mechanisms, like cutting back on spending, using prior savings, borrowing food and necessities from stores, and borrowing money from friends and family. The study shows that the state's quick policy reaction, which targeted vulnerable groups, and its successful execution significantly reduced workers' livelihood vulnerability and the prevalence of coping mechanisms. The evidence showed that the income and employment recovery in urban Kerala is quicker than in rural Kerala.

Caste-based Wage Discrimination in the Indian Rural Non-farm Sector: A Critical Examination

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This study investigates wage discrimination among non-farm workers, including both regular and casual workers, in rural India focussing on the dichotomous relationship between the forward caste (FC) and backward caste (BC). The research spans data from National Sample Survey Office (NSSO) unit-level employment and unemployment surveys from 2004-05 and 2011-12, as well as periodic labour force surveys from 2017-18 to 2019-20. The objective of the study is to find the wage differential between FC and BC non-farm employees and capture the cause for such differential, that is whether it is the discrimination effect or the endowment effect which is responsible for the difference. The study showed that the wage differential has increased over time, with BC workers being paid less than FC workers. To determine the factors contributing to the wage difference, a linear regression econometric model was used, wherein several dummies where used to understand the effect of variables like social group, age, education and gender on the wage of the workers. The Oaxaca Blinder decomposition method was employed to examine whether the wage difference was due to endowment or discrimination effects but this method provided only the average earning difference in the wage. Therefore Machado-Mata-Melly

method was deployed to estimate the earning difference across the wage distribution. The results drawn from the study showed that wage gap is more pronounced among casual workers in the rural non-farm sector, where BC non-farm workers earn less than FC workers as compared to the regular workers. The mean wage gap between FC and BC casual employees rose from ₹2.8 to ₹30.2 during 2004-05 and 2019-20. Similarly, the median wage gap also consistently increased from ₹-2.1 to ₹20 during the same period. For regular employees in the rural non-farm sector, the mean wage gap between FC and BC has continuously increased over the years in India. From ₹24.6 in 2004-05, it rose to ₹38.3 in 2011-12, and further increased to ₹55.3 in 2019-20. This shows a rising trend in wage discrimination over the years. The Machado-Mata-Melly method showed that the unexplained component of wage difference, which includes discrimination and endowment effects, is found to be the highest across the quintiles, indicating the presence of wage differences between BC and FC regular workers due to discrimination. The reasons behind the wage differentiation in rural India include stringent social norms, patriarchy culture, undervaluation of BC workers, and lower levels of education and skill. These factors cause BC workers to earn less than their FC counterparts on average in the rural non-farm sector. Overall, the study highlights the persistence of caste-based wage discrimination in rural non-farm employment in India. For the betterment of BCs worker and to reduce discrimination, the policies and programmes which are implemented by the government are in need to be revived. The widening gap demands a proactive response from policymakers to address the root cause of caste based discrimination among workers. Government policies should be revolutionised to take into account the changing dynamics of labour market by fostering equal opportunities for all workers.

A Comprehensive Panel Data Analysis for Selected Asian economy

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This article aims to analyse how public debt mitigates the unemployment problem through innovation. For this analysis, we have selected 14 Asian countries over the data from 1996 to 2022. Here we have taken the unemployment rate as the dependent variable and innovation & public debt as the independent variable. For innovation, we have taken some proxies known as research & development and education. For the empirical analysis of this study, we have used the panel Auto Regressive Distributed Lag (ARDL) model. To check the robustness of the panel ARDL, we have used the Panel Corrected Standard Error (PCSE) model. The result of the study found that, in the short run education and public debt positively influence the unemployment rate at a 1 percent level of significance. The coefficient is 0.11 and 0.35, respectively. This indicates that 1 percent increase in education and public debt, the unemployment rate increases by 0.11 and 0.35 percent, respectively. In the research & development case, the unemployment rate is negatively affected but it's insignificant. But in the long run, research & development and education negatively affected the unemployment rate at a 1 percent level of significance. The long-run coefficient of research & development and education is -0.36 and -0.45, respectively. This indicates that 1 percent increase in expenditure on research & development and education (innovation), the unemployment rate decreases by 0.36 and 0.45 percent, respectively. In the case of public debt, the coefficient is 0.28 at a 1 percent level of significance. This indicates that 1 percent increase in public debt, the unemployment rate increases by 0.28 percent. Here we conclude that the negative effect of public debt on unemployment is larger than the positive effect of public debt on the unemployment rate. So, the net effect of public debt on unemployment is positive for the society. To check the robustness of the model, we have used the PCSE model. The results of this model also support the results of the panel ARDL model. In this case, research & development and education negatively influence the unemployment rate and public debt positively influences the unemployment rate at a 1 percent level of significance. Like the panel ARDL model, here also the negative effect of innovation on the unemployment rate is larger than the positive effect of public debt on unemployment. The outcomes suggest that the policymaker, administrator, and academician, to the proper way to manage the public debt. The government can borrow the money for expenditure on innovation even if the borrowing is negatively influencing employment because the net effect of the borrowing is positively influencing the employment rate through innovation. And this process is not only solving the unemployment problem of the country but also increases the economic growth of that country and brings innovation. For this analysis, we have followed the systematic literature review approach, there is less literature available relating to innovation and unemployment. However, this paper finds how innovation mitigates the unemployment problem with the existence of high public debt. Along with we have used the latest data from 1996 to 2022. For the empirical analysis, we have also used the latest econometric technique known as panel ARDL and PCSE model.

Linkages of Training and Education on Employability **Amidst Changing Nature of Work**

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Technological evolution is creating new employment opportunities and paving way for pioneering jobs. There are several foreseeable implications of the march of technology globally such that the current technological advancement can be broken down into two kinds—advances in labour-saving technology and in labour-linking technology. While advances in labour saving technology might benefit the developed countries where there is acute labour shortage, the labour linking technology if harnessed to its full potential would benefit the developing countries immensely. In arrears to recent technological advancements, the proportional contribution of total income accumulating to labour

(as opposed to capital) is decreasing worldwide. It is only rational, then, that workforce ought to be granted a precise share of the economy's profits. However, the structure of the labour market particularly in the Global South that constitutes the largest youth population in the world is a complex set of demand and supply side variables. Several variations across gender, age, sectors and countries make the digital technological transformation even more challenging. The dynamics of change within the sectors and structural shifts in labour market and its impact of changing nature of work take long time to acclimate thereby impacting the gross domestic product (GDP) in a myriad of ways. In light of this, a set of studies concur that India's output growth is accompanied by joblessness and job polarisation primarily owing to the lack of suitable technical and vocational training. The prevalence of 'job polarisation' in India is impacting the labour market wherein the share of noncognitive jobs has been snowballing at the expense of routine manual jobs. This too both in terms of lack of employment avenues and low average wages. While the setting up of high-tech industries has a positive jobs multiplier yet low skilled workers are often paid poorly thereby leading to a fall in average wages. Thereby leading to expansion in formal sector employment but with much greater informality of employment. The linkages of education and technical training in enabling employability are far more apposite than ever in these transforming times of work. The increasing importance of technical training towards enabling employability has been theoretically and empirically researched. However, several pertinent questions are undermined in the existing literature. Particularly the interlinkages of education and technical training and thereby addressing the twin impact on employability needs focus. So, with the intent of examining the extent of training and education and its effect on employability, this study descriptively and econometrically analyses data from several national sample survey organisation employment unemployment surveys and periodic labour force surveys. The labour market transitions are challenging the inequality and discrimination on the socio-economic front and particularly owning to gender and age. The opportunity cost of transformation of work enforced by digitisation and technological advancement at the gendered dimension are crucial wherein women are required to even more than ever thereby balance the double burden of paid and unpaid work continuum. Here the opportunity cost of transitioning nature of work reinforces gender roles along with creating informalisation within formal work spaces. Interestingly, the increasing literacy rate, improving gender ratio and a myriad of positive socio-economic transformations warrant for favourable demographics. However, the escalation of technology is forming an increasingly common labour market for the world and to keep up with it, one needs to obtain the adequate skills and training or else the unskilled labour will be out of demand. Also, the impact of age and access to training can't be undermined wherein several working age group people are not equipped with the technical know-how while several people in the younger working age group are lacking the opportunity to get the appropriate technical knowhow to be gainfully employed. Our results depict increased educational attainment but drastically low technical and vocational training amongst other pertinent variables distressing employability. These in turn widen the demand-supply gap in job market, severely impact the wage structure and so on. Numerous policy implications are further deliberated.

Enhancing India's Sustainable Development Goal 8 **Index with Decent Work Indicators**

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Work plays a significant role in our lives, serving as a means for sustenance, a platform for social interaction, and a source of self-worth. Therefore, decent work is crucial for the quality of our lives and personal and national development. The International Labour Organization (ILO) defines decent work through four essential pillars: job creation, rights at work, social protection, and social dialogue. Recognising the fundamental role of decent work in sustainable development, the United Nations (UN) included Sustainable Development Goal (SDG) 8 to promote inclusive and sustainable economic growth, employment, and decent work for all. Within SDG 8, four targets specifically address decent work. Target 8.3 calls for development-oriented policies to support productive activities, job creation, and the formalisation of enterprises. Target 8.5 aims to achieve full and productive employment, decent work, and equal pay for all. Target 8.6 aims to promote youth employment, education, and training. Target 8.8 emphasises protecting labour rights and establishing safe working environments for all workers, including migrant workers and those in precarious employment. This paper discusses the importance of decent work and its measurement, explicitly focussing on the limitations of the current measurement framework used in India's Sustainable Development Goal (SDG) 8 Index. In India, the National Institution for Transforming India (NITI) Aayog measures decent work and economic growth through the SDG 8 Index. However, the current framework, consisting of nine indicators for SDG 8, inadequately represents the dimensions of decent work. Only three indicators, namely the unemployment rate, labour force participation rate, and the percentage of workers in non-agricultural sectors without social security benefits are currently used. This limited representation fails to fully reflect the essence of decent work outlined by the ILO. Following Anker et al. (2003), we incorporate new variables related to decent work, namely, workers with no written contract and workers without paid leave (using various issues of the Periodic Labour Force Survey (PLFS)) in the SDG 8 index. The study calculates the index between 2018 and 2020 for different Indian states. We utilised 11 indicators to calculate the improved SDG 8 Index, while NITI Aayog's SDG Index used a smaller number of indicators. We have used NITI Aayog's methodology to create a new index by normalizing the raw data values of the indicators and applying it to formulate a new index that aligns with their approach. The study calculates the index between 2018 and 2020 for 36 Indian states/Union Territories (UTs). We use the rank correlation coefficient to examine the superiority of one index over the other. The finding indicates that our index value is less than NITI Aayog's index for most states. Thus, the latter's index must adequately capture the nuances of decent work. The paper emphasises the need for targeted policies and interventions to address the specific challenges faced by each state. We may also draw inspiration from developed countries like Germany, Sweden, and Denmark, which prioritize social security coverage for workers.

Improving First-Generation College Students' Education and Labour Market Outcomes: Impact Evaluation of an Inclusive Policy in India

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First-generation graduates (FGGs), the first in their families to attend college and representing a growing segment in higher education, encounter unique aspirations and challenges. Despite their significance, there has been limited research and policy interventions on FGGs. This study evaluates the First-Generation Graduate Scholarship (FGGS) scheme, launched in 2010 in the Indian state of Tamil Nadu, which aims to waive tuition fees for FGGs pursuing technical education in engineering, medicine, and agriculture at the undergraduate level. Our analysis focusses on FGGs aged 17–22 years and assesses the programme's impact on professional course enrolment, stream choice, and subsequent labour market outcomes. We employ a Difference-in-Differences (DID) model using multiple rounds of the National Sample Survey Office (NSS). Our findings reveal a notable 3.6 percentage point increase in professional course enrolment in response to the policy; this effect translates to around 43 percent increase over the mean enrolment rate in professional courses. The treatment also significantly affects the beneficiaries' stream choice and graduate-degree completion rates in favour of professional courses. We also estimate the labour market consequences of the FGGS scheme. The pooled data for this analysis was sourced from NSS rounds 66 and 68, and Periodic Labour Force Survey (PLFS) 2017-18 and 2018-19. First, we find that the scheme had a positive and significant impact in terms of increasing the likelihood of having a professional graduate degree among the beneficiaries. This implies that the scheme was not only successful in enrolling students in professional degree courses but also in improving the completion rates among the targeted group. Then, we observe that the scholarship program steers first-generation graduates towards service-sector employment while discouraging engagement in agriculture and related sectors. We also observe a decrease in casual employment and an increase in the propensity for active job-seeking. We present suggestive evidence indicating a decrease in educational expenditure and the proportion of educational spending among FGGs who enrolled in professional courses in Tamil Nadu subsequent to the implementation of the FGGs scheme. Furthermore, our analysis explores the consequences of professional graduation on earnings and social welfare, revealing suggestive evidence of an augmentation in monthly per capita expenditure among FGGs. Various robustness checks, including synthetic-DID analysis, event studies, and placebo tests, affirm the program's effectiveness in promoting enrolment in professional courses. We use the synthetic difference-in-difference (S-DiD) with more donor states, along with Kerala and Karnataka, comparable to the treatment state, Tamil Nadu. We have used 18 states in the pre-intervention period to form our donor pool and create a synthetic state that looks similar to Tamil Nadu. The S-DiD

estimates are similar to our main results. We also employed an event study and placebo test for preintervention periods. The results show no significant pre-intervention trends, implying that the parallel trends assumption is likely to be satisfied in our context. Our heterogeneity analysis indicates that the programme has a more pronounced effect on the upper strata within the cohort of First-Generation Individuals. Specifically, the programme demonstrates a greater impact on FGGs who are male, belong to the OBC, or reside in urban areas, as compared to their respective counterparts.

Implications of Supply-side Structural Economic Reforms for Self-sufficiency on Growth-Employment Balance in India

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The main objective of our present study is to examine how far "growth-employment balance" is that straightforward what government policy makers claimed. In fact, we cannot tolerate higher unemployment and inflation in order to get higher economic growth. The trade-off is not as straightforward as that, there is a threshold level of both unemployment and inflation. If the unemployment and inflation is below that level, then we can only make that trade-off, but if it isn't, then we can't. High level of both involuntary and under employment as well as retail inflation hurts poor people - agricultural labourer, industrial workers and common man and lower real interest rate hurts the said class of people as depositors, of which hundreds of millions, the most. It hurts them more than it hurts the rich one who derives benefit from so-called economic growth. The last three years have been difficult for the world economy on account of the COVID-19 pandemic. Repeated waves of infection, supply-chain disruptions and, more recently, unemployment and inflation have created particularly challenging times for policy-making. Faced with these challenges, therefore, the Government of India's immediate response was to cushion the impact on vulnerable sections of society and the business sector. Then it pushed through a significant increase in capital expenditure since 2020 on infrastructure to build back medium-term demand as well as aggressively implemented supply-side measures to prepare the economy for a sustained long- term expansion. "Self-Reliance" approach adopted by the government since 1956 to the end of 1980s government played a pivotal role with a background in infant industry argument and on the other hand "Atmanirbhar Bharat" adopted policy packages to promote private sectors as well as foreign direct investors and government to be acted as a facilitator of self- sufficiency. The main objectives of our study are to analyse and examine in details in these issues in the context of pandemic and health induced economic crisis attempted to solve by supply-side structural reforms. We think that the crisis world has been facing today has been different but has some similarities in a number of ways. The health crisis-induced global recession is in contrast with previous global recessions which were driven as well as followed by classical and neoliberal market economy in nature which included financial crises (the Great Depression in 1930-1932, sharp movements in oil prices 1975 as well as in 1982, the crisis of 1991 and 2009). But the financial crisis of 2009 has made us a moribund world economy. Western economies, particularly the United States of America (US), promoted the orthodox top-down approach, preferring monetary policy

(liquidity enhancement cheap money policy) to fiscal policy (fiscal prudence) for higher and higher level of gross domestic product (GDP) growth. What is more, the previous global recessions which were driven by financial crises of 1982, 1991 and 2009 were due to neo-liberal free market policies which were initiated as well as motivated by the International Monetary Fund, a die-hard votary of fiscal prudence and promotion of monetary policies. Within these perspectives of reality, therefore, the main objectives of our study are to examine that how far health crisis-induced pandemic recession amidst the economic reforms of more than 30 years with aspiration of high level of GDP has been able to generated higher level of output, reduction of inequality, increase employment and stabilisation of general level of prices in particular and resolving resultant macroeconomic imbalances in general in India. In Section II, we conceptualise the "self-reliance" approach adopted by India since the Second Plan to the end of 1980s and "Atmanirbhar Bharat" of May 2020 which was initiated by policy makers following COVID-19 crisis through mainly supply-side structural reforms. Section III examines the COVID-19 pandemic induced crisis and the medium to long term structural reform policy responses for economic recovery. Section IV examines the implication of fiscal policy in general and fiscal deficit and investment-savings gap (public sector) in particular on inflation and GDP growth in India. Section V examines the implication of policy rate as a monetary policy instrument on GDP growth in particular and stability in the economy in general. Section VI examines the implication of fiscal and monetary policies on overall GDP growth, inflation, employment and inequality in Indian economy. Section VII finally concludes. Now, as a whole, two developments have been taken as confirmation from National Sample Survey Organisation (NSSO), Employment Unemployment Surveys (EUSs) and Periodic Labour Force Surveys (PLFSs) Annual Surveys and CSO Data on employment in the organised manufacturing industries from Annual Survey of Industries , that has transited to a virtuous, high growth trajectory since the initiation of economic reform with the exception of the COVID-19 shocks period and after that there has been a quick recovery. Then, one of this was the evidence of a near sustained 8-9 percent rate of GDP growth since 200304 and the rather quick recovery of GDP growth after the deceleration by global financial and economic crisis.

A Case Study on Education and Labour Market Participation with respect to Kanyakumari District, Tamil Nadu

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The study is based on the education level and labour market participation among the youth in Kanyakumari district in Tamil Nadu. The researcher has taken six taluks for survey and collected primary data from 390 respondents across the district. The traditional percentage method is used with the help of Excel and convenient sampling was taken as methodology for quantitative analysis. In order to find out the demand and supply needs of the respondents the researcher has interviewed with youth who are in formal education, and not in employment and the employees representing some key sectors representing large, medium and small industries. The total population in the district includes around

18 lakhs. The district is high in literacy rate and human development index (HDI). The objective is to find out the participation of youth in labour market and the reason behind the hindrance of job if the youth is educated. It is found that there is high association between higher education level and high unemployment rate. Interestingly it is found that there is a high positive correlation between higher level of education and higher unemployment. Most of the respondents are graduate and most of the respondents comes under NEET (youth Not in Employment, Education and Training) category. This shows that the youth are waiting for the job for long period of time. The youth is categorised into employed, unemployed and not in labour force. Employed means one who is working, unemployed means one who is willing to work but could not find job and not in labour force include youth who are not interested in participation in labour market. Mostly women even though got decent educational level and was unemployed because of pressurised to get married and looking for the job locally. Majority of the respondents want to secure job in public sector. Most of their economic activity circles around education and training and only few enters into other streams of economic activity. Bulk of the respondents migrate to nearby districts to work in industries. It is recommended by the researcher that since the industries are limited it is advised to generate agro-based industry, aquaculture and food processing industry. Also, giving counselling to parents and community members to encourage women participation in labour force and creating women cooperatives are recommendable by the researcher. Apprenticeship and direct benefit transfer to semi-skilled workers reduce the attrition rate and supply of labour to the concerned industry or office. Also, during the training hands-on-training should be recommended. In conclusion, channelling the youth in proper way will improve the productivity of the nation and upgrade the nation into a self-reliant one. Youth employment and participation in labour force is considered as the sustainable economic and social development. In conclusion, the future employment opportunity of the district based on the recent policy measures were discussed in detail.

Do Higher Education Levels Reduce Youth Unemployment in India? Evidence from PLFS

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Youth unemployment is a critical issue that affects economies and societies worldwide. Understanding the factors that contribute to youth unemployment is of the utmost significance in the context of India, a nation that is experiencing a rapid increase in the number of young people it has. In addition, with the rapid growth of higher education in India, it is vital to investigate the effective utilisation of educated youth in the labour market and the possible impact that this utilisation could have on reducing youth unemployment rates. India's higher education sector has proliferated over the past 10 years, opening up more possibilities for younger generations in stream-specific (general/technical/ vocational) education, increasing the number of youth enrolling in higher education. Despite this, the

question should be addressed as to whether this educated youth is efficiently allocated or channelled in the labour market. Moreover, how will this educational attainment reduce the unemployment rate among the youth? This article goes into the complex connection between the type of education and the unemployment rate among young people. This study intends to give valuable insights into the factors that influence young people's unemployment rates and shed light on the role of different educational opportunities in determining employment outcomes. In addition, it investigates the factors that contribute to youth unemployment and emphasises the importance of implementing specific interventions and policy guidelines to address this situation effectively. This study uses data from the Periodic Labour Force Surveys (PLFS) conducted in India between 2017-18 and 2021-22 to assess India's youth unemployment rate, focussing on the role of education. The study reveals an alarming pattern of rising unemployment rates among educated young people through descriptive analysis. This tendency is especially concerning for young people who have completed their graduation or postgraduate studies. Another interesting result is that women with high levels of education are more likely to be unemployed than men. However, when it comes to people with lower levels of education, males are more likely to be unemployed than females. Additionally, when we look at the location, we find that urban youth have a greater rate of educated unemployment. In contrast, rural youth have a more significant unemployment rate than those with less education. Therefore, educated unemployment is especially noticeable among young women and urban youth in India. Furthermore, upon examining the recent patterns of youth unemployment in India, the research discovered an unprecedented development: a consistent downward trend in youth unemployment over the study period. In addition to taking into account a variety of socio-economic conditions at the family level, we use logistic regression analysis to investigate the factors associated with the levels of education and youth unemployment. According to the findings, greater levels of education, such as graduation and postgraduate education, contribute to increased youth unemployment rates. However, technical education on its own does not solve the problem for young people. Nevertheless, vocational education and training have a substantial impact on lowering the rates of youth unemployment, particularly in those situations that are informal. This research highlights the importance of implementing targeted interventions, skill development programmes, and vocational training efforts in order to overcome the difficulties that young people face in obtaining work possibilities that are relevant to them.

A Case Study on Temporary Out-Migration from West Bengal

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Regarding migration in West Bengal, a clear and unique pattern has been found. Based on the 1990 Census statistics onwards, the rate of migration to West Bengal is seeing a significant decline, while the rate of out migration from the state is on the rise. However, the migratory patterns of West Bengal distinguish it from other states with significant emigration rates, such as Uttar Pradesh, Bihar, and Odisha. West Bengal transitioned from being a region that received more migrants than it sent

until the late 1980s to becoming a region that now sends forth more migrants than it receives. The study examines the characteristics and patterns of out migration from West Bengal. Additionally, it emphasises the occupational transition experienced by the migrant worker. Ultimately, the study investigates the factors that influence the migration of people away from West Bengal. The study relies on the primary data. We have selected two districts: one located in the southern region of West Bengal, which is more advanced, i.e., South Twenty-four Parganas, and the other situated in the northern region of West Bengal, which is considerably less developed in terms of output, i.e., Cooch Behar. In order to understand the characteristics of out migration, we have computed the share of the workforce and the proportion of migrants to the overall number of employed individuals within the family. In order to investigate the factors that influence the migration patterns of the working-age population in the study area, we used the logistic regression model. In both areas, individuals come from households with low marginal per capita consumer expenditure, lower levels of family education, and smaller landholdings that experience higher rates of migration. They secure employment in the informal sector, such as the construction sector, brick kiln sector, textile industries, etc., by enhancing their social connections with recruiters, family, friends, and villagers. Furthermore, it is observed that semi-skilled workers migrate to the textile industry in Hyderabad and Delhi and to the construction sector in Kerala, Bangalore, and Bhutan. receive higher wages relative to their origins. Conversely, migration to the brick-kiln industry in Nepal and Bihar serves as a means for migrant workers to cope with or survive their circumstances. A significant proportion of the migratory work force in the study area stays at their destination for a duration exceeding six months, and the return of migrants is not associated with the cultivation season. This indicates that migration is one of the primary means of livelihood for migrant workers in the study area. According to the regression analysis, young, married males have a higher tendency to migrate. Additionally, the study demonstrates that migration in advanced areas is mostly motivated by a high dependence ratio and unfavourable economic situations. In the context of the underdeveloped district, people with limited education and small land holdings are primarily responsible for migration. The study reveals a significant finding that people in the advanced district see migration as a way to ensure their livelihood and reduce the hazards associated with their place of origin. In contrast, the underdeveloped region views migration as a means of ensuring its existence.

Unveiling the Invisibles: An Empirical Study of Women's **Unpaid Care Work in Bihar**

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Unpaid care work services play a very significant role in the production processes in many countries of the world. It is easy to estimate the monetary value of paid care work services. However, the exact valuing of unpaid care works is difficult for various reasons, particularly for women in rural and semiurban areas. While the contribution of the formal workforce is included, unpaid care work values are excluded in the total income accounting of a country. It is the general belief that the primary duty

of unpaid caregivers is to take care of the home and family members. Traditionally, mothers and many women in the family do many works day and night in the family, which do not carry any direct monetary payments. This exclusion from unpaid economic activities creates domestic employment in the shadow of invisibility and it is beyond the sphere of the national accounting system. Suppose the money values of all unpaid care works can be calculated or included with proper accounting methods. In that case, the actual GDP figures of many underdeveloped countries will be much larger than officially printed GDP figures. According to the International Labour Organisation Report 2018, an average woman in India spent 297 minutes per day on unpaid care work as against 31 minutes by men. In paid work, women spend only 160 minutes compared to 360 minutes for men. Among states in India, the participation of women in the total workforce is the lowest in Bihar and it is below the average rate of all India. Both of them exhibit similar trends in the decline of women's work prospects although the tendency is especially apparent for women living in rural areas. Thus, it is important to examine the various issues of unpaid care work of women. With this background and motivations in mind, the present study proceeds to examine the following specific objectives. (i) to examine the status, extent, and valuing of unpaid care work done by women in Bihar, (ii) to identify the significant factors that contribute to women doing high levels of unpaid care work and (iii) to examine the relationship between unpaid care work and women's socioeconomic status, health, education, and empowerment. The study is based on both secondary and primary data. The primary data set has been collected by field surveys from 200 respondents at the household level in Barauni block of Begusarai district in Bihar. The second objective is examined by applying the multiple linear regression model. For the third objective analysis, we apply the logistic regression method. Although the major part of the analysis is quantitative, the study also involves the qualitative analysis of the experiences and perspectives of unpaid caregiver women. The findings of the study have shown that more rural women are spending more time in unpaid care work services compared to their urban counterparts. In both rural and urban areas, the extent and magnitude of unpaid care work services vary across social groups, education levels, income groups, and family size. Among many variables, education status and income of husbands play important roles in the participation of women in paid or unpaid care work. The long duration time in unpaid care work by mothers and many women is leading to fewer hours for self-care and consequently affecting the health of mothers and many women adversely. Enormous time spent by mothers in unpaid care work including baby/child care compels even educated women to abstain from working in well-paid jobs. Though education is considered an important instrument for empowerment and social upliftment, field evidence reveals that even with a certain level of education and skills, the nature of work does not change for many women in families. Findings have important policy implications in unveiling the invisible money values of women's unpaid care work services. Keywords: Women's Unpaid Care Work, Formal Workforce, Money Value, Bihar JEL Classifications: J17, J18, C13, M54.

TECHNICAL SESSION 2.12

Just Transitions in Waste Management for Sustainable Growth and Development

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With rapid economic growth largely fueled by rapidly growing urbanisation and consumerism, one of the biggest problems facing the world is that of managing urban waste. This problem presents itself most acutely in India. India produces nearly 70 million tonnes of Municipal Solid Waste annually and engages between 14-20 million people in the management of this waste - most of these people work in the informal sector. Much of the waste produced in India is dumped in landfills or burnt openly. Only about 10% of the waste is recycled and mostly through the informal sector. Most of the remaining waste (nearly 60 million tonnes annually) is dumped in landfills, open dumps or burnt, causing massive air, water and soil pollution, loss of land, damage to human health and release of greenhouse gases. A green transition in the waste sector is therefore urgent and necessary to sustain the economic growth and urban development. But how can states ensure that the transition is also just? This study looks closely at the waste management systems of two cities (Ahmedabad and Pune) and the role played by two organisations (SEWA and SWaCH) to understand the status of waste management, the level of inclusion and sustainability in the existing systems and what kind of transitions they are headed towards. We find a lot of similarities and many contrasts between the two cities which offer a lot of learning. We find that the two cities have adopted two very different models of waste management. While one has adopted a more centralised, mechanised model of waste management, the other has adopted a more decentralised, worker centric model of waste management. The two models are shown to have very different outcomes in terms of the creation of green jobs, recovery of waste, environmental impact and municipal expenses. Based on a comparison of the outcomes, the study outlines a pathway for just transitions in waste management - a pathway which would lead to sustainable urban growth, maximisation of waste recovery and green jobs creation and minimisation of municipal expenses and environmental costs of waste generation.

Informality and Employment Vulnerability: An Analysis Based on Primary Data

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The economy and informal employment are the defining features of the dominant economic paradigm. It is seen that there has been an increase in informal employment in India in general and Assam in particular during the period of 1999-2000 to 2011-12. The unorganised sector employs more than ninety per cent of the labour force in the nation. Despite of their significant contribution to the national income, they have been oppressed in different terms even after seventh decade of the independence. Keeping this in mind, the present study attempts to measure the employment vulnerability among the informal workers. Objectives: The broad objectives of the study is to measure the employment vulnerability among the informal workers of Assam. Further, the study attempts to find the link between informality and employment vulnerability of the workers. Methodology: Field survey is done to gather the primary data. To gather the primary data, a multi-stage stratified random sampling technique is employed. Moreover, in the process of gathering primary data, purposive, stratified random, and clustered sampling is employed. To collect the data, a total of 600 sample respondents were selected (550 informal workers and 50 formal workers (control group)) from the districts of Dhemaji, Sonitpur and Dhubri. From the data, Total Employment vulnerability index is constructed for each individuals which is the average of three indices, i.e., Social Security Vulnerability, Job Security Vulnerability and Economic Security Vulnerability. The value of the TEV lies between 0 (No vulnerability) and 1 (High Vulnerability). Further, the level of vulnerability is compared for each district, area of resident, education level, gender, and sector of employment employing ANOVA. Moreover, to find the determinants of employment vulnerability, the Beta regression is employed. Lastly, to find the link between informality and vulnerability, the informality index is constructed and Employment Vulnerability index is regressed on the informality index employing linear regression model. Key Findings: The average overall employment vulnerability has the highest intensity of social security vulnerability (0.83). When we look at the districts, we find that the average Employment vulnerability in Dhubri district (0.74). Further, the average TEV among female workers is higher than that of male workers. Workers in the urban informal sector are more vulnerable in terms of employment, social status, income, and general susceptibility. These groups include Scheduled Caste (SC) and OBC employees, unmarried or single-married workers, illiterate workers, and workers in the informal sector. Collectively, a greater percentage of the workforce is at risk. Workers in the informal sector are unable to gain economic stability, social security, or high-quality employment due to the nature of their employment. Conclusion: The study made an effort to investigate the level of vulnerability in Assam's unorganised labour market. Many unofficial workers continue to be at risk because of social and economic uncertainty. The average of the three indicators in this study economic, social security, and job security—is the vulnerability index. The study seeks to elucidate the factors influencing the degree of vulnerability among Assamese informal workers. According to the present survey, the circumstances for both regular and casual employees are still dire since they must

deal with social insecurity, economic instability, and job uncertainty. Also, it is found that increasing informality is the key source of employment vulnerability among the workers. Keywords: Informal Sector, Employment Vulnerability, Beta Regression, ANOVA, Assam.

Globalisation, Caste Equation and the Labour Market **Outcomes: A Community-Integrated General Equilibrium Model**

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Discrimination exists in varied and complex forms which stand in conditioning-conditional relationship with each other. Such discriminations have been observed across time and space, and have been identified as a major catalyst which may have a profound bearing on the formation of socio-economic outcomes. Its significance in terms of labour market outcomes has been hitherto unexplained in the mainstream literature. The fundamental aspects of discrimination and how it can be incorporated into economic theory which date back to Becker (1957), followed by Arrow (1973, 1998). However, the objective would be to make a profound understanding of the notion of caste, both in the global as well as Indian context first. Interestingly, Arrow (1998) puts forward the notion of racial discrimination, which has been observed globally amongst all kinds of races. While analysing the labour market on the lines of casteism and social formation there are some interesting questions that we come across. How does casteism influence labour force composition across different sectors? Does greater implication of job reservation actually lead to more biasedness in employment? Are firms likely to discriminate more in a society with a stronger view against discrimination? Can foreign inflow do away with the myth of labour market segregation? The issue of caste and power structure is interesting yet very sensitive, especially in the Indian context where it plays an important role in determining one's occupation. As recently of 2017-18 the Periodic Labour Force Survey (PLFS) survey claims that nearly 83 percent of India's workforce is employed in the unorganised sector, with only 17 percent obtaining employment in the organised sector. We can therefore argue that the unorganised sector is the backbone of the Indian economy, and it is in this sector that the lack of regulation leads to imperfections, including caste-based discrimination. One of the foundational beliefs of the caste system in India is that outcast groups are human embodiments and repositories of "impure" matter as such. Our paper is an attempt to address the microeconomic foundation of the complex and intertwined dimensions of casteism, hegemony, and political process. We provide a micro theoretical framework to explain the labour market participation of different caste types in different job titles, and also determine factors that can influence changes in one's choice. On the production side of the economy, we model discrimination in terms of caste-based wage differentials and employer's caste preference in hiring. We model the social damage of a high caste worker ending up in informal sector jobs, and experiencing "damage"

in reputation. The above conjecture can be drawn from existing caste norms, where certain jobs are considered inferior for a high-caste worker. Similarly, low-caste workers participating in the formal sector are subject to backlash from high-caste workers, who in general perceive that low-caste workers are not cut out for formal sector jobs. However, it is interesting to note that the final commodities of both the formal and informal sectors are subject to consumption by households irrespective of their caste. Besides this, we consider mutual cooperation between the workforce of both castes as essentially necessary in the production of certain goods, where there is vertical specialisation along the production line. In the analysis of the formal sector, we consider the role of job reservation, which by the law allows for a heterogenous workforce in this sector. But then the question is, how do lowcaste workers experience backlash? The analysis is rather simple given that both castes compete for the unreserved job seats, employer biasedness can act in favour of high caste workers. Our findings indicate how changes in workforce caste norms can lead to narrowing wage differentials. We also found that globalisation in terms of foreign capital inflow may help in curbing the incidence of casteism provided some sufficient conditions are met. Interestingly in the organised sector, greater implication of reservation policies is seen to be a cause of increased discriminatory practice by firms. Finally, based on the results of the partial equilibrium framework we examine the impact of globalisation in a 2 by 3 general equilibrium framework.

Regional Dimension of Economic Growth and **Employment Pattern: A Comparative Study of** Gujarat, Maharashtra and Tamil Nadu

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This study deals with the changes in the important factors in three industrialised states Gujarat, Maharashtra, and Tamil Nadu such as employment, types of employment growth, unemployment, and labour force participation rate worker population ratio during the 2017-18 to 2020-21. The states of Gujarat, Maharashtra, and Tamil Nadu are the most industrialised in India. Their contribution to the total gross domestic product (GDP) of India is significant and due to this very reason analyses of labour and economic growth of these states showcase a real picture of India's economic dimension and condition of workers. The total number of factories established in Gujarat is 12 percent (28479), in Maharashtra 10 percent (25610), and in Tamil Nadu 16 percent (38837). According to the Annual Survey of Industries, the share of fixed capital in India is highest in Gujarat (19%) and followed by Maharashtra and Tamil Nadu with respectively 12 percent and 9 percent of the total. With this observation, another evident thing is that as the availability of fixed capital is higher in Gujarat and Maharashtra, Tamil Nadu employs the highest no. of labour around 17 percent of all Indian workforce,

and pays the highest wages to workers which are 15 percent, and share of other two states in wages to a worker is respectively 12 percent and 14 percent. Over the period from 2011-12 to 2021-22, Gujarat, Maharashtra, and Tamil Nadu indicated distinct patterns in Gross State Value Added (GSVA) in Manufacturing. Gujarat started at 15,681,931 units, experiencing consistent and stable growth and reaching 43,722,492 units in 2021-22. Maharashtra, starting at 24,603,175 units, demonstrated incremental growth, reaching 34,115,536 units. Tamil Nadu's manufacturing GSVA, beginning at 15,176,801 units, grew steadily to 29,039,850 units. Gujarat's unprecedented surge in manufacturing GSVA positions it as a leading contributor, potentially driven by liberal industrial planning and robust infrastructure development. Maharashtra's path shows stable progress, while Tamil Nadu maintains a competitive position. The data underscores Gujarat's significant performance, suggesting a blossoming manufacturing sector, as Maharashtra and Tamil Nadu showcase diverse patterns of growth in the manufacturing domain. An increase in labour force participation rates was observed with fluctuation over the years 2017-18 to 2020-21. The rural worker participation rate is generally more compared to urban areas. There are gender disparities and rural female participation is much higher compared to urban females. The Work Population Ratios (WPRs) are increasing for most regions in the given period, indicating a positive trend in work participation. The own account workers' employment has decreased slightly while in Maharashtra, Tamil Nadu, and all India level, it has been increased. There is gender disparity as well as region. The percentage share of household enterprises has increased but it has decreased in Tamil Nadu and Gujarat while Maharashtra has experienced no clear trend in any direction. The percentage share of households working as self-employed and regularly employed has increased. Casual employment is rural as well as female-dominated. The unemployment rate has decreased in rural areas while increasing in urban areas of Gujarat and Tamil Nadu. In Maharashtra, this unemployment rate has decreased in every region and category. At all India levels, the unemployment rate has decreased over the given years.

Economic Growth and Employment in Karnataka: Implications for Spatial Disparities and Socio-economic Outcomes

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This article examines the intersectoral growth and employment (bearing) disparity between agriculture and non-agricultural sectors and its implication on the persistence of intra-state economic and social inequality in the state of Karnataka. Though there have been a few attempts by the state to address the regional disparities in the past, the implementations of the recommendations of various committee have had significant impact on achieving the set policy goals, despite those the intra-state disparities are widening and is an issue of major concern in the policy sphere. In this background this paper

explores the major factors behind the widening economic growth and employment disparities between sectors as well as the regions across Karnataka and analyse the impact of these disparities on the further widening gaps between per capita income, consumption, investment, asset holdings, human development indicator and other key variables. In terms of per-capita district income the state shows a greater tendency towards divergence against convergence. Though industrial and service sectors have shown outstanding growth performance in the state, their success still has limited appealing for a) large mass of population and b) for sustainable and inclusive growth character of State economy. Our assessment of growth dynamics of Karnataka economy analysed in this paper does not provide us very encouraging picture. The growth observed in industry and service sectors are largely concentrated in few districts/regions. Moreover, growth in service sector does not have much to offer to mass population as it comes from a few but relatively developed districts like Bangalore Urban, Dakshina Kannada, Belgaum and Dharwad and mainly from services (IT and business services, communications and real estate) which benefits only a small number of population. What is disheartening to notice that the industrial sector seems to be following growth pattern of service sector except its ability to provide employment to a large number of population varying from high skilled to low skilled workers. The policy environment of State and its interventions so far have not been able to shift the growth from central poles to other neglected pockets of the State. It is ironic to notice that the current industrial policy promoting investment environment give more weightage to IT & ITES and promote industrial activities in name of 'cluster development programme' in the regions which largely falls under central growth polls. The study found that Dharwad, Belgaum, Bangalore and Mysore districts of Karnataka the industry and service sector has fared well which also has positively affected the employment generation, prevailing wage rate and the growth of these districts. The most backward districts from Hyderabad Karnataka region which is largely agrarian based are also the one consistently ranked low in per capita income and other developmental indicators. The state has witnessed concentration of urban agglomeration, greater flow of investments and funds in the recent decades to select cities with a policy neglect to the backward regions despite the issue of regional inequality remained a key issue in the political narrative since nineties. The promotion of agro-based industries and small scale industries in socio-economically vulnerable and backward districts would be effective strategies towards achieving inclusive and sustainable growth. Diversification of income activities is a much needed interventions to give a push to the agricultural sector. Resource mapping and development of business models; economic activities and capacity building/infrastructure strengthening for the supporting activities are also required. The paper is organised into six sections. After a brief introduction in first section on the widening inter-sectoral disparity in growth and employment, we try to identify the major problems faced by the agriculture of the state and its status compared to that of all India level in the second section. The third section goes into details of factors adversely affecting agricultural sector in Karnataka. The budget highlights and its possible impacts are discussed in the fourth section. The subsequent section outlines the future strategy required for coping with current problems of agricultural sector and placing the sector on the path of sustainable development in the state. Last section contains conclusions and provide suggestions to overcome the challenges of regional disparity which is a major bottleneck to the inclusive growth in Karnataka State.

Knowledge and Low-tech Industries: **Kerala's Perspective**

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Kerala became an unequivocal example of a counterargument to the neo-liberal understanding of growth and development. It offered an alternative to academic discourse, a trajectory for development completely different from the Western experience. The continued focus on health and education, dating back to its princely origin warranted the state towards higher human development levels well above national averages. Amidst the laurels, academic debates have highlighted the issues of lopsidedness and sustainability with the development experience of Kerala. Generally characterised by the theoretical framework of unbalanced growth Kerala's tradeable sectors lagged behind in comparison to the services and construction sector. Migration and remittance have been a buzzword in Kerala's development debate for the most part of its independent existence. Existing literature has extensively discussed the different channels of impact these variables have on the economy. The arguments through the framework of Dutch Disease attributed the poor performance of tradable sectors to the overt push received by the non-tradeable sectors. Thus the same factors, Migration and remittance which acted as chariots of growth and development created a situation of 'windfall gains' and deterred the long-run growth prospects of primary and secondary sectors. Recent discussions around these, signal a declining trend that exposes a critical juncture at which the state stands. The crucial factors which moderated the effect of the financial crisis in the state appear to dwindle further. Specifically the last decade (from 2013), KMS 2018 reported a decline of 3 lakh emigrants and a fall in the percentage of remittance as a percentage of state gross domestic product (GDP). Thus, this raises questions about the reliability of being overly dependent on a standalone mercurial factor such as remittance and where the state would turn to maintain itself in an upward growth trajectory. It is in this context the need for reprioritisation of other sectors becomes vital. In this context, this study revisits the state's manufacturing sector to evaluate its position in terms of its structure and composition over time. Especially with reference to the unprecedented growth displayed in the previous decade. The initial section of the paper analyses the nature and source of the growth, to understand whether this new lease of life indicates a fundamental shift in the sector or a temporary phenomenon. The study identifies that the growth Kerala has experienced in the manufacturing sector was primarily a profitability-led growth in the formal manufacturing sector. This phase is characterised primarily by the growth in the modern sector, with capital growth outpacing labour, thus, indicating the newly invested capital to be technologically advanced and labour-replacing in nature. Although the overall growth in the last decade stands out in comparison to the national level, the nature of growth raises questions regarding the equity and sustainability of such a growth pattern. The sector has gained further traction with the push for a knowledge economy in recent years. Although the term knowledge economy might signal a push for dominant service-based or high-technology manufacturing activities, the experience

of European economies highlights the persistent role of low-technology industries in the discussion. Kerala's manufacturing sector is dominated by the medium-low R&D intensity industries (OECD classification) with more than a fair share (Location quotient) of employment and gross value added (GVA) contribution with respect to India. This holds even in terms of percentage share to the total with the above two metrics. The paper argues for embodied knowledge in labour as an alternative vantage to observe the knowledge intensity in low-tech industries. The paper attempts to broaden the understanding of the knowledge economy beyond the current focus on high-tech industries by highlighting the role of human capital in the development of low-tech industries. Increase in the proportion of highly skilled workforce, lower employment turnover over ratio-labourers with higher experience, investment in human capital and reduction share in labour cost — change in labour cost to output is traced over time to capture the change in embodied knowledge in the sector.

Green Hydrogen Mission of India: Effects on Employment

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The Green Hydrogen Mission in India stands as a transformative initiative, positioned at the intersection of sustainable energy and economic growth. As nations worldwide pivot towards cleaner and renewable energy sources, India's commitment to producing green hydrogen presents a promising avenue for decarbonisation and environmental stewardship. The reasons behind the initiation of Green Hydrogen Mission are necessarily environmental in nature. Among them, climate change, air pollution, and environmental degradation are just a few of the many reasons that have contributed to the transition from the brown economy to the green economy. The preservation of habitat, environmental protection, and zero emissions are the main goals of this shift. The idea of a "green hydrogen economy" presents India with numerous chances to achieve energy independence. India has been utilising its geographic advantages to increase the amount of renewable energy it can produce continuously for the past ten years. India can increase its production of green hydrogen by combining it with various renewable energy sources. India can expand its facilities for producing hydrogen and benefit from its renewable energy situation. This research delves into the multifaceted impacts of India's Green Hydrogen Mission, with a primary focus on its potential for job creation and employment opportunities. The study employs an analytical methodology and qualitative assessment to gauge the direct, indirect, and induced employment effects. By examining the entire lifecycle of green hydrogen production, from project initiation to ongoing operations and maintenance, the research provides a detailed understanding of the skill sets required and the sectors likely to benefit. Key findings reveal that the Green Hydrogen Mission not only generates immediate employment in construction and operation but also catalyses job creation across the supply chain and related service sectors. These are identified as the transportation sector, heavy manufacturing and electrolysers manufacturing, agriculture sector, shipping industry, energy and power sector, and agriculture sector.

The renewable energy sector, construction sector and electrolyser manufacturing are found to be the highest green job creating industries. Furthermore, 11 percent and 2 percent of the new jobs will be created by green hydrogen generation and storage, respectively, while 4 percent will come from the distribution and transport sector. The potential semi-skilled and low skilled job roles which will be created under the renewable energy production sector are renewable energy system installer (solar/ wind), plant operator, supervisor. The study also identifies the challenges that may hinder this potential job creation due to adoption of green hydrogen. These challenges are the high cost of hydrogen production from green energy, slow development of green hydrogen infrastructure and high cost of producing electrolysers. To overcome these challenges the government is setting up various supportive policy provisions that will be extended to Green Hydrogen Projects in order to assist the distribution of renewable power. This will involve enabling the banking of renewable energy, granting time-bound open access and connection, and waiving off interstate transmission fees for renewable energy utilised in the manufacture of green hydrogen.

Caste-Class Dynamics in the Informal Economy during Economic Growth in India

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Caste and class are two major markers of social and economic stratification in India. They play a crucial role in sustaining and strengthening the process of social exclusion. It has been often expected that the process of economic growth and modernisation may weaken the congruence between caste and class structures and induce social and economic mobility, thereby bringing about a change in the socio-economic environment. Although there have been some improvements in the economic outcomes of the depressed and excluded sections of the society during the growth period, it has been argued that the Indian economy has failed to witness a process of inclusive growth, and that this process has been uneven across sectors and across various population groups. Over the last few decades, the informal economy has become an important economic space to understand poverty and precarity in the developing countries. The informal economy is not only a statistical category; rather, it gives an entry point to understand the conditions of existence, and the process of survival and reproduction through the exclusionary growth process in the Indian economy. The issues of caste and class dynamics, informality, and their interaction have been widely studied in other disciplines. However, the interaction of these two issues in terms of a strong convergence between how not only the vast majority of population in general, but the marginalised castes in particular reproduce their livelihood through an exclusionary growth process in the informal economic space has not been explored so much in the economics literature. This study attempts to explore these dynamics using the four rounds of employment-unemployment surveys of the National Sample Survey Organisation (NSSO) covering the peak period of economic growth, i.e., 1999-2012. Our analysis reveals that the exclusionary growth process not only dumps a vast majority of surplus population that is rejected by the formal/modern/industrial sector into the informal sector, and places them into different tiers

based on their economic characteristics, caste plays an important role in creating further contradictions in the informal economy. Given the context of worsening state of affairs in the agriculture and nonagriculture sectors, one can see that there is an evident mapping between caste identities and the placement of individuals in the upper-tier and lower-tiers of the informal economic space. Thus, while this excluded surplus population is pushed to the margins, subsists, on an average, below the customary standards of living in poor working conditions devoid of any employment security and social security benefits, have low productivity, earnings and consumption outcomes, caste dynamics further add a layer of exclusion, depravation and inequality even within the excluded and precarious informal sector. It is the marginalised castes such as scheduled tribes (STs) and scheduled casted (SCs) who are placed in the lower-tiers of the informal economy, and have not witnessed significant improvements in their socio-economic outcomes such as education and consumption expenditures even during the high growth period. The OLS estimates suggest that the consumption inequalities for STs and SCs relative to forward castes have further intensified for all classes in both agriculture and non-agriculture sector with the increase being much higher in upper-tiers of the informal sector. Even for higher education categories, there exist substantial consumption inequalities. On the other hand, other backward classes (OBCs) are relatively better placed than STs and SCs in the socio-economic structure. The OLS results suggest a widening of consumption inequality between OBCs and forward castes for rich farmers and small and marginal farmers while there is a marginal decline in the consumption gap for middle farmers. All the classes in the non-agriculture sector have witnessed an increase in the consumption gap whereas the increase in consumption gap is miniscule for regular salaried and wage workers. OBCs have witnessed a decline in the consumption disparity particularly for the category of higher secondary and above educated. There is no micropreneurial improvement of the deprived castes as well.

Unravelling the Stratified Landscape of Employment Growth in India: A Comprehensive Analysis, 1983 to 2022-23

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The COVID-19 pandemic has led to an extraordinary economic and health crisis and has impacted the economies across the globe. According to the National Statistical Office's (NSS) provisional national income estimates, India's gross domestic product (GDP) decreased by 7.3 percent at current prices in the fiscal year 2020-21. The massive decline in the GDP, because of the pandemic, is indicative of the severe crises rocking the Indian Economy, subsequently affecting adversely the lives of millions of Indians. The extent of the crisis is so deep that it has forced the masses to make a choice between their lives and livelihoods. The extent of the brutality of this crisis was evident during the mass exodus of migrant workers from big cities had happened during the first phase of the lockdown. The second wave of the pandemic saw a massive rise in number of deaths due to unavailability of care facilities. However, the situation of the Indian economy was already deteriorating when the pandemic hit the country. There are several indications of the declining economic performance of the Indian economy. The unemployment rate has risen to 6.1 percent in 2017-18, which is the highest in the last 45 years.

India saw a massive decline in the employment growth, from 12 million per annum during 2000-2005 to about 2 million per annum during 2005-12. This decline has led to research to point out the "jobless growth" in India. It was found that the sharp fall in agricultural employment and a rise in educational enrolment at secondary and higher education was the primary reason behind the slow growth in employment between 2004-05 and 2011-12. However, it was anticipated that overall employment would rise after 2012, particularly in the non-farm sectors, as educated youth would have joined the labour market. It was further expected that this would have sustained the structural transformation that India is experiencing. Since 2004-05, the Indian economy has been at a critical period of development, with the share of workers in agriculture dropping and the non-farm sector increasing at the same time. This stage of structural transformation, when "surplus labour" from the traditional sector (agriculture or informal) moves to the modern sector (industry or formal sector), has been modelled by Arthur Lewis and is defined indicative of the modernisation of a country. But unfortunately, total employment measured in terms of the Usual Principal and Subsidiary Status (UPSS) has declined between 2011-12 and 2018-19. However, there is a debate on the exact estimates of this decline. Further, the share of those attending educational institutions has dropped from 27.5 percent for the year 2011-12 to 26.32 percent for 2018-19. Thus, unlike 2004-2005, when the share of those attending educational institutions increased when labour force participation rate (LFPR) decreased, between 2011-12 and 2018-19, the decline in LFPR is happening along a with decline in participation in educational institutions. Further, women withdrew from the labour market en masse, leading to an increase in the share of those who have declared themselves as attending domestic duties from 10.81 percent to 16.14 percent. But this significant job loss will have an unequal effect on different sections of society as the Indian social structure is highly fragmented along lines of caste and gender. This persistence of segmentation and fragmentation of the labour market has worsened the situation for the disadvantaged groups. However, the analysis on employment growth in India has not focussed on caste as the centre of the analysis. Therefore, in this study, a detailed analysis of the changing employment structure of India between the years 1983 and 2022-23 will be analysed, particularly examining its impact on different social groups.

Poverty, Inequality and Working Hours: **Evidence from Labour Market in India**

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How do poor households respond to poverty and inequality? Empirical evidence suggests that households not only react to inequality by sending more household members into the labour force but also by increasing the work hours of the already employed. This paper studies how poverty and inequality influence a household's time allocation in the labour market. Though work hours and their interaction with inequality have been of specific interest to researchers in the field of economics, the study of the phenomenon in a developing country context like India has been rather limited. For a detailed understanding of poor households, our empirical strategy involves classifying working

individuals as absolutely poor (using \$2.15 of the International extreme poverty line), relatively poor (using the Societal Poverty Line given by Jolliffe and Prydz, 2021), and non-poor. Using data on actual hours worked by members of a household from the Periodic Labour Force Survey (PLFS) 2017-18 round, we find three main findings. Firstly, members belonging to absolutely and relatively poor households work for fewer hours than those in non-poor households. At the All-India level, we observe that absolutely poor (relatively poor) households work for almost 45 (22) minutes less per day than the average working hours of non-poor households. Secondly, the impact of inequality (measured by Gini) on average work hours is positive, large, and statistically significant for the All-India level. A one standard deviation increase in regional Gini is associated with a 2.4 percent increase in the average work hours of a household. Thirdly, contrary to the evidence from the developed countries, we find that the response of work hours to inequality varies across rural and urban areas. While inequality induces households to work for longer hours in urban areas, it discourages households from spending more time at work in rural areas. Compared to rural areas, we find that the absolute (societal) poor households in urban areas experience 2.12 (1.8) times the reduction in per day work hours. We also check the robustness of results using work hours data at the individual level. We find that individuals belonging to absolutely (and relatively) poor households also work for 2.2 (1.7) percent less than average working hours at the All-India level. Moreover, a one standard deviation increase in regional Gini leads to an increase in individuals' work hours by 2.32 percent. In the case of rural areas, rural Gini is negatively associated with the average work hours of an individual. A one standard deviation increase in Gini is associated with a 0.84 percent fall in an individual's work hours. In the case of urban areas, individuals from absolute as well as societal poor households work for fewer hours by 3.91 percent and 2.39 percent, respectively. Contrary to rural areas, as inequality increases, non-poor in urban areas increase their work hours by 2 percent. These results inform the larger policy space on poverty eradication programmes and employment generation. Increasing the work hours of the poor through skill enhancement programmes or employment opportunities for the people below the poverty line(s) can ensure better living standards for them. Given that the conditions of the "working poor" are a concern across developing and developed countries, the present evidence motivates the pro-poor policies targeting in-work poverty.

Do Farmer Producer Organisations (Fpos) Provide A Good Platform To Increase Farm Employability and Farmers' Livelihood Conditions

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The Farmer Producer Organizations (FPO) are set up and promoted in India to help the famers in the process of cultivation using technology, to improve agricultural productivity and production, to facilitate agricultural marketing and to create a co-operative positive environment for the farmers in the rural areas. An increase in the participation of farmers in these organizations is likely to help

boost farmers' overall welfare through an increase in income or improved their standard of living. Using secondary data from the National Association of Farmer Producer Organization (NAFPO), and the National Sample Survey's (77th Round survey) Situation Assessment Survey of Agricultural Households (2018-19), this paper examines the growth of FPOs over last two decades, and farmers' participation in the FPOs. It also explores the factors that restrict the poor and marginalized famers' to participate in these organizations, and the impact of farmer's participation on their family income and standard of living. The main findings of this study reveals that in absolute numbers, the growth of FPOs was sluggish until 2014-15, but thereafter a substantial growth is noticed. Despite the remarkable growth of FPOs and the Central Government's awareness mechanism, farmer's participation in the FPOs is still quite dismal (less than 1 per cent) in India. Although, the participation rate among the large and medium size farmers is a bit higher as compared to their small and marginal counterparts, the overall share of the later groups in FPO participation is quite significant (about 84 per cent). There is a host of factors including farmer's education, gender, age and the size of operations, etc., influence their decision to participate in the FPOs. To understand the determinants of participation of the farmers in FPO system, we applied the Probit and IV-Probit model. The research reveals that the socioeconomic characteristics of the head of household emerge as pivotal factors, exerting a primary influence on farmers' decisions to become member of FPOs. Moreover, the FPO participation in India is only limited both "technical advice" and "to the input procurements", instead of "selling the final produce" or the marketing issues. Within this subset, majority of farmers, comprising 67 percent, leverage their FPO membership primarily for accessing technical advice. Conversely, disposing of harvested produce to FPOs emerges as the least favored choice and accessing inputs in the form of technical advice and input procurement from FPOs being most favored choice. FPOs are conspicuously absent from being chosen as a marketing channel across all farmer categories, owing to their non-engagement of FPOs in the aggregation of harvest and providing scope for the continued exploitation to farmers. The idea of FPOs as to integrate farmers, especially small and marginal farmers into the agricultural marketing system, reaping benefits of economies of scale, providing them with fair remunerative prices while minimizing transportation and transaction costs seems too far away from the reality. Hence, the impact of PFO participation do not help increase farmers income and standard of living in India. Based on these findings it is suggested that demand driven farmer's welfare schemes would have been more useful for the farmers rather than the supply side interventions like the FPOs.

TECHNICAL SESSION 2.13

Dynamics of Employment Vulnerability across India: A State-level Analysis

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This study assesses the quality of jobs created across states and highlights whether new jobs that states are creating are vulnerable or not based on selected indicators of conditions of employment, access to employment, type and nature of employment and sectoral composition of employment. Using unitlevel data from Perodic Labour Force Survey (PLFS) 2017-20, state-level variations in employment vulnerability are assessed. The central focus of the paper is to explore whether there exists a difference in the nature and quality of employment created across states in India based on the type and level of economic growth witnessed by the state. In this regard, primarily, a disaggregated analysis of growth and distribution of employment has been conducted for 16 major states including Andhra Pradesh, Bihar, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha , Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, and West Bengal has been done. Based on this, the states have been ranked and grouped together into three categories, high, moderate, and low growth based on their year-on year per capita net state domestic growth (at constant prices). Second, adopting International Labour Organization's (ILO) decent work framework an inter-state analysis is conducted based on selected indicators including workforce participation rate, change in employment arrangement, informal and formal employment, and chosen indicators describing conditions of employment, i.e., tenure security, social security, and paid leaves to understand the nature of vulnerable employment generated across states. Furthermore, to examine and identify the status and drivers of vulnerabilities in employment across developed, moderately developed, and under-developed states in India binary logistic regression has been conducted, to unravel the factors which drive participation of workers in vulnerable employment and highlight whether same factors govern this decision of participation or are there any state-specific reasons which need cognisance. Based on the level of economic growth, the results showcase that the propensity to generate high quality decent jobs is extremely poor even in states with high economic growth, rather they have witnessed a substantial rise in vulnerable jobs. Workers are often employment in short-term contractual service jobs with low pay and no security of employment which is rendering them vulnerable. This study highlights the need for policy intervention

to improve conditions in the labour market if India is to realise the demographic dividend. Specific to their internal environment, states should focus on creating jobs that are more centric towards requirements of industries within their boundaries and matching with the overall well-being of the people of the state. The study contributes to the literature in two ways. Firstly, it is amongst the firsts to provide a comparative qualitative assessment of jobs created across states in India based on the nature and pattern of growth in the state. Secondly, it brings out the pattern of employment creation witnessed by states and maps out specific areas that create vulnerable employment. Such an identification would be instrumental for state level policy making decisions to assess key response areas which need urgent attention as well as to diagnose the key potential areas of employment generation within the state.

Exploring Pattern of Growth and Employment Trend in Contemporary West Bengal

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The economy of West Bengal witnessed the emergence of a new political regime after 34 years of Left rule in 2011. At that time, the state economy registered national state domestic product (NSDP) growth of around 6 percent, with a significant contribution from the tertiary sector in the composition of NSDP and the NSDP growth rate. However, in terms of employment generation, tertiary sector could not generate skilled and remunerative employment. The sectors like construction, trade, hotel, and restaurants created informal types of employment. At this time, the economy also witnessed massive informalisation and casualisation of the workforce. The state also had a history of land reform and good agricultural growth in the decade of 1980s. However, the fruits of good agricultural growth were not sustained in the last decade of 2000s. Especially, towards the end of the Left rule, the rural sector witnessed low agricultural growth, declining inequality along with the increasing population proportion of agrarian workers, non-agricultural workers, and non-agricultural self-employment, indicating a process of proletarisation. Given this background, this paper attempts to study the pattern of growth and associated pattern of employment of the economy of West Bengal in the period between 2011-12 and 2022-23, i.e., in the new political regime. The new political regime is vital as the All India Trinamool Congress (TMC) government has undertaken a series of welfare measures, particularly for the women in the state. It would be essential to study how the state economy performed regarding growth and employment generation under the TMC government. Thus, the main objectives are to study the overall NSDP growth sectoral and sub-sectoral growth to understand which sector drives the overall growth during this time. Along with that, this study would also like to focus on the pattern of employment in rural and urban areas and try to see if there are any changes in the pattern of employment. This study uses data from various sources. The data of employment and unemployment have been taken from National Sample Survey Organisation (NSSO) for 68th round (2011-12) and Periodic Labour Force Survey (PLFS) for 2023 to capture the long-term trend in employment and nature of employment. The time series data of overall and sectoral NSDP have been taken from the EPWRIFTS. The data on

NSDP and its components have been given in different base year periods. Simple splicing technique has been used to convert the different base year periods into a single base year, i.e., at 2004-05 prices. Similarly, splicing technique is also applied on the sectors and subsectors separately. This study uses the following methods to calculate the exponential growth and to find out breaks in the overall growth trend. The main purpose is to identify the structural break points in the growth of the output of the overall economy (NSDP), sectors and subsectors and then estimate the exponential growth rates of each of the above-mentioned sectors respectively. The following model is used to calculate the growth trend. Ln yt = a + gt + Ut Where Ln yt is log of income, a is the intercept term, gt is the growth rate, t is the time trend and Ut is the disturbance term. The subscripts t denotes time. The slope and intercept parameter of the above model will vary with respect to the break points. Now the first step would be to estimate the break dates of aggregate, sectoral and sub sectoral NSDP and then calculate the period wise growth rates. This empirical exercise hopes to provide an account of the growth and employment generation of the economy of West Bengal, which is otherwise inadequately presented in the existing literature.

Re-examining the U-shaped Feminisation Hypothesis and Determinants of the Female Labour Force Participation: **Empirical Evidence from Global Sample**

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Based on the literature review on female labour force participation, empirical studies have not explored female participation quantitatively and qualitatively using a global sample and further analysis at the regional level. This paper aims to comprehensively analyse the trends and determinants of female labour force participation across the six major regions of the world: South Asia (7), Europe (40), Latin America and Caribbean (LAC) (21), MENA (16), Pacific (17), and sub-Saharan African (SSA) (38). The study is based on World Development Indicators data from 2000 to 2020 to meet the outlined objectives. It compiles relevant, high-quality and internationally comparable statistics about global development indicators. The countries in the groups, study period and indicators are selected based on the data availability for the variable considered. The paper provides evidence of the non-universality of the U-shaped feminisation hypothesis and empirical estimation of the saddle point of the fitted line of female participation in the labour force and development path. The paper further studies how and why diverse development paths are followed by world regions under analysis. The effect of economic growth on occupational segregation is witnessed globally. The paper highlights the changing sector-specific employment of women as a percentage of total employment with high economic growth witnessed in the last two decades. Compared to developed regions where the dominance of the service sector and a gradual decline of the traditional sector was observed, quantified data indicates the dominance of the agricultural sector in developing regions in the 21st century. The paper further delves

into the evolving gender gap trends of male and female participation and provides a surprising reason for the fall in the gender gap in regions, i.e., a large fall in male participation rather than an increase in female participation in labour force. Lastly, the paper examines the effects of determinants of female labour force participation at the global and regional levels using panel data regression techniques. Given heterogeneity among the regions, the magnitude and level of significance of the coefficients differ across the regions. Therefore, the study suggests region-specific tailored policies that align with macroeconomic policy goals given the socioeconomic condition of an economy. The studies on Female Labour Force Participation Rate (FLFPR) highlights the importance of the inclusion of females in the labour force. Increased FLFPR can significantly improve primary development goals like reduced poverty, access to health care, education, environmental sustainability, institutional effectiveness, and democratic participation while also being associated with a decline in female gender equity is one of the Sustainable Development Goals (SDGs) set forth by the United Nations (UN) and enhancing FLFPR can help achieve this goal. For any nation to enjoy high economic growth and welfare, the utilisation of the other half-human endowment (women) is imperative. Projection suggest that the female participation is going to fall further in coming decades, the situation call for policy action to further increase the women participation in the labour market.

Economic Growth, Gender Inequality, Trade Openness, Green Energy and Female Labour Force Participation in India: A Nonlinear ARDL Approach

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This comprehensive study delves into the intricate dynamics governing economic growth, gender inequality, trade openness, and labour force participation in India over a span of three decades, from 1990 to 2020. Employing an Autoregressive Distributed Lag (ARDL) framework, the research uncovers substantial and noteworthy effects of female labour force participation, male labour force participation, green energy, gender parity index and trade openness on India's economic growth. This study has taken data from World Development Indicators (WDI) spanning from 1990 to 2020. Firstly, this study runs unit root tests such as ADF, PP and KPSS. Since the data is stationary at level and first difference ARDL model is more appropriate. For a small sample size, the ARDL model is more applicable. The ARDL results indicate a robust relationship between female labour force participation, male labour force participation, green energy, gender parity index, trade openness and economic growth. The considerable and significant effects of these variables suggest that India's economic trajectory is intimately linked with the active involvement of women and men in the labour force and adaptation of green energy and reduction of gender inequality. This finding underscores the importance of considering gender dynamics and green energy policies in the pursuit of sustained economic development. Taking the analysis, a

step further, the study introduces a Nonlinear Autoregressive Distributed Lag-bound test to unveil the nuanced, long-term relationship between female and male labour force participation and economic growth. The results illuminate an uneven trajectory, showcasing how positive and negative shocks arising from changes in labour force participation exert varying impacts on India's economic growth. This insight provides a deeper understanding of the complex dynamics governing the connection between female labour force participation and economic development. The Granger causality analysis further enriches the study by revealing intricate associations between key variables. Bidirectional causal links emerge between male and female labour force participation, underlining the interconnectedness of gender dynamics in the labour market. Additionally, unidirectional causal relationships are identified between economic growth and male labour force participation, trade openness and male labour force participation, as well as the gender parity index and female labour force participation. These findings shed light on the causal mechanisms at play, offering valuable insights for policymakers and researchers alike. A pivotal conclusion drawn from the study is the positive impact of increased female and male labour force participation, a favourable gender parity index, and new green energy policies on India's economic growth. Policymakers are urged to consider these findings as a call to action, emphasising the importance of fostering an environment that encourages greater female labour force participation, ensures gender parity, and promotes trade openness for sustained and inclusive economic development. In light of these findings, the study advocates for the improvement of institutional quality as a means to enhance economic efficiency and facilitate increased female and male labour force participation. The emphasis on institutional quality underscores the need for a supportive regulatory framework that not only promotes gender inclusivity but also facilitates an environment conducive to economic growth. Ultimately, this research contributes valuable insights to the ongoing discourse on economic development and gender equality, guiding policymakers towards evidence-based interventions for a more prosperous and equitable India.

Female Agricultural Workforce in Kerala: Insights from PLFS 2022-23

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Female labour force participation has been low comparing that of male for decades. But from 2017-18 and 2022-23 there is a slight increasing pattern in female labour force participation rate (FLFPR) by 12.3 percent in rural and 4.3 percent in urban at all India. Agriculture has always been the main venue for women's work in developing countries, with women having a higher share of agricultural employment. In developing countries like India, agriculture continues to absorb and employ female work force but fails to give them recognition of employed/hired labour. Women constituted 38 percent of the agricultural labour force in developing countries. It is also estimated that 45.3 percent of the agricultural labour force consists of women. But a large number of women have remained as "invisible workers". Family farms place important contribution in India. The paper explores the gender dimensions of the changing nature of agricultural households in Kerala, India. The shift of the

female workforce away from agriculture was quite marked in Kerala. In agriculture allied sector, the male as well as female work participation has declined for 2004-05 and 2015-16. In this paper we have tried to analyse the female work participation in agriculture and allied sector in Kerala using Periodic Labour Force Survey (PLFS) 2022-23. There is an increasing participation of females to the agriculture sector and declining construction sector in Kerala. The sharp increase in female worker participation in agriculture and allied sector during 2015-16 to 2022-23 in Kerala is 17.9 percent. In the construction sector there has been an increase of 1.4 percent in the female work participation during 2015-16 to 2021-22 but, after that, a sharp decline of 8.51 percent during 2021-22 to 2022-23 is evident. The bulk of female farm workers, are casual wage workers. Some work for themselves in agriculture. With increasing age, a person will likely to join the non-farm sector. However, after a certain age an increase in age has a negative relation with non-farm employment, implying that more older people choose farm employment as the livelihood option. Considering the social group, majority of women workers in farm sector belong to scheduled caste (SC) and scheduled tribe (ST) communities. Majority of illiterate women are employed in farm sector. As higher education attained there is a tendency of adopting nonfarm employment. The conventional U shape is not applicable to the agricultural activities, because more educated are turning to non-farm activities. The lowest expenditure quintile group depends more heavily in agriculture and allied sectors than higher quintile groups, and employment among non-farm sector is higher among higher quintile groups. Although women shift into the agricultural sector, there is a large gender gap in wages in Kerala. Even though Kerala paying the highest wage to field labour (male) ₹789/day and female ₹537/day in 2020-21. In case of skilled labour, highest wage rate i.e., ₹929/day and lowest wage rate i.e., ₹295/day were paid in Kerala and Tripura respectively. At all India level, the wage rate is ₹457/day. In case of field labour (male), the highest paid wages (in Kerala) is about 221 percent more than that of the lowest (in Chhattisgarh) and about 128 percent more than the all India average daily wages. In case of female field labour, the highest paid wages (in Kerala) also is about 212 percent more than that of the lowest (in Chhattisgarh) and about 90 percent more than the all India average daily wages. The very high state variations clearly reflect the scenario of availability of labour, arduousness of work, cost of living of the workers, geographical location of work and other factors, which play an important role in determining the wage rate in a particular state.

Rural Female Employment in India: **Trends and Determinants**

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Female labour force participation rate (FLFPR) along with men plays an important role in the overall development of the countries. Female employment has been at the centre stage of economic literature and discourse in recent times and has gained momentum since Claudia Goldin won the Nobel Prize for Economic Sciences in 2023. In the context of India, longer-term trends suggest that it has been declining. Various studies analysed these declining trends on a macro level. However, there is a dearth of state-specific studies, which can help to understand the trends better. Achieving gender equality and

empowering all women are the main targets of Sustainable Development Goal (SDG)-5. According to the SDG report 2020-21, Chhattisgarh is the top performer state in SDG-5 with a 64-index score and Assam is the lowest. Hence, these two states have been chosen in the present study. The main objectives of the study are to examine the trends and determinants of FLFPR in Chhattisgarh and Assam as well as at the all-India levels between 2011-12, 2017-18, and 2018-19. The article is based upon the analysis of the National Sample Survey Office's (NSSO) Employment and Unemployment Survey (EUS) 2011-12, Periodical Labour Force Survey (PLFS) 2017-18 and PLFS 2018-19. In 2011-12, in both states, most of the population was living in rural areas around 76.76 percent in Chhattisgarh and 85.92 percent in Assam (according to the 2011 census of India). Therefore, in this study, we mainly focussed on the rural areas' women. The study finds that over a period FLFPR declined in both the states as well as at all India levels among three survey rounds. However, the magnitude of the decline is different across the states — FLFRR is higher in Chhattisgarh compared to Assam and at all India levels. For the middle age group FLFPR initially declined and after that increased in Assam whereas, in Chhattisgarh, it falls in three survey rounds. As education level increased FLFPR also increased hence observed a U-shaped relationship between FLFPR and education level. In both states, a U-shaped relationship is exhibited whereby FLFPR is higher at the bottom (i.e., illiterates) and at a higher level of education. In the case of Chhattisgarh, the study observed a weak U-shape relationship between FLFPR and education level only after 2017-18. Considering the social group, the share of Scheduled Tribe (ST), Other Backward Class (OBC), and Scheduled Caste (SC) women in workforce participation was higher compared to other upper caste women. The reason behind this could be that these are the most deprived sections of the society. Therefore, to fulfil their basic needs they join the labour market. By using the pooled logit regression model study finds that age, age square, education level, vocational training, marital status, spouse employment status, number of elderlies, children below five years, head education, and household size are the main significant determinants of FLFPR. We find that education along with vocational training plays an important role in increasing women's participation in the labour market. Therefore, the study suggests that to increase female participation in the labour force government should encourage vocational training and skill formation.

Exploring Indian Labour Market Patterns

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Over the past two decades, India's labour market underwent significant changes fuelled by rapid economic growth and demographic transition. The movement of the labour force away from agriculture with improved educational levels of the workforce began in India and the modernisation of the labour force faced challenges such as slow diversification of employment structure, low female labour participation, and inferior quality of education. These changes in the labour market from 2005 to 2018 affected diverse groups of workers adversely in India. Unemployment among the youth increased sharply as the gap between labour supply and labour absorption widened in India between 2012-18.

Females responded to the mismatch of the labour demand and supply by withdrawing themselves from the labour market altogether and as a result, the female labour force participation rate declined drastically between 2005 to 2018 with a significant increase in their domestic duties The female labour force participation rate has seen a downward trajectory since the 1990s, despite robust economic growth, increased educational opportunities, and enhanced infrastructural accessibility. Several factors contributed to this decline including gendered occupational segregation and the inadequate growth of labour demand within sectors predominantly occupied by women. However, this declining trend showed signs of reversal where India's female labour force participation of 15 years and above age group, has shown a steady increase from 2017-18 to 2022-23. Therefore, given the contextual backdrop, the present study attempts to shed light on the trends and patterns of India's labour market over five decades (1983-2023) and tries to capture the sector-wise labour market outcomes for females concerning self-employment within the given period. To unveil the employment patterns, we employ the nationally representative dataset, the Employment-Unemployment Survey (EUS) from 1983 to 2011-12 and the Periodic Labour Force Survey (PLFS) from 2017-18 to 2022-23 conducted by the National Sample Survey Office (NSSO) and National Statistical Office (NSO) respectively. The paper compares the national aggregates to explore the employment patterns and their heterogeneity in terms of gender, sector, employment status, and industrial sector. The study also uses National Account statistics (NAS) to deflate the nominal wages presented in the EUS and PLFS to calculate the real wages for all the years. The findings of the paper indicate that numerous demographic factors like age, gender, sector, industry, and education are responsible for the change in patterns of India's labour market and the decline of the projected rates of labour force participation among working-age women. It was observed that most working-age females have been out of the labour force in contrast to working-age males. Moreover, self-employment has been prominent among females with a greater percentage of females engaged in unpaid family work. The dismaying observations show that even the youth population (15-24 years) is employed as unpaid workers. Lastly, we observe the persistent gender wage gap at all skill levels; unskilled, semi-skilled, and skilled. Overall, the paper highlights the Indian labour market pattern spanning over five decades with changes in sectoral composition however, there are fewer differences in the composition of the employment status.

A Study on Indian Women: Education, **Employment, and Marital Status**

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The following research questions will guide the study: (1) descriptive statistics explaining the education level and different types of job preferences of married women and unmarried women and the scenario of their participation in the Indian labour market and (2) identify the factor(s), which are influencing the females to stay in their current job status or switch it and how these factors are influencing the females to change their current working status from working to not working. Women's empowerment and labour force participation have been lagging behind in spite of various governmental policies aiming to generate an educated pool of women's human capital. Various theories of human capital suggest that more education would make women more skilled which will increase their labour force participation and in turn their earnings, which would finally have a positive impact on the gross national product (GNP) of India. However, it has long been observed that in India the relationship between women's education and labour force participation is U-shaped which suggests that at moderate levels of education, women get married into wealthy households and income effect negatively influences their decision to remain in the labour force. Various studies have also suggested that the ratio of women to men's market work participation declines as we move up the caste hierarchy and income groups. Studies have also revealed that marriage is considered an important social event in India which leads to disrespect of lone women in the anticipation of rebellion against patriarchy. Studies reveal influence of marital status on women's empowerment and conclude the miserably low empowerment among lone women hence, this study is an attempt to look into the labour force participation of married and never-married women and also look into the sector in which they are choosing employment. In the last few decades, higher education enhanced the economic growth of India, and massive growth has been witnessed. But the inner story may be something different, using the Perodic Labour Force Survey (PLFS) data set for the year 2021-22, this study aims to investigate the relationship between the education level and job preferences of married women within the context of family dynamics. The study uses some descriptive tables consisting of the percentage of currently married and never-married women who are in the labour force and also observes the percentage of women in each principal working status. The current weekly statuses of women are considered and a logit regression is estimated to observe the factors affecting the decision of married women to change their current working status. Since the dependent variable is binary which equals 0 if the women does not switch and 1 if the women switch a logit regression is used. However, this suggests only the switch of current weekly status but the concerning factor is whether the switch is positive or negative that is whether the women are switching from non-working to working or vice versa, hence again a logit regression is estimated. This study concludes with a result that the women are mainly involved in the education sector and even the highly educated women are switching from working to non-working. Hence, investment in the education sector is coined as a married market clearing factor instead of enhancing the conditions of Indian women and leading India towards its potential productivity.

Labour Regulations, Enforcement, and the Rise of Contract Labour in Indian Manufacturing

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This paper delves into the prevalent discourse surrounding the increase in contractualisation within the organised manufacturing workforce in recent decades. Various studies attribute this trend to the perceived rigidity in the labour market, primarily stemming from employment protection legislations such as the Industrial Dispute Act (IDA) of 1947, which imposes constraints on worker dismissals. Existing empirical literature posits that stringent employment protection legislations contribute to the

increased use of contract labour in the organised sector. Furthermore, states with more 'flexible' labour regulatory regimes are observed to experience higher levels of industrial and employment growth rates, suggesting a positive relationship. Additionally, the literature argues that greater flexibility in labour regulations is likely to yield enhanced productivity gains. While existing studies predominantly focus on the de jure aspects of labour regulation, there is a notable oversight concerning the de facto shifts in labour market regulations. These changes encapsulate alterations in the state's enforcement apparatus, which has diminished over the years due to a shortage of inspectors and resources in the labour department. Moreover, there is an increasing inclination on the part of governments and the judiciary to amend labour regulations favourably for employers. The primary objective of this paper is twofold. Firstly, it seeks to analyse the impact of labour legislations on contractualisation in the organized manufacturing workforce, examining the de jure measures. Secondly, it investigates the influence of declining enforcement intensity and enforcement capacity of labour regulation on the rising trend of contractualisation, delving into the de facto measures. Through empirical examination, the paper aims to contribute insights into the factors driving the growing use of contract workers in the organised manufacturing sector. The study uses unit level data from the Annual Survey of Industries (ASI) for the period 2005-06 to 2019-20 to carry out a pooled regression analysis. The key variable of interest for our analysis is the share of contract workers to total workers, aggregated at state-industry level. The raw data for the analysis consists of 285 state-industries over 15 years, and includes 4257 observations. To capture the de jure measures the study uses the composite index constructed by Gupta, Hasan and Kumar (2009), which combines information from three key studies—Besley & Burgess (2004), Bhattacharjee (2009) and OECD (2007). Using the score assigned to a state in each of the studies, Gupta, Hasan & Kumar (GHK) create a time-invariant composite index of Labour Market Regulations (LMR) for each state using a simple majority rule across the three studies. The GHK index categorises 15 major Indian states as 'flexible', 'inflexible' and 'neutral'. To capture the de facto enforcement of labour regulations, the study constructs two enforcement variables: (i) Inspectors—calculated as the number of factory inspectors (in position) per thousand registered factories. This variable reflects the capacity of the state enforcement machinery; and (ii) Inspections—calculated as the ratio of factories inspected in a state to the total registered factories, indicating the level of compliance intensity. Both variables are computed on a state-wise basis and over the period from 2005 to 2019. To ensure comparability across states, we normalise both the number of inspectors and factories inspected by dividing them by the number of registered factories in each state. Data on enforcement measures for the analysis are obtained from Standard Reference Note for various years, published by Directorate General Factory Advice Service & Labour Institutes (DGFASLI). The study finds a consistent rise in the utilisation of contract labour in both 'flexible' and 'inflexible' states within organized manufacturing in India. Notably, there has been a significant decline in the percentage of factories subjected to inspections over the years, with the decline being more pronounced in 'flexible' states. Additionally, the declining intensity and capacity of labour regulation enforcement is found to be significantly associated with a rise in contract labour usage, especially in states with 'flexible' regulatory regimes.

Impact of MFI on Women's Labour Force **Participation in India**

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This research paper investigates the association between microfinance and labour force participation growth in India. The economic landscape of India has experienced significant changes over the past few decades, with microfinance institutions playing a pivotal role in providing access to credit and financial services to marginalised and underserved populations. While microfinance has been heralded as an instrument for poverty alleviation and women's empowerment, its impact on labour force participation remains a relatively understudied aspect. Using a combination of secondary data sources, including national employment surveys and microfinance institution records, this study employs a rigorous econometric analysis to assess the influence of microfinance on labour force participation in India. The research examines how microfinance programme s have affected the participation of individuals in the labour force, with a focus on gender differentials, regional disparities, and socioeconomic conditions. Preliminary findings suggest that microfinance has a positive correlation with labour force participation, particularly among women, rural populations, and those from economically disadvantaged backgrounds. By providing access to financial resources and fostering entrepreneurial initiatives, microfinance appears to empower individuals to engage more actively in income-generating activities, thereby contributing to the growth of the labour force. However, the study also highlights the need for a nuanced understanding of the potential trade-offs and challenges associated with microfinance, such as debt burdens and over-indebtedness. This research paper aims to contribute to the ongoing discourse on microfinance's role in the broader context of economic development in India. It sheds light on the nuanced relationship between microfinance and labour force participation, offering insights that can inform policy decisions, programme design, and future research in the field of financial inclusion and labour economics. Understanding the intricate dynamics between microfinance and labour force participation growth is crucial for designing strategies that foster sustainable economic development and inclusive growth in the Indian context. Preliminary findings unveil a compelling narrative: Microfinance institutions (MFIs) play a pivotal role as catalysts, fostering an environment conducive to increased women's labour force participation. However, the research also underscores the imperatives of a balanced perspective. While MFIs undeniably amplify women's participation in the labour force, challenges such as potential over-indebtedness, limited scalability of micro-enterprises, and socio-cultural barriers warrant concerted attention. Recognising these nuances is paramount to ensure that the benefits of MFI interventions translate into sustained empowerment rather than fleeting economic gains. This research elucidates the transformative potential of MFIs in reshaping the contours of women's labour force participation in India. By navigating the complexities of economic, social, and cultural terrains, MFIs emerge as potent instruments of change, heralding a new era of women's empowerment and inclusive growth. The insights gleaned from this study hold profound implications for policymakers, practitioners, and stakeholders vested in fostering gender equality, economic dynamism, and sustainable development paradigms within

India. Preliminary findings unveil a compelling narrative: MFIs play a pivotal role as catalysts, fostering an environment conducive to increased women's labour force participation. Particularly in regions grappling with economic disparities and entrenched gender norms, MFIs emerge as transformative agents. They equip women with the requisite financial tools, training, and resources, thereby bolstering their confidence and capabilities to venture into diverse economic activities. The current effects are intense, with enhanced labour force participation translating into improved economic independence, social mobility, and empowerment for women across age groups and social strata.

Childcare Strategies and Sustainable Economic Growth in Asia: Towards a Care-Sensitive Policy Framework

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This study seeks to thoroughly analyse childcare policies in 46 Asian nations, with a specific emphasis on their effects on growth and labour force participation. The study aims to offer insights into the efficacy of current policies and propose enhancements for a childcare framework that is more inclusive and responsive. The global recognition of the pivotal role played by quality childcare in shaping children's cognitive, emotional, social, and physical development during their crucial early years is wellestablished. Multiple studies and analyses have emphasised the significance of allocating more resources to childcare. This is due to its potential to enhance female labour force participation rates, improve children's education and abilities, and generate quality employment opportunities. The International Labour Organisation (ILO) states that investing in universal childcare services can provide significant economic benefits. The Asian Development Bank (ADB) and the United Nations Children's Fund (UNICEF) highlight the significance of greater financial commitment towards childcare to advance gender equality and foster sustainable development. Government-supported efforts in nations such as Japan, South Korea, China, and Vietnam are pivotal in correcting demographic imbalances, fostering population growth, and assisting families in achieving work-life balance. This article is driven by the growing need for easily accessible and top-notch childcare services among growing Asian countries. Prior research underscores the significance of providing resources to childcare, emphasising its capacity to augment female labour force involvement, increase children's education, and generate high-quality employment prospects. Nevertheless, there is a notable absence of a thorough analysis of childcare policy in various Asian nations. This study aims to identify the discrepancy and fulfil the requirement for a more intricate comprehension of childcare regulations. The report comprehensively analyses policy and institutional frameworks by utilising data from the ILO Global Care Policy Portal. Various aspects of the study include the duration and cash benefits of maternity and paternity leave, statutory protections for pregnant and breastfeeding workers, provision of paid nursing breaks, government schemes for childcare services, support for pre-primary education, and childcare policy gaps. K-modes clustering classifies countries according to their childcare policies, while the innovative Childcare Index, created using Categorical Principal Component Analysis (CATPCA), quantitatively evaluates policy

efficacy. The technique offers a thorough comprehension of the varied landscape of childcare policies across Asia. The findings emphasise the importance of creating a policy structure that prioritises providing care and responsiveness to the growing demand for childcare. The study expects to provide vital insights into the potential impacts on inclusive economic growth and gender equality in different nations. This knowledge will be useful for policymakers striving to develop more effective and inclusive childcare systems. The report proposes policy recommendations derived from the findings, highlighting the significance of an adaptable childcare framework. Suggestions involve prioritising healthcare in policy frameworks to tackle changing family requirements and fostering comprehensive economic development and gender parity in the examined nations. This study enhances the current body of knowledge by thoroughly analysing childcare policies in 46 Asian countries. Implementing the Childcare Index, employing CATPCA, offers a unique quantitative metric for evaluating the efficacy of policies. By shedding light on the varied childcare policies across diverse countries, this research aims to inform and guide decision-makers in shaping more effective and inclusive childcare frameworks.

Prevalence of Food Insecurity and Occupational Structure in Rural India: Evidence Based on Food **Insecurity Experience Scale Surveys**

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This paper studies the prevalence of food insecurity among households belonging to different occupational categories in rural India. The results are based on application of the Food Insecurity Experience Scale (FIES) measure for estimating the prevalence of severity of food insecurity. FAO's Food Insecurity Experience Scale (FIES) is the gold standard in the area of experience-based measurement of food insecurity and provides a global standard scale for measuring severity of food insecurity. Prevalence of food insecurity is estimated using a set of questions that are posed to a sample of individuals. Each question is designed to ask the respondent whether, over the reference period, they have experienced a particular situation - for example, having had to skip a meal or consume inadequate quantity of food - because of lack of money or other resources. Studies have shown that such experiences are associated with different degrees of severity of food insecurity. Assuming that a person facing a high degree of food insecurity is likely to answer questions regarding moderate degrees of food insecurity in the affirmative, the tool allows for endogenous estimation of degree of severity associated with each experience as well as the severity of food insecurity faced by every individual in the sample. Data used in this paper were collected through surveys conducted in selected villages in six States of India namely Jharkhand, Andhra Pradesh, Haryana, Madhya Pradesh, Manipur and Rajasthan. Although purposively selected, these villages are very diverse in terms of socio-economic composition, nature of agriculture, physical access to markets, access to food from forests and other common property resources, and access of households to non-agricultural employment. The villages also capture considerable diversity in terms of coverage of social protection programmes such as

the public distribution system. FIES data were collected from a randomly selected member of each sample household. Apart from data on FIES questions, the primary surveys collected information on basic demographic characteristics of the household, sources of livelihoods, landholding, income, asset holding and access to credit. The surveys also collected information on the extent to which they obtained food from social protection programmes such as the Public Distribution System. For analysis of relationship between food security and economic status, households across all the study villages were classified into eight occupational categories based on primary source of income. These categories were: Large peasants, Poor and middle peasants, Hired manual workers, Self-employed (Own Account Enterprises), Self-employed (Large), Salaried employment (Private), Salaried employment (Government), and Households dependent solely on remittances and pensions. These categories broadly represent the economic classes that the households belongs to. After testing the statistical validity of the obtained FIES estimates, the paper analyses variations in prevalence of severity of food insecurity across different occupational categories. The results show that large peasants, households with government salaried employment and households dependent on large businesses had the lowest prevalence of food insecurity. On the other hand, households dependent on pensions and remittances and hired manual workers had the highest prevalence of food insecurity. Households dependent on pensions and remittances did not have any workers in the households. They mostly depended on meagre government welfare pensions or remittances from migrant workers. Hired manual workers did not have any land, and were engaged in most precarious forms of employment such as agricultural labour, construction labour, manual labour in brick kilns, and manual labour in public works programmes. Notably, households with private salaried jobs were also found to have a very high prevalence of food insecurity. This category included salespersons, drivers, office workers, peons and watchmen. Although private salaried jobs provide monthly salaries (unlike hired manual workers who work for casual daily or piece-rated wages), the salaries tend to be low and jobs are insecure. Low incomes and insecure employment are likely to be the cause of high prevalence of food insecurity among such households. A substantial proportion of food producers face high food insecurity because of small landholdings, low productivity and low incomes in agriculture.

TECHNICAL SESSION 2.14

Labour, Politics of Production and Regimes of Production in the Indian Automobile Industry of the Late 20th and 21st Century

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The global capitalist production regimes of the late 20th and 21st century witnessed multiple modes of production in the manufacturing sector across the Global South. The Indian automobile sector, in particular, witnessed the domination of both Fordist and post-Fordist regimes of production. The dynamics of labour processes in different production regimes posed grievous challenges for the 'wage labourers.' In conjunction with the partly proletarianization, which exhibited discernible manifestations across the non-western societies, rose with the liberalisation of the Indian economy during the late twentieth and twenty-first century, with the complexities in the organisation of production. The contemporary 'global production networks,' particularly in the contemporary automobile sector, contribute to that, dispossessing India's industrial labour and posing persistent questions on the employment, work, and livelihood of the labour. The pre-capitalist mode of production supposedly tends to wither away with the evolution of a dominant capitalist mode. This shift requires an understanding of temporalities. The [heterogeneous] informal sector contains elements of the "precapital" mode of production and the capitalist wage-labour tradition. The former is not transitory or gradually eviscerates with economic development; rather, it is an outcome of capital itself. Lewis' model of structural transformation fails in this particular context and advises the movement of labour from the non-productive sector (=agriculture) to the productive sector (=manufacturing). In the manufacturing sector, where multiple modes of production continue to exist, homogeneous productivity is difficult to ascertain, and there is a need to understand the current labour employed comprehensively. The industrial workforce in the automobile sector did not always employ women, for instance-this phenomenon is much more recent. In the contemporary automobile sector, many women are employed in hazardous work, such as operating heavy machines. Multiple explorations, alike, require a robust methodology of economic history. The workers employed in the factories of global production networks are hired on contractual employment and are "informal," even within the formal sector. Under the changing nature of capitalism and production, capital-labour relations and work conditions have undergone several changes, and rapid contractualisation, segmented workforce, feminisation, and informalisation are a few notable aspects of the last few decades in the auto industry.

Multiple scholarly works problematize these changes for different sectors in the Global South. However, these changes have not been historically traced to the automobile sector, particularly in India. This study proposes to locate the "labour question" and the mode of production in the late 20th (since the start of the auto industry) and 21st century production regime in the automobile industry in India. In alignment, it aims to comprehensively map out the changes in the mode of production and statecapital-labour relations. Such a comprehensive account of the auto-sector workers post-20th century is absent in conventional literature. The methodological limitation was the teleological orientation, which failed to encompass the complexities and overlooked the realities of the working lives that were shaping labour politics. This paper focusses on the methodological approach required to study the labour question in the automobile component industry, emphasising the need for an economichistorical approach. The complex production regimes are to be studied with the situation of labour.

The Impact of Foreign Direct Investment on **Employment Generation: Econometric Evidence** with Special Reference to India

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Developing countries, emerging economies, and countries in transition have come increasingly to see foreign direct investment (FDI) as a source of economic development and modernisation, income growth, and employment. Many studies show that the FDI has the potential to generate employment through the direct hiring of people for new plants, which means they improve aggregate domestic employment through types of jobs created, regional distribution of new employment, wage levels, income distribution and skill transfer. These direct effects are accompanied by indirect effects, which take place through movement of trained labour from foreign firms to other sectors. Moreover, they create links with suppliers and service providers. Consequently, FDI not only creates employment directly but also stimulates indirect employment through supply chains, subcontracting, and the creation of supporting industries. Several countries, since 1980s, have liberalized their FDI regimes and pursued other policies to attract investment. India is not an exception. Since 1991, the country has adopted liberalisation policies and FDI has emerged as a crucial component of India's economic development strategy, playing a significant role in stimulating economic growth and creating employment opportunities. In this context, this study aims to analyse the impact of FDI inflow on employment in India. We have adopted a mixed-method approach, combining both quantitative and qualitative techniques to provide a comprehensive understanding of the relationship between FDI and employment. The study considers time series data which ranges from 1980 to 2020 on employment, FDI, real gross domestic product (GDP), and exchange rate. For this purpose, we have collected secondary data from different sources, like World Bank, Reserve Bank of India (RBI), Economic Survey of

India, Director General of Employment, Ministry of Labour and Employment, etc. The quantitative analysis involves examining the trends in FDI inflows and employment levels over a specified period employing statistical techniques (time series analysis) to establish correlations and causal relationships. Johansen's cointegration technique and Granger causality tests have been applied to data for the period 1980 □ 2020 for this purpose. Additionally, qualitative analysis has been done with the help of graphs to gain insights into the mechanisms through which FDI influences employment in different sectors of the Indian economy. The study identifies that the impact of FDI is not uniform across all sectors and highlights the importance of policies and regulations in attracting and channelling FDI towards sectors that have the potential to create a large number of employment opportunities, particularly in labourintensive industries. Furthermore, the study recognises the need for a balanced approach to harness the benefits of FDI while addressing potential challenges. While FDI has contributed positively to employment, it is essential to ensure that it does not lead to job displacement or exploitation of labour. The government and policymakers must focus on skill development programmes, enhancing labour market flexibility, and promoting inclusive growth to maximise the employment potential of FDI inflows. In conclusion, this paper has made an attempt to provide valuable insights into the impact of foreign direct investment on employment in India. It not only analyses the crucial role that FDI plays in creating employment but also highlights on the importance of supportive policies and strategies to optimise its benefits. Understanding these dynamics can guide policymakers in formulating effective measures to attract and utilise foreign investment in a manner that maximises employment opportunities and promotes sustainable economic growth.

Change in Poverty and Pro-poor growth: Impact of Growth, Redistribution and Population Shift in Bihar and Kerala

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Despite a number of actions undertaken by international organisations and local governments to eradicate poverty and ensure the availability of essential information for assessing its level and evolution, poverty still stands as a major problem. At the beginning of the development era, it was a faith that the growth itself could eradicate poverty through the trickle-down effect. However, in the late 1970s, it was observed that growth is a necessary condition for poverty reduction but not sufficient. So, the focus should be on redistribution of growth along with the higher growth rate is necessary. However, new developments introduced that population change is also affecting the poverty. Therefore, this study has decomposed the poverty change into growth, redistribution and population shift effect for Bihar and Kerala and further estimating that which growth is pro-poor. The present paper takes up two states of India, namely, Bihar and Kerala. Both states are diagonally different from each other. It is puzzling to note that both states were at the same level of poverty by the early 1970s. Now, poverty in Kerala is only 8.07 percent against 34.05 percent of Bihar. It is widely accepted that a poverty measure should be sensitive to the incidence of poverty, the intensity of poverty and the inequality among the

poor. Therefore, while analysing the factors behind changes in poverty, it becomes interesting to ask to what extent these components are responsible for causing changes in poverty. While growth and distributional variables influence the incidence of poverty, population change is also critical for the change in poverty. Thus, there are three major factors that influence the poverty change. The first one is the change in magnitude of the growth rate. A higher growth rate implies a more significant poverty reduction. The second factor is changes in inequality; there will be less impact of growth on poverty reduction if the inequality is high. The last and the third factor is the population shift between segments that have different degrees of poverty. This study uses decomposition methods to understand the impact of growth, redistribution and population on poverty. But, decomposition does not let us know which growth is inclusive or pro-poor one. One needs to have a measure which can show this. Hence, pro-poor growth index and poverty-equivalent growth rate growth are estimated in this study. This study is based on the NSS (National Sample Survey) 50th, 61st and 68th round unit level consumption expenditure data set. Findings reveal that the contribution of growth is prominent in poverty reduction. Evidence reveals that the only growth of combined (Rural + Urban) Kerala in the second time period (2004-05 to 2011-12) has been pro-poor because each component has contributed in poverty reduction. Otherwise, pro-poor growth has not been achieved because of unequal distribution, rising inequality and population effect. Growing inequality and pro-rich growth are largely due to capital-skill complementarity, rapid skill-biased technical change, and a slower rate of wage growth for casual labourers. Therefore, increasing the wage of casual labourers, slowing population increase and equal distribution of economic gains eventually become a necessity to promote pro-poor growth and reduce inequality. Agriculture and the rural non-agricultural sector have a critical role in poverty reduction in Bihar. To lift people out of poverty, more money must be spent on anti-poverty programmes.

Performance of the MGNREGA Scheme in Odisha: **Evidence from Performance Index Analysis**

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Social welfare schemes are useful for socio-economic development and inclusive growth in any economy. Since its implementation in 2006 in India, the MGNREGA (Mahatma Gandhi National Rural Employment Guarantee Act) scheme has been becoming an important scheme mainly in rural areas for employment generation, asset creations and other purposes. Odisha state has also been implementing this scheme. More than 80 percent of people in Odisha reside in rural areas, majority of whom are economically poor. More than 70 percent depend on agricultural activities. Odisha's labour force participation rate is slightly higher than the national level. Odisha contributes about 56.5 percent to the labour force participation rate compared to the 54.9 percent in the country. So, it is important to examine the performance of a social scheme like MGNREGA. The main objectives of the present

paper are: (i) to examine performances of the MGNREGA scheme with respect to employment generation and asset creation in Odisha, and (ii) to examine how the scheme has been contributing towards the livelihood or living standard of rural population. The present study is based on secondary data from 2014-15 to 2022-23. For the analysis of MGNREGA performances, an index known as the performance index (PI) has been constructed based on some indicators such as employment generated, financial progress, gender participation (skill and unskilled), and work completion rate. Since indicators have different units and non-comparable directly, before constructing PI, data values were normalised through the max min/min max method. This index value lies between 0 and 1, zero indicates the worse performance, and one indicates the best performance of MGNREGA. Analysis is done inter-district, across districts and for state level of Odisha. Based on the values of PI, districts were divided into four categories – best performance district (1.00 to 0.75), moderate performance district (0.74 to 0.50), low performing district (0.49 to 0.25) and very low performing district (0.24 to 0). The study found that in many economically poor and backward regions, the overall performance of MGNREGA is better than in the developed districts of Odisha. The analysis from the PI values found that people in economically poor or backward districts are participating much more in MGNREGA schemes in terms of employment generation, asset creation, and gender participation of skilled and unskilled workers. The scheme has been very important for the living standard and empowerment of large proportion of rural population because it has been providing employment and income generations, eradicating poverty, reducing distress migration, and gender equality to the vulnerable sections. In addition to gender equality in the MGNREGA scheme, there is a provision for equal wages for equal work. There is no discrimination in wages based on gender. During the COVID-19 crisis, this scheme was the only source of income for the migrant population and many rural people. Despite some limitations, this scheme is going to be an important scheme for employment generation and asset creations in rural areas of Odisha. However, the scheme requires proper implementations in every district, efficient fund transfer mechanism, and systematic monitoring

Feminisation of Vulnerable Employment: **Recent Evidence from Indian States**

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The paper is an endeavour to study the issue of feminisation of vulnerable employment across different states in India. The category of vulnerable employment is defined as sum of the following employment status — 'Own account worker' and 'Contributing family workers'. This group of workers are less likely to have formal work arrangements and therefore, more likely to lack decent working conditions, social securities, voice through effective representation by organisations like trade unions etc. It is also characterised by inadequate earnings, low productivity, difficult conditions of work undermining workers fundamental rights. World Development Indicators (WDI, 2021) show that vulnerable employment is dominant category in most developing countries. Initially using the data from WDI for last 31 years (1991-2021) our study observed that vulnerable employment status

constitutes around 70 percent of the total work force in India. The plight has been miserable for women (75%). This incidence of over representation of women in the stated category is termed as 'Feminisation of Vulnerable Employment'. Regression result indicates that 'vulnerable employment elasticity of GDP PPP (at constant prices)' in India has been negative for both genders in general and significant for women in particular. The result supports the hypothesis that feminisation of vulnerable employment is a potential threat to growth of the economy. Our study provides evidences of feminisation of vulnerable work across different states and industries of occupation in India using Periodic Labour Force Survey (PLFS) 2021-22 data. It compares the unconditional probability of being exposed to the perilous status of employment among male and female across different categories of states, caste, and religion, different levels of general and technical education and different industries respectively. It shows inter-state variation of feminisation of vulnerable employment across different General Category States (GCS), Special Category States (SCS) and UTs, respectively. The incidence of feminisation of vulnerable employment is severe among SCS. Himachal Pradesh and Nagaland are the SCSs where the situation is even worse with nearly 80 percent of the employed female concentrating in the precarious status. Among the GCS, the incidence is alarming in Chhattisgarh. Our findings indicate that Schedule tribes (ST) and Christian female workers are more prone to vulnerable employment. Among the non-farm sectors female workers in manufacturing, wholesale and retail are more likely to expose to the risk of precarious employment status. The multinomial logit estimation analysis for GCS and SCS explores the impact of individual (age, education, experience, marital status) and household characteristics (caste, religion) on the probability of women being at the risk of vulnerable employment in rural and urban area separately. Instead of examining a binary outcome analysis we consider a multinomial analysis. We considered two subcategories of vulnerable employment 'own account work' and 'unpaid family work' separately because they appear qualitatively different. Our multinomial logit estimation analysis finds that general education, formal training plays an instrumental role in reducing the vulnerability among women especially in SCS. Marital status, family size are often associated with women's confinement in unpaid family work status. One distinguishable observation is that female workers from reserved castes are now comparatively better off in employment outcome than the unreserved category in both rural and urban areas of GCS.

Impact of the MGNREGS Employment Generation Programme on Labour Out-Migration in Odisha

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The extended agrarian crisis, exacerbated by neoliberal economic policies, has caused a survival dilemma in rural regions, uprooting a class of farmers and agricultural labourers who have joined the informal economy as self-employed or wage earners. Because of the economy's structure, many of them have been unable to obtain secure, well-paying work. However, employment generation programme like Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) is play a significant role by providing wage guarantee employment opportunities in rural areas. Nonetheless, available

evidence suggests that the rural migration rate has increased. As a result, rural workers have become a component of the urban informal economy, with uncertain and precarious jobs and minimal social protection. Thus, the goal of the paper is to investigate whether an employment generation programme (e.g., MGNREGS) helps to shrink labour out-migration and rural poverty in Odisha. Additionally, it also looks at whether job creation initiatives in rural areas directly affect the living circumstances of those households. The questionnaire asked on the respondents' participation in migration and MGNREGS as well as their socioeconomic and demographic details. Inquiries include if the household looked for job in the 365 days prior to the survey date, how many days they worked in the year prior . Information was obtained about if any members of the household moved at least more than one month during the previous year, whether it was a seasonal or long-term migration. This paper is based on the primary survey in the districts of Keonjhar and Jajpur in Odisha. The stratified sampling was used for household selection on the based-on land holding landless, small, marginal and large. After that, the sample data has been collected from the sample selected households through personal interview with the help of well-structured and pre-tested questionnaires. The interview was conducted with migrants who were living in the sampled households at the time of the survey and non-migrant male workers of the households. Finally, total 400 households (with 300 migrant households) were collected. The non-migrant households formed one-third of the sample in each village. To determine how MGNREGS involvement affects a household's desire to migrate, we have applied both simple and bivariate probit regression models. This paper discovered that the MGNRES does not better performance by giving job opportunities to impoverished and socially marginalised groups. It does not regulate a significant percentage of the labour out-migration from this area that is caused by unscrupulous authorities of employment guarantee programme. It also finds the invisible factors that snatch employment from workers in employment generation programme s (i.e., MGNREGS). On the other hand, an increase in home spending is a result of migration, and this has an impact on the socioeconomic growth of the rural area as a whole rather than employment generation programmes. Apart from increasing the purchasing power of poor households, it boosts agricultural production; others spend it on health, education, and saving. This paper suggests reforming the employment generation programme according to technological transformation. In addition, it should also provide free training programmes for unskilled workers and raise the wage rate. Furthermore, it needs direct observation by the district collector or any higher authorities.

Economic Growth and Employment Pattern in Uttar Pradesh: Regional Dimension

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This paper is an attempt to analyse the pattern of employment and unemployment of Uttar Pradesh one of the most populated states and has an important political significance in India. The share of Uttar Pradesh gross domestic product (GDP) in India's GDP was 14.8 percent in 2011-12 at constant price and the share has decreased to 13.4 percent in 2020-21. In this context, the objective of this paper is to study industrial development and growth of different types of employment. Further, this paper also appraises the changes in the coverage of social security of males, females, and persons in rural and urban areas. This paper examines the trends of worker population ratio, labour force participation rate over the four Periodic Labour Force surveys (PLFS), and growth of Uttar Pradesh GDP during 2011-2021. The pattern of earnings of different types of workers during the periodic labour force survey 2017-18 to 2020-21 has been analysed thoroughly. Uttar Pradesh holds the distinction of being the most populated of all states of India and the fourth largest state of India. It has also played a very important role in India's economic, social, and political progress. At the beginning of the 1990s, Uttar Pradesh witnessed relatively sluggish advancement — in terms of economic growth, social welfare, and cultural development. The share of Uttar Pradesh's GDP in India's GDP has shown changes but finally, it shows a decline from 14.8 percent to 13.4 percent during 2011-12 to 2020-21. The labour force participation rate (LFPR) is more for rural females compared to urban females. In each category, the LFPR has shown a rise during the four PLFSs. An increasing pattern of worker population ratio (WPR) during the PLFS 2017-18 to PLFS 2020-21 has been observed in every category in each area. The share of males is greater than the share of females in the case of WPR. When considering the employment type, the male workers in urban areas have shown their interest in self-employment from regular salaried works and casual works. The majority of workers in male, female, and person of urban areas are working as a regular wage worker while the share of casual labour is quite insignificant. The rural male are engaged mostly as own-account workers compared to rural females while the majority of rural females are engaged as helpers in Household Enterprises compared to rural males. The unemployment rate of both areas has shown a decline during the 2017-18 and 2020-21 PLFS. An increase in the average monthly salary of people, male and female in both rural and urban areas has been observed. The average monthly salary of regular wage workers in urban areas is greater than the rural areas and Male salary is greater than female salary. There was a rise in the average daily earnings of people, male and female in both rural and urban areas. The average daily earning of casual labour in urban areas is greater than the rural areas and the male salary is greater than the female salary. The average monthly gross earning of self-employed persons in Current Weekly Status (CWS) of urban areas is greater than the rural areas and male salary is greater than female salary in each area.

The Interplay of Output, Employment, and COVID-19 in India: A Gendered Perspective

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Since the COVID-19 shock, there has been debate about the extent and shape of the Indian economy's recovery. On the employment generation front, such concerns are even more critical. The capacity of the economy to address poverty and inequality considerably depends on the nature and extent of recovery

in employment generation. In this context, the paper explores the trends and patterns of employment generation from 2017 to 2023 and its relation to the economy's growth. Further, the relationship between output growth and employment generation across sectors is dynamic. Such a relationship draws heavily on the structure of output growth. In other words, if output growth is happening in labourintensive commodities, it would lead to more employment generation than the same rise in the output of commodities and services with relatively higher capital intensity. Further, the structure of output growth depends on the changing nature of the demands in the economy. For instance, the growth in the agricultural sector not only affects employment generation in the agricultural sector (which is often explained through employment elasticity) but can also lead to a rise in the demand for labourintensive commodities in the manufacturing sector. Consequently, with a change in the manufacturing sector's output structure (rising share of labour-intensive production), employment generation could also be induced in the manufacturing sector. In this context, the study explores, firstly, the impact of a sector's output growth on its employment growth and, secondly, on the employment growth of other sectors through the demand-induced restructuring of output of that sector. Like the concept of cross elasticity of demand, the paper analyses the idea of cross-employment elasticity (percentage change in employment concerning one percent change in the output of other sectors of the economy) to understand the demand-led impact on employment generation. Doing so would also disentangle the impact of COVID-19 shock on the employment generation process. Additionally, the paper explores the gender dimension of such relationships across sectors during the same period. The paper analyses the unit-level data of the Periodic Labour Force Survey (PLFS) of various rounds from 2017 to 2023. The paper explores employment elasticity and cross-employment elasticity through simple regression models. Employment and cross-employment elasticity are further explored from the lens of gender difference. The paper asserts that even prior to the COVID-19 hit, the connection between economic growth and employment generation had been deteriorating. Despite efforts by the government to boost employment, the results fell short, and post-COVID-19, there has been little improvement in job growth. The employment shift from agriculture to industry stagnated, and a reversal was observed. More women working in agriculture and a significant drop in urban manufacturing jobs confirm this trend. The paper concludes that the expansion in certain sectors, such as Agriculture and Allied sectors, leads to higher employment generation in Manufacturing, Construction, Trade, Hotels, Transport and Communications, Electricity, Gas and Water and Other Services as well. In most cases, the impact of expanding agricultural output is even higher than their own employment elasticity. Similarly, the role of Other Services in enhancing employment generation in all other sectors is also essential. Regarding the employment generation of females, the role of the expansion of output in the agriculture and allied sector and other services is even more important than that of their male counterparts. In other words, not only is the employment elasticity of female workers higher in the Agriculture and Allied sectors, Electricity, Gas and Water sectors, and Other Services, but their impact on the employment generation of female workers in other sectors is also significant. Thus, demand-led expansion of employment opportunities must be given due importance in policy discussions.

Emergence of Rural Non-Farm Employment and Poverty Reduction in India: Evidence from Assam

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As developing countries are undergoing structural transformation, there is a new interest in rural areas. India has been witnessing a rural transformation as rural areas have seen a shift in employment from the farm to the non-farm sector. Rural poverty is generally seen to be a role of agriculture with farm incomes. However, recent literature has focussed on engagement in rural non-farm activities and rural livelihood diversification as an indicator of household poverty reduction or escape from poverty. The rural non-farm economy, with high-income shares and growing employment, is seen to be a pathway to rural poverty reduction. This paper is an attempt to understand if engagement in the rural non-farm sector can be a solution to poverty eradication in rural India. However, rural households are not simply farm or non-farm households. Income diversification and pluri-activity households are emerging in the rural landscape. The paper, thus, attempts to understand what level of income diversification can lead to greater poverty reduction in rural households. We use a primary survey of 329 rural households in 6 districts of Assam, one of the most backward states located in the northeastern part of India. An analysis of Assam and the North Eastern Region of India is important because of its geographic location (the Northeastern region of the country is separated by a 22 kilometres chicken neck from the rest of the country) and has a more stagnant economic growth. This region is further marked by its slow growth and isolation from the rest of the country. As distance from mainland India increases, increasing transportation costs along with a lack of infrastructure have slowed down industrialisation in the region. In addition to this, rural Assam is marked by years of conflict and insurgency. Hence, Assam's structural transformation has been slow with a slow growth of all the sectors of the economy. However, with policies like the recent Look East Policy and globalisation, Assam has witnessed a steady rural transformation. We first use the Margalef diversification index to understand household income diversification in rural Assam and do a bootstrap quantile regression to understand the determinants of livelihood diversification. We further devise a multidimensional poverty index to understand the poverty levels of the surveyed households. Our paper finds evidence of increasing livelihood diversification in rural Assam at various levels. Income from agriculture or crop production is no longer sufficient and there has been increasing venturing to alternative sources of livelihood like livestock rearing and other off-farm jobs, including seasonal or temporary migration. Household characteristics like household size, number of migrated members, sex and age of the household head, land owned, and land possessed have a positive on income diversification at all levels. Livestock possessed can also be an important determinant of income diversification. As the head of the household gains better education, the household shifts more towards off-farm jobs with lesser income diversification across all levels. Our result also suggests that a married or widowed head of the household has a negative influence on income diversification across all levels. The paper then seeks to identify the levels of livelihood diversification or non-farm employment that reduce poverty levels in rural Assam. We found that mostly farm and pluri-activity households have a positive relationship

with multidimensional poverty, while mostly non-farm and pure non-farm households have a negative relationship with multidimensional poverty. This implies that the probability of mostly farm and pluriactivity households being multidimensionally poor is higher than mostly non-farm and purely nonfarm households. We find evidence of livelihood diversification leading to poverty reduction but the extent of diversification varies across districts.

Precarious Work and Precarious Lives: The Case of Migrant Labourers of Jharkhand

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The main objective of this study is to provide the working conditions of migrant labourers of Jharkhand in the destination states. Among others, this paper tries to understand the (a) the major corridors of migration of labourers from Jharkhand (b) nature of work of the migrant workers, (c) their wages and earnings, and (d) provision of social security in the home state as well as in the destination states. This paper tries to provide a macroeconomic picture of the social and economic conditions of Jharkhand's migrant workers in the destinations states by analysing the micro data of more than 4,35000 migrant labourers native to the state of Jharkhand living and working across India. The Ministry of Rural Development, Government of Jharkhand had collected the data under the project 'Saksham' from these labourers. The data were collected by more than ten thousand women members of the selfhelp groups in all the villages of Jharkhand during July-August, 2020. The International Labour Organization's (ILO) states what constitutes 'decent work'. The ILO's concept of decent work is multidimensional models that include components such as safe working conditions, payments of living wage and social security payments to the workers. Scholars' term the 'precarious work' as the antithesis of the ILO's notion of decent work because it provides wages far below the living wages, exposes workers to unsafe working conditions, among others. This study employs the antithesis of 'decent work' to analyse the employment and working conditions of Jharkhand's migrant labourers in the destination states. Given very limited sources of employment opportunities in Jharkhand, each year a large number of workers from Jharkhand migrate seasonally in many other states of India in search of work. Most of these labourers migrated to relatively developed states of India: Delhi, Maharashtra, Tamil Nadu and Gujarat. In the destination states, these workers undertake a vast array of casual work in construction, manufacturing, services, and farm sector. Poor wages, erratic employment, hazardous work conditions and lack of essential services define the experience of migrant workers at their workplace. In the destination states, most of the migrant workers survive on the margins, that is, on construction sites, brick kilns or polluted manufacturing zones on the peripheries of cities. They have also no access to public entitlements at their place of work such as subsidised food grains, let alone housing, health care and other benefits. The study provides ample credence to the hyper-precarity of migrant labourers of Jharkhand in the destination states, despite the scores of labour laws in vogue to protect the migrant labourers from exploitation and forced work, among others. This study exhorts the government of the Jharkhand to provide means of livelihoods in the state itself so that the migrations

of labourers from Jharkhand become minimal. Given the vast resources at its disposal, Jharkhand government can easily minimise the out migration of labourers. This study also exhorts the employers and incumbent governments of the destination states to apply a humanistic perspective while dealing with the labourers of Jharkhand and other state of India.

Whether COVID-19 Destructed Economy or Directed Toward New Employment Opportunities: Evidence from Migrants' Household of Rural Bihar

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Bihar has the most prominent share in internal labour migration in India where most of the workers migrate from rural Bihar to the urban areas or other developed vicinities of Indian states and UTs in search of better occupational opportunities. But, the origination of COVID-19 and its rapid proliferation disrupted the entire economic system and compelled the government to put a lockdown and close the workplaces in the country. As workplaces closed people started to return towards their origin. After returning they were restless to search for an alternative source of earning in their locality. Even, they were also willing to work at a lower wage rate than those of the prescribed wage rate but it was too hard to get the job during that time. Therefore, people were forced to search some new businesses as per the trending demand of local people. Earlier studies related to COVID induced migration and reverse migration claim that reverse migration and unemployment are the outcomes of COVID initiated unplanned lockdown which retrenched a large number of employees from their jobs. While discussing the prevalence of employment status of the pandemic pushed reverse migrant workers a few studies argue that returnees are looking for employment in the agricultural sectors and MGNREGA in their localities. However, no studies are available on the employment or occupational status of reverse migrant workers in Bihar. So in this context, this study attempts to study the following objectives. The study aims to: 1. investigate the employment status of migrant households during the pandemic. 2. explore the new avenues of employment that emerged during the COVID and post-COVID crisis. 3. suggest policy measures to improve the working and living conditions of migrants. The study is based on the primary survey data which have been collected from 300 migrant households from 3 aspirational districts of Bihar (i.e., Naur village in Nabinagar block of Aurangabad district, Mau village in Tekari block of Gaya district, and Pharaha village in Akabarpur block of Nawada district). Then 100 migrant households were completely enumerated from each village using an appropriately structured questionnaire where 1546 observations were recoded including 667 migrant individuals. Therefore, majority of the findings of this paper will be based on the primary survey data to investigate the aforementioned objective questions like what types of work migrant is/was doing at their place of destination? If you are pre- COVID migrants then what types of work you are doing here and what were you doing at the place of destination? If you are a post- COVID migrant then what types of work you were doing at your native place and what are you doing at your destination place? If you have migrated in pre- COVID, COVID and post- COVID period, then what is your occupation?

Whether you are a government employee or private employee or a business man? It has also taken into consideration how your current occupation is different from that of a traditional one. The origination of coronavirus disease destructed the existing economic system and impelled migrant workers to return towards their birthplace. Returnees have worked in diversified fields at their destination. So after waiting for a long time, returnees are directed through their skill and knowledge to uncover the source of earnings. Thus new business activities have been started by returnees around villages and local markets which are mostly related to beauty parlours, beauty salons, cybercafés, fast-food sellers (such as Burger, Chowmein, Spring rolls, Momos, Eggroll, Omelette, etc.), sewing and tailoring centre, mobile phones and accessories selling, repairing and recharge shop, computer and xerox shop, internet services, laptop repairing shops, computer skills training centre, government exam preparation coaching, home tuition services, electrical and electronic repairing services, assemble and fabricators, etc. have been more opened in the rural areas in the recent past three years.

Employment and Skill Development in Contemporary India: Gendered Differential Perspectives and Outcomes

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Employment and Skill Development in Contemporary India: Gendered Differential Perspectives and Outcomes Amidst the discourse on reaping India's fast closing window of demographic dividend, this paper examines gender differentials in skill development in the Indian context. Existing social norms and patterns tend to influence the choice of stereotypical skills for males and females, with males generally opting for more technical roles and females often opting for care giving roles. This paper provides a gender comparative perspective on skill development across skilling streams, employment outcomes and skill premium. It is evident that females take up skilling courses of shorter duration and have limited options for self-employment after training. There is also high prevalence of female youth who end up as 'Neither in Education, Employment or Training' (NEET). The prevalent fields of training with more than 50% of females in NEET included agriculture, beauty and wellness, media and entertainment and textiles sector. It is to be noted that these are the sectors that have a large participation of female youth for vocational and technical training. This is a worrisome trend, and there is need for reengineering the skilling system to provide accessible gender responsive quality education for decent employment opportunities for all. This paper examines gender differentials in skill development in the Indian context. Existing social norms and patterns tend to influence the choice of stereotypical skills for males and females, with males generally opting for more technical roles and females often opting for care giving roles. This paper provides a gender comparative perspective on skill development across skilling streams, employment outcomes and skill premium. It is evident that females take up skilling courses of shorter duration and have limited options for self-employment after training. There is

also high prevalence of female youth who end up as Neither in Education, Employment or Training (NEET). The prevalent fields of training with more than 50% of females in NEET included agriculture, beauty and wellness, media and entertainment and textiles sector. It is to be noted that these are the sectors that have a large participation of female youth for vocational and technical training. This is a worrisome trend, and there is need for reengineering the skilling system to provide accessible gender responsive quality education for decent employment opportunities for all. The focus should thus be on employment generation along with raising productivity through skill development. Improving the quality and outreach of education as well as vocational training is paramount, especially through the gender lens by reducing differentials and skilling outcomes. There are skill and job mismatches seen across various fields of training, especially for female youth. Further, even though youth with VET should be employed in regular wage employment, youth with training in Agriculture & Food Processing, Artisan, Craftsman & Handicrafts, Beauty & Wellness and Textiles, Handlooms & Apparels are usually self-employed. Given limited employment creation, there is a significant percentage of youth across the training field that are neither in education nor in employment. Some of it may be due to lack of employability given the fact that with increased enrolment and spread of training, quality of education and training might have suffered over time. Improving access and quality of training across domains and genders is therefore of primary importance.

TECHNICAL SESSION 2.15

Beyond Growth: Social Disparities in India's Employment Landscape

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India is the sixth largest economy in the world in terms of nominal gross domestic product (GDP), and one of the fastest growing economies recording an annual growth of rate of 7.2 percent in real GDP as of 2022-23. However, despite this huge growth, not everyone is able to claim their fair share in it. India is also one of the most unequal countries and the economic inequality in India has grown sharply over the last three decades. According to a report by Oxfam India, as of 2020, the income share of the bottom 50 percent of the population was estimated at 13 percent of the national income, while their stake in the country's total wealth was less than 3 percent. Employment stands as a crucial determinant of the overall well-being of the population and their access to resources. A decrease in the employment rate sparks discussions in both macroeconomic and political arenas leading to a reevaluation of existing policies. The Indian society is stratified along the axes of caste, religion and gender. These identities have considerable influences on the access to resources and opportunities by individuals and households. A growth strategy, that treats unequal as equals, especially in a stratified society as that of India's deepens the already existing fractures and magnifies the existing differences. This paper explores the factors influencing an individual's likelihood of being employed, using unit level data from the Periodic Labour Force Survey (PLFS) 2022-23. Many studies have focussed on the gender discrimination in Indian labour markets, mostly in the context of wages and some in the context of the type of employment: regular wage or casual wage employment. This study looks at how in the broadest level, whether a person is getting job or not is influenced by the person's identity and social location: sex, caste, marital status and religion. Studies have pointed out the difference in poverty rates among religious groups within and across states. The study also makes a state wise analysis to see how employment varies across states. It looks at the nature of employment taken up: Regular Wage Employment or Causal Wage Employment by different social groups across different states. The logit estimates show that age is a significant factor in determining whether a person would be employed or not. Here, age acts as a variable closely related to experience, the two bearing a positive correlation. Age has a positive significant coefficient 0.09, indicating the with a rise in age by 1 year, the log of odds in favour of getting employed increases by 0.09. For sex, the base category is males. Hence, females and others have a significant negative coefficient of -0.41 as compared to their male counterparts in

getting employed. Religion of a person has no significant effect in determining if a person is employed in terms of principal status, hence it has been dropped from our analysis. Currently married and others (consisting of widowed, divorced/separated) have a significantly higher chance of employment as compared to the those who have never been married. The Monthly Consumption Per Capita (MPCE) in a household depends among other factors on the income and wealth of the household. Thus it is a rough estimate of the wealth or income of the household. It being positively significant implies that the household wealth has a positive effect in providing a person with gainful employment. Years of education is a having a negative significant coefficient. This is in line with the fact that as education increases the unemployment rate increases, thus, India faces a problem of educated unemployment. Among the social groups, schedule tribes (ST) is the base category, and the significant negative values indicate that other social groups are performing worse than the ST in terms of employment as a whole, but the story changes when the type of employment people from different social groups are engaged in is analysed. Policies at the state level are found to have a role in influencing the total employment.

Understanding the Cumulative Risks and Graded Health **Vulnerabilities of Construction Workers and** Earth Diggers in Delhi-NCR

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The present paper attempts to understand how various dimensions of work determine the health and well-being of informal workers in the construction sector using the framework of decent work and unacceptable forms of work proposed by the International Labour Organization (ILO). The health and well-being of labour is determined by various factors and critical among them are access to basic amenities and fundamental rights at the workplace. This is reflected in their working and living conditions and differential health status. Philosophical worldview of the paper is driven by an interpretive and social constructivist approach. A cross-sectional design with case study elements was employed to collect both the quantitative and qualitative data across the two field sites viz., site-1-a metro construction site and site-2-Bhati Mines village in Delhi-NCR. A total of 117 respondents were included in the study across the two sites (77 male and 40 female), 105-workers and 12-key respondents. Researcher-administered semi-structured questionnaire, in-depth interviews schedule, group discussions, key informants interview schedule, non-participant observation and informal and spontaneous interactions with the respondents were the tools used for data collection. The paper focusses on workers inner world through understanding their everyday lives experiences, documenting illness and injury episodes and narratives of survival, their perceptions of health and well-being and interprets their life stories through collective memory of community and life histories. The narratives documented and analysed were mainly contingent, moral and core narratives. Globalisation leading to informalisation, and casualisation is exemplified by the selection of the data collection sites particularly the metro construction site. It shows that the macro context influences both the meso and micro. The macro context is defined by the kind of industry, migrant status, employment status (regular,

contractual, casual or self-employed) gender and social group etc. Within this macro context the researcher is trying to bring the workers sense of world view, feeling of alienation, anxiety, suffering, insecurity, and uncertainty of work. In the continuum of informal work, the levels of insecurity, impoverishment, lack of access to basic needs and struggle for survival is a spectrum. By selecting the Bhati Mines village as second data collection site, we are trying to compare and contrast the continuity and discontinuity of informal labour who were employed in a global multinational company and the other set of workers working in a completely informal setting at different locations on daily basis. The paper focusses on these two different sets of workers to understand the continuum of vulnerability, insecurity, and precarious work. There are individual vulnerabilities, and then there are vulnerabilities you face as a family or as part of a community. Individuals and families lie at a particular end of the vulnerability spectrum. The study captures the complex interaction between their social position, nature of work and terms of work across two completely divergent groups. It shows while there are some continuities across the group vis. a. vis. conditions of work, wages, social welfare measures, access to health care services and health and well-being. There is tremendous variation among the workers within the informal sector. The degree of indecent work varies. The present paper analyses this variation and highlight how the nature of employment relations, type of work and place of work plays a significant role in determining risks, vulnerabilities and the health outcomes which is further mediated by the spectrum of informal work. Overall, two strands of analysis presented in the paper are the structural and experiential determinants of health and well-being. Structural determinants include, globalisation urbanisation, in-formalisation, restructuring of cities and changing forms of employment. Experiential determinants include objective and subjective dimensions of health and well-being. Besides, the study uses the concept of suffering, its expression and manifestation in various forms to understand health and well-being. The documented narratives of workers are testimony to the suffering and grief it produces. The intensity of the suffering increased across the hierarchy of the position. Invisibilization of suffering increases as we go down the ladder of the hierarchy of informal work. Juxtaposing the determinants of decent work and unacceptable forms of work with everyday lived experiences brings out the contrasts and gaps.

Growth and Employment in Gujarat: **Inter-district Analysis**

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This paper attempts to compare and analyse growth and employment pattern prevalent in Gujarat state. Inter-states growth means growth and employment among different states of India, whereas intra-state growth means inter-district growth within a state. In this paper, various glossary words are shown. Survey of literature is also mentioned in brief. We analysed district-wise number of registered working factories and average number of workers employed daily therein in private sector in Gujarat. Moreover, we highlighted the issues pertaining working factories, workers employed in

working factories and average number of workers per factories. Regarding inter-districts growth and employment in Gujarat state, it is observed from secondary data that most of the factories, workers, job opportunities are found in leading districts of Ahmedabad 8523, followed by Surat, Rajkot, Vadodara, Bharuch, Bhavnagar, Valsad, Mehsana and Morbi. We observed that in various districts of Gujarat state regarding persons employed for all broad activities by sectors are different. It is found that highest number of working factories are operating in Ahmedabad district (8523) followed by Surat (3982), Rajkot (3369), Vadodara (3148), Valsad (3031), Bharuch (2111) and Gandhinagar (1869). Regarding workers employed daily in working factories in different districts of the state, it is found that Ahmedabad district provides employment to 362873 workers, followed by Surat (337510 workers), Valsad (196083 daily earners), Rajkot (168395 workers), and Vadodara (150733workers). Regarding the average number of workers per factories, Devbhumi Dwarka provided 99.71 workers per factory followed by Gir Somnath (96.05 workers), Kachchh (82.22 workers), Surat (84.76 workers), Jamnagar (77.45 workers). We found that out of the 33 districts in Gujarat, heavy industrialisation has taken place in Ahmedabad district, followed by Surat, Rajkot, Vadodara, Valsad, and Bharuch district. It was also found that highest growth and employment creation is observed in these districts. In conclusion, rapid industrialisation growth leads to huge employment opportunities, which means that Ahmedabad, Vadodara, Surat, Rajkot, Bharuch, Valsad, Jamnagar, Mehsana, Gandhinagar and Mahisagar districts are industrial growth islands of Gujarat state. Broadly speaking, districts of Ahmedabad, Vadodara, Bhavnagar, Jamnagar, Rajkot, Surat, Bharuch, Valsad and Mehsana are top-most leading districts in these regards. Consequently, issues of over-crowded cities, over-traffic, and burden on local authorities have also emerged. These are the outcomes of out-migration from rural areas to urban areas and district head-quarters. Consequently, in migration of labourers in district headquarters has led to various socio-economic problems in Gujarat state particularly. State planners and policy makers should make concerted efforts to find out amicable solutions.

Emergence of Nonstandard forms of Employment in the Banking sector in India

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The paper aims to shed some light on the emergence of 'Nonstandard forms of employment in the Indian banking sector. The paper investigates the changing labour processes evolving in the highly regulated formal banking sector of India in the wake of globalization and neo-liberal labour flexibility regime. To meet the rapid technological change and increasing competitiveness, banks are redesigning their work for short employment tenures and outsourcing as well as sub-contracting low skill jobs to leverage the advantages of market mediated work arrangement. The study explores the nature, pattern and extends of nonstandard employment proliferating in the banking sector. The study also examines how the prevalence of nonstandard employment deteriorates the jobs quality in terms of poor benefits, lack of social security, job stability and poor retirement benefits. The paper based on the primary survey of 200 Non-standard forms of employees chosen from Public sector banks and Private

sector banks working on non-regular basis. Though the categories of employee working as security guards and MTS are huge, the survey took great care in incorporating various ranks of employees working from the Officer rank to clerical and sub-ordinal work. Segregation of employees based on the rank is important to capture how the highly regulated banks hiring employees to cut their cost in the name of efficiency. Different categories are segmented as per the ILO division of Non-standard forms of workers. The Demographic-Topology highlighted the workers segmentation. A snow-ball sampling has to be done as the employee are too skeptical to fill the questionnaire. However, the study undertake that snow-ball sampling is not a sound method, nonetheless the survey has to depend on this. Different occupations are segmented as National Occupation Classification based on the Banking sector employment category as consider by RBI. To capture the changing nature of jobs, NSSO indicators of nature of job contract, availability of social security has been used while designing the questionnaire. The survey also cover their working condition in details to study the difference between the employee working on the regular basis and non-regular basis despite having same nature or rank of job. The descriptive analysis shows how the nature of employment changes in terms of low payment, multiple jobs, long duration of work without any overtime payment, no social benefits. Though the contract of the job is written for most of them, medical benefits is given to all by providing them ESI card and a Provident Fund account get registered. However, the employee mentioned about the poor ESI hospital facility and non-payment of PF amount once they changed their job. To verify the quality of Non-standard employees, the study incorporated different parameters set for decent work for any employee. The survey shows how these workers lacked all the parameters set for a Decent Work by ILO. The changing nature of the banking system and evolution of technology propel the banking sector to adapt more technological driven banking structure and less on human resources (HR). However, in the developing countries like India quantity of job is still more important than the quality of job.

An Analysis of Stability of Employment in India

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The informal economy is growing fast not only in India but also all over the world, even in wealthy countries. However, growing informality is associated with the fluctuation of employment. Informal sectors are unregulated and unorganised and consist of low-paying jobs. The relevance of the informal economy is crucial for the Indian labour market as it is a significant contributor to employment in India. Employment in the organised sector is rising, but such growth can be attributed to growth in informal workers. In India, the proportion of informal workers has increased from 32 percent in 1999-2000 to 50.9 percent in 2004-05 and to 60.4 percent in 2011-12, out of all non-farm organised sector employment. While the growth rate of wages is positive in the case of regular and casual workers, India is experiencing a growing difference between their wages, which can contribute towards rising informality. Wages in different occupation categories increased over the year (1993-94 to 2011-12), but the differences in the increase in wages between the occupations have also increased. This high disparity

in employment and wages between the formal and informal sectors, increasing informalisation of work in the organised sectors, and high volatility in wages and employment has given rise to the 'working poor' category. These 'working poor' present a significant challenge to policymakers and point towards a need for intervention. Government policies such as Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), Pradhan Mantri Gram Sadak Yojana (PMGSY), Deendayal Antyodaya Yojana-National Rural Livelihood Mission (DAY-NRLM), and Aatmanirbhar Bharat Rojgar Yojana (ABRY) have focussed on the improvement of employment and wages. Studies have argued that, with 100 days of guaranteed work, MGNREGA may ensure decent wages and regularity in employment. A significant number of studies have focussed on employment and wage-related issues in India. While the studies analysed job security, income security and the condition of work, the question of stability in employment and wages remains unexplored. Even when a few studies have taken up the question of stability, the focus was on the average increase in employment and wages. They have implicitly assumed that an average increase in days of employment can be considered an indicator of stability. However, with increasing informality, wages and employment can be volatile even when the average days of employment or average wage increase. Hence, this study analysed the stability of employment on a weekly basis based on secondary data sources such as Periodic Labour Force Survey (PLFS). The findings indicate that the stability of employment has increased in all the given years. However, along with this increase, there is also a rise in the instability of employment and unemployment. The study found that instability among casual labourers is higher than among self-employed and regular labourers. The study found that instability in employment is higher in rural areas than urban areas, while employment stability is higher in urban areas than rural areas. Additionally, the instability was observed to be higher among males than females. Finally, among social categories, instability among scheduled caste (SC) individuals is higher than that among scheduled tribe (ST), other backward classes (OBC), and Others.

The Web of Inequality, Growth and **Employment in Gendered Context**

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As India forges ahead in its pursuit of sustained growth and development it becomes important to understand the trajectory of employment alongside it. Developmental progress and structural transformation of an economy involves examining the dynamics emerging from both growth of output as well as employment. In this article, our focus is to explore the interconnected relationship between growth, employment, and gendered barriers present in the contemporary Indian context. As the vision of growth and development of an economy transcends mere increase in value of output and focusses on a broader objective of generation of livelihood and decent living conditions, we

theoretically locate this study beyond the confined quantitative measurements that are used in the structuralist outlook of development. Therefore, the sheer volume of production remains important but its qualitative impact on different subsections of the society becomes a new core to understand. This article starts with a premise that growth is highly related to sustainable development and plays and dominant role in promoting social equity. Growth also, should ensure that economic progress benefits all spheres of a community, emphasising a more inclusive understanding of a nation's prosperity. In accordance to this view and furthering this perspective United Nations Sustainable Development Goals (UN-SDG), established some objectives to address various prevailing social, economic, and environmental challenges, aiming to create a more sustainable and equitable world. Contributing to this literature, we aim to explore a two-pronged formation of a barrier that exists for working aged women in India. These barriers are closely related to the current trajectory of growth and employment. We have used EPWRF data to understand the growth of and share in gross value added for different economic subsectors. We look into the last five years (2017-2022) as these periods also collides with the Periodic Labour Force Survey (2017-2023) data. We have utilised the latter to understand the rate of employment in each industry and proportion of formal jobs that exists in these jobs. We define formal jobs within the regular salaried jobs using job contract, paid leave, and social security as three tenets of it. Firstly, we explore and deliberate on the literature (especially during the 2000s) that had identified India's growth process as 'jobless.' Several sectors continue to display growing accounts of output but does not adhere to the visioned employment generation and the much-needed overall development. Pondering on this gives a pattern of how sectors such as manufacturing that has shown an average growth of 18 percent over the period while has generated only 11.7 percent of employment. Whereas share of employment in agriculture sector is staggering 44.2 percent when its growth over the years is 15.2 percent. We observe there is a further gendered character to it which is often unseen. Joblessness, when viewed in terms of regular/salaried jobs is much higher for women as it involves only an average of 11.9 percent and 3.4 percent of female in the manufacturing and agricultural sectors, respectively. Secondly, we further delve into the salaried jobs and explore the incidence of informality in salaried jobs across different subsectors. Here again, a second fold of discrimination is observed. Although there exists opportunity to be employed unlike other industries, but formal jobs are rare for women compared to men from the same working age, as most of the industries are male dominated and only in service sectors 94 percent women are employed. Finally, we observe, prima facie: even toppling the first and second barrier, a salaried working age women associated with highest growing and highest formal job providing sector, faces a wage discrimination. These gender disparities earnings according to Oaxaca Blinder Decomposition are most pronounced in the agriculture (0.65) followed by services (0.63), which can be driven by women's disproportionate allocation to social reproductive time reflecting limited opportunities and systemic favouritism towards men. It is in this context we aim to re-establish a theoretical framework that explain the features of gendered barriers for decent female employment in India.

Employment Structure and Occupational Dynamics in Bihar: An Evidence from Labour Force Survey, 1993-2017

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The importance of structural change in the process of economic growth and development has been identified and discussed since years. Income/output and employment are the two identified key factors in the study of structural change in the economy, where in the process of continuous economic growth a set of interrelated changes occurs in the form of the change in compositions in income share, and employability across the sectors in the process of overall growth in terms of income and productivity. Sever scholars too identified that the movement of workforce from low productive sectors to the high productive sectors are key to structural change and economic growth. Taking cognizance of the importance of the role of labour force in the development process, this paper is to understand the dynamics of the employment status in the labour market in the process of structural change and economic growth in Bihar over the periods of 1993-94 and 2017-18. Bihar is among the poorest states in India and most of the young population are still out of the labour market. However, the recent data reflects momentous change in the economic growth in the state and the prosperity of the poor households, where employment is playing a vital role. The employment status of an individual has been analysed across the industrial and occupational classifications. We have used the labour force survey data of five rounds since 1993-94. The labour force survey is conducted by National Sample Survey Organisation (NSSO) in India under the name of Employment and Unemployment Survey (EUS) till 2011-12, later the survey is carried out as Periodic Labour Force Survey (PLFS) from 2017-18. We have used four rounds of EUS i.e., NSS 50th, 55th, 61st, and 68th and the first PLFS (2017-18) in our analysis and estimated marginal effects after utilising the multinomial logistic regression for empirical estimation. The analysis shows a significant changes in the employment patters across the industrial and occupational classifications over the periods. However, the major changes in the employment structure were observed between 2004-05 and 2017-18. The workforce in the primary sector had declined by 35.53 percentage points, in which about eighty percent of the workforce declined between 2004-05 and 2017-18. The decline of the workforce share in primary sector was absorbed into secondary and tertiary sector in 57:43 ratio. A further disaggregated analysis revealed that the maximum workforce were absorbed in the construction sector followed by trade and hotel services. Interestingly, the employment share in the service sector had declined for male in the urban region in contrast to a significant rise in rural region. On the other hand, the impact of female employment can be observed as the rise in tertiary sector employment in both regions compared to the decline in primary sector employment. However, gazing over the workforce participation by occupational classification, it revealed that the decline of the workforce in primary sector was due to withdrawal of casual wage labourers in the sectors rather than the experienced ones. However, the structural change analysis suggests the movement of the workforce from low to high productive sector and, lastly, the empirical estimation suggests a significant impact of the socio-economic factors in the change in the workforce patterns

Understanding the Dynamics of Occupational Structure in Nagaland

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This paper attempts to study the trend in the occupational structure of the population in Nagaland through the course of five years, from 2017 to 2022. The trends in occupational structures are very closely related to the economic growth of a nation as an economy shifts from a subsistence state to a modernized and industrialized sector. Such a structural change in the workforce distribution is pertinent for the development of any economy. An understanding of occupational structure of a population warrants the comprehension of the composition of its working force (Rina and Godara, 2020). The proportion of workers engaged in each sector of the economy provides with a clear and definite picture of the socio-economic development of the nation. Nagaland is a state in the North-eastern region of India with Kohima as its capital. Agriculture remains one of the main sources of earning livelihood for the people of Nagaland with almost 70% of its population engaged in the agriculture and allied sector and an almost negligible number of industries and corresponding industrial activities. This paper further attempts to dissect the proportion of workers and study the occupational structure in the categories based on region and gender. Secondary data has been collected from the annual reports of the Periodic Labour Force survey (PLFS) under the NSSO for the period of 2017 to 2022, and the 2011 Census of India. The objectives of the study serve as guide to the various data selected and the data is organized and processed using suitable tables, diagrams and statistical tools to arrive at the results. An analysis on the occupational structure in Nagaland reveals that majority of the working population are engaged in the primary and tertiary sectors with 43.6 percent and 42.8 percent respectively of the total working population engaging in these two sectors in 2021-22. On the other hand, percentage share of the working population in the secondary sector is very low with only 13.6 percent of total workforce participating in the secondary sector in 2021-22. Looking at the gender -wise workforce distribution, female workers are more in the primary sector while the male workers are dominant in both the secondary as well as tertiary sectors. The trend in the past five-years from 2017 to 2022 also depicts the percentage of female workers in the primary sector to be increasing while its share in the secondary and tertiary sectors fluctuates slightly over the years. On the other hand, the percentage share of male workers in all the three sectors for the past five years shows only slight variations of increase or decrease in workforce participation across the three sectors. From the analysis, it is evident that Nagaland has great potential in improving its industrial sector, with more emphasis on research and development. With the ever increasing population, the government has a huge responsibility to shoulder in developing all sectors of the economy so as to generate more employment opportunities and thereby absorb the growing manpower, which will also curb the problem of unemployment and lead the economy towards a more developed and sustainable path of progress. Keywords: Occupational structure. Workforce. socio-economic development

Aan Inter-District Analysis on the Performance of MGNREGS IN Kerala

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Kerala received national acclaim for implementing various social security and poverty alleviation programmes. The reach of Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) is wide in Kerala as it made a revolutionary change in the informal sector by providing employment opportunities to the millions. The mobilisation of workers through self-help groups (SHGs) in Kerala resulted in the rise of women's labour force participation. The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) has been designed with a focus on creating durable assets, including drought-proofing and flood management. The programme aims to empower marginalised communities. Such initiatives can go a long way in improving the lives of people living in rural areas and ensuring sustainable development. On average, the percentage share of female workers participating in the MGNREGA convergence projects is much higher in the hills (70% in Pauri and 81% in Champawat) districts than the plain districts (22% in US Nagar and 0% in Haridwar). The paper attempts to understand the performance of MGNREGS workers in Kerala. The process of implementation and work completion may be different for districts as the work participation rate is high among hilly areas. The study analyses inter-district differences in the performance of MGNREGS for the period of 2014 to 2024 (till Dec), and it also analyses the fund availability, expenditure and percentage of utilisation. The study mainly relied on the MIS report of MGNREGS. The report provides data on aspects like number of job cards issued, total registered workers, total active workers, fund utilisation, average wage, employment demanded and availed by the household. For further information and data Economic Review and Census of India 2011 has been used. Even though Kerala is providing a home to migrant workers, the gap in the informal sector employment is filled with the developmental activities of MGNREGS. The lockdown has hit badly on the Kerala Economy and the employment sector shrunk. During these days by focussing on agricultural and allied activities jobs were provided through MGNREGS. There has been a hike in the number of job cards applied and issued during 2021-22. The people tried to make up their lives by enrolling and engaging in public works. Mahatma Gandhi National Rural Employment Guarantee Scheme is the only programme that feeds the people during hard times of COVID and post COVID. The number of registered and employed workers shows an increasing trend with the age group of 51-60 years and 61-80 years. The unemployed active old age preferred to work in MGNREGS by considering the earnings as well as the social life with the same age group. It is to be noted that there is a downward shift in the number of registered and employed workers in the age group of 31-40 years and 41-50 years. The employment demanded, offered and availed by the household for different years are taken to for the analysis. During 2014-15 to 2019-20, the employment demanded and offered by the household has shown fluctuations but by the year of 2020-21 there was a hike in both employment demanded and offered. The employment

availed by the household in 2014 was 1565107 lakh and by the year 2022 it is 1630876 lakh. It indicates the initiatives of the Kerala government on Subiksha Keralam, Sanitation campaign and Kerala Tribal plus and the convergence of public works captivated the households to choose MGNREGS as a mean of livelihood and wage earning. When we analyse the job card issued to the household among the social group it is found that from 2014-15 there was an increasing trend. A major hike was seen in the year 2020-21 for scheduled caste (SC) household i.e., it reached 440581 in 2019-20 to 514922 in 2020-21. The scheduled tribe (ST) households and other community data show increasing trend, but the variations was slight. The person-days generated will help to understand the number of SC, ST and women that are provided with employment. The lockdown and COVID restrictions pulled back them from all the public workers. Once COVID is over by the year 2021, there was an increase in the total person-days generated to all the communities.

Is Gender Inequality in Indian States Influenced by the Labour Market?

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Gender inequality adversely affects society by leading to poorer health, economic, and social outcomes. However, much of the gender inequality is sourced from gender bias in the labour market. From this perspective, the present paper assesses the impact of gender inequality in the labour market on the overall gender differences in the Indian state. Gender inequality is measured by the state-wise Gender Inequality Index (GII), Gender Development Index (GDI), and Human Development Index by sexes. On the other hand, labour market inequality is measured by the gender gap in workforce participation rate and the average wage/salary gap. We also consider several other variables such as crime against women, infant mortality rate, sex ratio, gender gap in literacy rate and having a bank account. The study uses Principal Component Analysis and the OLS regression method for the analysis. The results show that the gender gap in the labour market significantly increases overall inequality measured by GDI and GII. In addition to the incidence of crime against women, the gender gap in literacy and financial inclusion also increases. Among the states and Union Territories, Delhi and Puducherry are ranked highest and lowest, respectively, in terms of crime against women, which substantially increases gender inequality in Indian states. Finally, relevant policies are made to reduce gender inequality in the labour market for higher and sustainable economic development in India. Conclusions and policy implication: The present paper assesses the impact of labour market inequality on the gender inequality of the Indian states. The gender gap in average wage/salary and work participation rate measures labour market inequality. We also consider several control variables such as crime rate, crude birth and death

rates, gender gap in literacy rate, infant mortality rate, sex ratio, and gender gap in having a bank account. Data are sourced from different reliable government documents for the year 2011. On the other hand, gender inequality is measured by the state-level Gender Inequality Index, Gender Development Index, and Human Development Index for females. By applying the Principal Component Analysis (PCA), we found that Delhi, Assam, Telangana, Odisha, and Haryana are at the top of the list regarding the incidence of crime against women. In contrast, Puducherry, Tamil Nadu, Nagaland, Dadra and Nagar Haveli, and Jharkhand are ranked lowest. The OLS results show that labour market variables, the gender gap in average wage/salary, and the workforce participation rate negatively affect the GDI and positively affect the GII. It indicates that labour market inequality has an adverse impact on state-wise gender inequality in India. However, it does not have a statistically significant effect on the HDI for females. The crime rate has a negative effect on the GDI and HDI for females. The CBR negatively impact the GDI and HDI for females and positively impacts the GII. However, CDR has a negative effect on the GII. Similarly, IMR and the gender gap in literacy rate negatively affect GDI and HDI for females. The gender gap in having a bank account also has a negative effect on the GDI and HDI for females. However, sex ratios do not affect the state-level gender inequality in India. Based on the regression results, we propose the following policies to reduce gender inequality in Indian states: First, most importantly, labour market inequality in terms of workforce participation rate and average wage/ salary has to be reduced between males and females to achieve gender-friendly economic development in Indian states. Second, the crime rate has to be reduced substantially to achieve the same. Third, the gender gap in the literacy rate and having a bank account must also be reduced. Therefore, we need more female participation in the labour market, and to have higher wages for women, we need to increase the productivity of the female labour force by providing skills and better jobs to them. Finally, we also need to improve the health status of women and infants to reduce the infant mortality rate and for higher gender equality. Therefore, we need more women-friendly policies to achieve higher and sustainable economic development.

Assessment of Employment Generation in the Post Operation of New International Airport in Goa: A Study of Two Villages Adjoining the International Airport

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Goa is one of India's smallest state by area and population. Goa state has an area of 3702 sq. kms and a population of 14.5 lakh as per 2011 census. Panaji is the state's capital city. Goa is located in the south west India in the region known as Konkan. It is bounded by state of Maharashtra to the North and by Karnataka to the east and south, while Arabian Sea forms its western coast. Goa, is a popular tourist destination known all over the world for its beautiful beaches, temples, churches and modern culture. This led to huge foreign as well as domestic tourist in the state. The increase in tourist inflows thus created a need for expansion of existing infrastructure including road and rail network and also

for air transport. The state of Goa had one existing airport, built in 1955 by colonial rulers at Dabolim village in South Goa. Though the airport was geographically in South Goa, but it was centrally located. A huge tract of land located in the Pernem taluka at the Mopa village in the North District of Goa was chosen for the new airport. The location of both the airports in the state is shown in the map above. The proposal for new airport at Mopa gained momentum in the early 2010s when the need for second airport became apparent due to the increasing air traffic at Dabolim Airport. In 2016, the Government of Goa approved the construction of Mopa Airport, marking a significant milestone in the project's history. The decision to develop the airport in the Pernem taluka was seen as a means to generate employment and income to the local people in particular. The project, also faced opposition from some environmental groups and local communities, who raised concern regarding ecological imbalance and impact on agricultural and allied activities, The government, in response, ensured the local community from adjoining villages that the proposed project would generate employment opportunities for the local youth. The main objective of the paper is to assess the employment generation in the adjoining areas of the international airport. The is based on a household survey in the adjoining villages of Casarvarnem and Chandel. A total of 60 households were interviewed from both villages. The data collected are analysed using statistical averages or percentages. The study revealed that though employment has been generated to some local people but majority of them have got jobs on contract basis as drivers, ground staff, housekeeping and security personnel. The majority of the people employed at the airport earn up to ₹20,000 per month. The white collar jobs or managerial positions have gone mostly to people from other states. The study suggest that local bodies should come forward and discuss with airport authorities about their requirement of human resources and accordingly train the people in this regard.

TECHNICAL SESSION 2.16

Harvesting Blue Prosperity: The Growth Trajectory of India's Shrimp Aquaculture and its Socio-Economic Ripple Effects

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In the dynamic landscape of global food systems, India is charting a progressive course through its advanced shrimp aquaculture sector, a critical driver of economic growth and employment. This comprehensive study examines the intricate patterns of shrimp production and area under cultivation across various Indian states, shedding light on the sector's substantial influence on both nutritional outcomes and socio-economic development. By harnessing authoritative secondary data from leading Indian fisheries and aquaculture institutions, our analysis employed sophisticated methods like the Growth Curve Model and Pearson Correlation Coefficient. These tools were instrumental in decoding the complex interplay between shrimp Cultivation Area (AUC) and Production Estimates (EP). Our findings reveal a noteworthy moderate positive correlation (r = 0.486) between AUC and EP, suggesting that increases in cultivation areas typically correlate with heightened shrimp production. However, this trend exhibits regional variations. Intriguingly, states like West Bengal and Gujarat show a steeper decrease in EP compared to AUC, highlighting the existence of unique regional challenges and underlining the imperative for customised intervention strategies. The nutritional profile of shrimp is exceptionally rich, boasting 25 grams of protein per 100 grams, alongside an abundance of essential Omega-3 fatty acids, vital vitamins, and minerals. This positions shrimp as an indispensable component in addressing global food security challenges. Our study not only illuminates the immense potential within India's aquaculture sector but also casts light on the significant hurdles that need to be overcome. These include the urgency for adopting sustainable practices, enhancing farmer education, improving infrastructure, and integrating advanced technologies. India's diverse climatic zones and its extensive coastal expanse offer a wide array of opportunities for shrimp farming. Despite facing challenges like susceptibility to diseases, climate variability, and infrastructural deficiencies, the aquaculture sector has the potential to be a cornerstone in socio-economic development, including the creation of numerous jobs and fostering technological innovations. Aligning shrimp production strategies with health promotion initiatives, India's shrimp industry is poised to not only satisfy domestic needs but also to

establish itself as a global leader in sustainable, nutrition-focussed aquaculture. The significance of this study extends beyond the analysis of shrimp cultivation. It provides vital insights that can guide policy-making and industrial strategy, aimed at maximising shrimp production while emphasising its nutritional benefits. This approach is pivotal for stimulating socio-economic advancement through aquaculture. As India cements its position in the global aquaculture market, a comprehensive strategy that embraces sustainable production practices, addresses regional challenges, and highlights the nutritional advantages of shrimp consumption becomes crucial. This strategy ensures that India not only meets its production targets but also plays a significant role in bolstering global food and nutritional security. This research offers a nuanced understanding of the complexities and opportunities within India's shrimp aquaculture sector. It underscores the critical role of shrimp farming in the socioeconomic fabric of India, contributing to employment, technological advancement, and food security. The insights derived from this study are instrumental in paving the way for a future where India's aquaculture sector is not only a national asset but also a key contributor to the global effort in achieving sustainable and nutritious food systems.

Distribution of Land, Income and Assets in Rural Punjab: Implications for Agrarian Change

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The Indian province of Punjab has been historically regarded as a success story of Green Revolution. More recently, widespread reports of agrarian crisis and farmers' distress in Punjab have co-existed alongside accounts of dynamism and accumulation by some sections of Punjab farmers. In this context, this paper aims to understand dynamics of agrarian differentiation in Punjab by assessing the situation of agrarian livelihoods in Punjab using 59th, 70th and 77th round of Situation Assessment Survey of Farmer/Agricultural Households (SAS) and All India Debt and Investment Surveys (AIDIS) carried out in the year 2002-03, 2012-13 and 2018-19 by the National Sample Survey Organisation (NSSO). The paper does so by investigating the distribution of land, income and wealth amongst agricultural households in Punjab to unpack the emerging accumulation trajectories in the province. Punjab has been traditionally seen as one of the most prosperous and technologically advanced regions in the country. However, recent scholarly works present highly uneven situation of agrarian livelihoods in the province. While evidence from various national databases establishes that Punjab continues to be the most agriculturally prosperous province in the country in terms of the average incomes of agricultural households in the province. However, a large number of scholarly articles have drawn attention towards widespread farmer distress in Punjab since the early 2000s. In this context, this paper aims to make an intervention to unpack the impressionistic evidence from national databases that Punjab agriculture trumps the rest of the country in terms of agrarian prosperity by unravelling the ongoing processes agrarian differentiation in Punjab across last two decades. This paper aims to unfurl the tendencies towards economic differentiation amongst agrarian households in Punjab to make sense of disparate reports of agrarian distress as well as robust agrarian accumulation emerging

from Punjab in recent decades. In doing so, the paper draws attention to the role of land tenancy markets in Punjab in facilitating agrarian differentiation in the province. The paper employs three rounds of National Sample Survey's Situation Assessment of Agricultural Households conducted in 2002-03, 2012-13 and 2018-19 which provides extensive data on production, land ownership and land lease activity as well as incomes from various sources for agricultural households in Punjab. A key finding of the paper is that agricultural households in Punjab are highly differentiated in terms of their livelihood outcomes. In fact, access to income from cultivation seems to be a key differentiator across various size classes of land. Stagnant agricultural productivity, intergenerational land fragmentation and limited non-agrarian economic opportunities have increased the importance of land tenancy market as a channel for agrarian accumulation. Punjab was notably at the forefront of the historical farmers' movement witnessed in India from August 2020 to November 2021 along with farmers from Haryana and Western Uttar Pradesh. The movement was often maligned by the mainstream media as a struggle of prosperous farmers. This paper hopes to address the myth of Punjab's overarching agrarian prosperity by underscoring that Punjab farmers are far from a homogeneous entity they were made out to be in the popular discourse around the movement.

Tourism Sector Recession and Endogenous Policy Response of the Central Bank, of which Price Puzzle may be One Consequence

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In recent times, the global economy has witnessed several economic shocks, which include inter alia COVID-19, the US-China tariff war and the Russia-Ukraine war. According to United Nations World Tourism Organization (UNWTO), the pandemic crisis led to a sharp fall of 74 percent in tourist arrivals worldwide. Countries that are heavily dependent on tourism sector were severely affected which includes inter alia Sri Lanka, India, Maldives, Jamaica, Thailand, Bangladesh, Turkey, and Brazil. In the midst of new waves of economic crises, the vulnerability of the tourism sector to external shocks has pushed tourism-dominated economies into limbo. Sri Lanka recently experienced a major economic, energy, and political crisis, which is putting millions of its citizens at risk. Foreign exchange reserves dropped 70 percent in 2 years to \$1.93 billion as of March 2022. Liquidity constraints on foreign exchange have resulted in shortages of fuel, food, medicine, cooking gas, and inputs needed for economic growth. Here it is pertinent to note that the tourism sector contributes to 47.2 percent of total foreign exchange earnings in Sri Lanka. This led to the penetration of the global economic crisis into Sri Lanka's economy through the tourism sector. In India, this crisis led to an estimated job loss of 38 million in the tourism sector, which is 70 percent of the industrial sector workforce, 309,500 job losses in the tourism sector in Bangladesh and 1.45 million job losses in Thailand's tourism

sector etc. According to ILO (2021) report, Brunei Darussalam, Mongolia, Philippines, Thailand and Viet Nam recorded four times greater job loss in the tourism sector compared to the non-tourism industries during the pandemic period. International tourist arrival decreased by 56 percent in the first month of 2020 which lead to a loss of USD 320 billion, this is three times compared to losses during the 2009 global economic crisis. Against this backdrop, the objective of this paper is twofold. Firstly, we examine how an adverse global income shock impacts inflation, exchange rates, and wages in a tourism-sector-led developing economy. Secondly, we analyse how the Central Bank responds to the tourism sector-led crisis by endogenously choosing its policy instruments, of which price puzzle may be one consequence. In so doing, we construct a general equilibrium model in the presence of the non-traded tourism sector. The common colloquy about the causal relationship between inflation and credit control policy may be reversed. We argue that traditional theoretical deductions for stricter or stronger credit control by the Central Bank overlook its potential supply-side effects. Using a general equilibrium model, we obtain that in response to tight credit control policy, inflation varies quite dramatically. Interestingly, we found that the popular discourse concerning inflation and the Central Bank's credit control policy may be reversed if sectoral factor intensity and endogenous general equilibrium effects are taken into consideration. Thus, the result of our model adds to the explanation of the phenomenon most commonly known as the "price puzzle". Price puzzle, refers to a rise in the price level in response to contractionary monetary shocks. Interestingly, we found the following two counterintuitive results. Under certain sufficient conditions, if the tourism sector is credit-intensive, the Central Bank lowers the credit control instrument following an initial deflation, making the problem of deflation worse rather than improving. Accordingly, the results of our model contribute to a possible explanation for the phenomenon of the "price puzzle". In another situation, when the tourism sector is labour-intensive, Central Bank may tighten the credit control despite an initial deflation. Globally, central banks have developed a set of rules of thumb regarding how to react to inflation. Inflation management and for that matter, deflation cannot be reduced to a mechanical exercise, where the formula is written in stone.

Nomadism and Economic marginalisation: How the Modern Concept of Development Made the Life of Narikuravars More Vulnerable?

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Economics is a social science but economists won't give much research on the problems of 'fourth worlders' who have been on the tip of ancient regimes and occupied 'strange places' since the past. Throughout history, in our society there existed the fear of 'strange' about the community people who populate the concept of 'nomadism. These classes were addressed mostly either through their traditional occupational association or their peculiar lifestyle. The people from this community became placed in the 'margins of margins' and their lifestyle was characterised by vagrancy. In academic terms, these

'marginalised' constitute a distant category called subaltern and made a separate branch of academic inquiry in the early 1980s popularly known as the 'subaltern studies'. However, the bigger question as to who a citizen is and what constitutes citizenry remained in this entire conundrum of political arithmetic and chess-like moves of the actors involved in it. The nomads gypsies and vagabonds as a community of peripatetic and itinerants and as acts that define them and their characteristic way of have existed since ancient times. In reality, there are different categories of mobile populations having internal differentiations and hierarchies and yet who cling to each other due to their multiple similarities. The nomad's superior knowledge of the world acquired from extensive travels is seen to endow them with great mental resources and a potential for greater manipulation of others. Moreover. The mobile populace was resistant to proselytising missions and the Christian missionaries couldn't achieve any success, especially with the pastoral nomads. Besides they could not be taxed and always escaped the scourge of war or any natural calamity like epidemics drought and famine. Increasingly, street entertainment provided by acrobats, singers, dances, tightrope walkers and fortune telling were seen to threaten public order. Since they attracted a large crowd during their performance. With the onset of the Industrial Revolution and the idea of private property becoming redefined, the nomads as a non-sedentary group of people started being viewed as particularly dangerous having the potential to usurp established order. So in official and administrative order they were seen as parasites and seeing as threats to the general health of the nation. This paper focusses on a nomadic tribe in Tamil Nadu called Narikuravar community. They belong semi-nomadic community and they faced and still facing so many problems from society because of their peculiar lifestyle which others think is not modern. This paper also focusses on the role of these people in the development process and tries to explore the process of their marginalisation in different spheres like education, employment and access to infrastructure facilities. The Narikuravar community, a semi-nomadic tribe who were originally hunters and gatherers. They have faced and continue to face discrimination in all spheres of life, including education, employment and even in securing accommodation. Due to their unique habits and lifestyle, they are often looked down upon when they interact with Tamils or people from outside their community. For the state, they are the people who occupied strange places. The affirmative actions and the reservation policy towards scheduled caste (SC)/scheduled tribe (ST) do not trickle down to these nomadic people. In the legislature assembly and any other government machinery, their representation was very less or not.

From Dependency to Empowerment: Unravelling Caste Dynamics in the Informal Labour Market

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This study undertakes a comprehensive exploration of informality within the labour market, focusing on the disproportionate burden of vulnerability borne by the disadvantaged sections of society. Despite contributing significantly to the Indian population, this segment finds itself deprived of decent livelihoods, grappling with dependency on the privileged class for survival. The research, conducted over three months in Puri and Khordha districts of Odisha, encompasses both rural and urban perspectives, aiming to elucidate the vulnerabilities faced by the Scheduled Caste (SC) people, positioned at the lowest echelon of the social hierarchy. The study delves into their livelihood opportunities and evaluates their accessibility to state-formulated measures intended for their welfare. Drawing on individual observations, personal interviews, and focussed group discussions, the study contends that social institutions exert a substantial influence on the economic outcomes of marginalised sections. Elements such as the nature of work, type of occupation, financial status, and social standing are still significantly dictated by these institutions. The survival of the disadvantaged remains contingent on the privileged communities, who not only exercise control over the underprivileged but also wield influence over local government entities. The research highlights a tendency for local governments to favour the privileged, perpetuating existing disparities. Moreover, the study forecasts a bleak future for the offspring of the vulnerable, anticipating a trajectory towards pauperisation rather than upward mobility if current conditions persist. It sheds light on how the decision-making process regarding education for these children is influenced not only by household circumstances but also by external factors like locality, infrastructure, and the educational attainment of parents. Despite educational attainment, the marginalised continue to face obstacles in breaking free from the shackles of vulnerability. The study contends that the survival and prospects of these individuals are intricately linked to prevailing socio-economic structures, where privileged communities wield significant control. It underscores that education alone is insufficient to alter the trajectory of the marginalised, as external factors shape crucial decisions related to schooling and higher education. As the research exposes socioeconomic disparities at the grassroots level, it calls for a re-evaluation of existing policies and their implementation. The study advocates for strict and rigorous measures at the grassroots level to address the inequities and injustices faced by vulnerable sections of society. It proposes comprehensive policy reforms that consider not only economic disparities but also tackle deeply ingrained social hierarchies influencing occupational opportunities and livelihoods. In conclusion, this study makes a substantial contribution to our understanding of poverty and vulnerability, revealing persistent gaps in policy implementation. By emphasising the social, economic, and political factors perpetuating inequality, the research underscores the urgency for targeted interventions to ensure equity and justice for the vulnerable sections of society. It calls for a paradigm shift in policy formulation and implementation, urging policymakers to address the root causes of vulnerability and pave the way for a more inclusive and just society. The persistence of dependence on upper-caste individuals for livelihoods reveals the deeply rooted social hierarchies shaping economic relationships. Despite the existence of well-intentioned welfare measures, the stark reality remains that these initiatives are struggling to permeate the grassroots levels, leaving those in the most dire need on the periphery of assistance. The consequences of this systemic failure extend beyond the immediate generation, as our exploration into the fate of marginalised children in this environment suggests a precarious future for their education. As we navigate the complexities of the informal sector, it becomes increasingly apparent that transformative change is imperative. Policy interventions must be recalibrated to address the root causes of dependence and extend the reach of welfare measures to the most marginalised. Moreover, it must address the privileges of the privileged

groups that are the actual reason behind the still remained socioeconomic crisis of the vulnerable. The future of these communities, particularly the education of their children, hinges on our collective ability to break free from entrenched structures and forge a more inclusive and equitable path forward.

Female Legislators and Forest Conservation in India

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We study the causal impact of legislator gender on forest cover growth in India. Exploiting quasirandom variation in close mixed gender electoral races in a regression discontinuity framework, we find that assembly constituencies where a female politician won witnessed an increase in subsequent annual forest cover growth by 6 percent. For our analysis, we combine forest cover data for the period 2000-2014 and corresponding state assembly elections data from The Socioeconomic High-resolution Rural-Urban Geographic Platform for India (SHRUG). Our analysis shows that female politicians winning in "close" race against male politicians improve subsequent annual forest cover growth in their constituencies; but this result is only statistically significant for constituencies that are reserved for politicians belonging to the historically disadvantaged communities, the scheduled castes (SCs) and scheduled tribes (STs). There are no significant effects for the sample of all constituencies or for constituencies that are unreserved. In this regard, our results are similar in spirit to Clots-Figueras (2011), who find that beneficial impacts of electing female politicians is largely driven by such politicians who also belong to lower castes. Further, our results are also conceptually similar to Clots-Figueras (2012) who find the beneficial impacts of female politicians being concentrated in sub-samples and not for the whole sample in the analysis. We also find that our results are unlikely to be driven by constituencies that lie at either extreme of the initial distribution of forest cover or for states where forest cover data is likely to have measurement error (such as states in North-East India). We assess the credibility of our RDD through a number of robustness and falsification tests, in addition to the McCrary and covariate continuity tests that have mainly been reported in the existing literature. We find no evidence of manipulation of the margin of victory (no failure of the McCrary density test) either in the whole sample or in the sample of SC/ST reserved constituencies. Additionally, covariate continuity continues to hold in our framework. Lastly, our results are also not unusually sensitive to observations close to the cut-off (the donut hole test), the choice of the number of observations close to the cutoff that is used for estimating the RD treatment effect (sensitivity to bandwidth choice) and there are no RD treatment effects observed when placebo cut-offs instead of true cut-off in our running variable are used. These additional tests help bolster our confidence in our RD estimates. Since we do not find any significant difference between female and male winners in "close" mixed gender race in SC/ST reserved constituencies in terms of observed characteristics such as age, education or asset ownership which could independently influence investments in environmental conservation, it appears the difference in the environmental outcomes between constituencies with a female and male legislator is largely on account of their genders. Gender differences in behavioural traits such as patience or risk

aversion, greater awareness of the adverse impacts of climate change in addition to acknowledgment of greater vulnerability of disadvantaged communities to climate change could be potential mechanisms influencing our results. Our findings are also similar in spirit to Leone (2019) who demonstrate that gender composition of decision makers in collective action bodies aimed at forest conservation matter. Our results underscore the large potential role of female legislators, especially those from historically marginalised communities, in combating climate change.

A Mysterious Case of Hidden Gender Inequalities in Higher Education and Academia Despite High Economic Growth

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India has recorded strides in its economic growth and development trajectory. Even though women have made tremendous progress toward increasing their participation in higher education, they are still under-represented in several ways. India's economy is currently the fifth largest in the world, behind that of the US, China, Japan, and Germany. Its growth accelerated in the years following the reforms. But the issue of gender inequality in higher education has been of significant concern. Despite substantial improvements in enrolment rates, women encounter various obstacles that hinder their access, retention, and achievement within educational institutions. These hurdles encompass a wide array of factors such as inadequate infrastructure, incidences of gender-based violence, societal norms and stereotypes, as well as limited financial resources. The Indian higher education system has undergone massive expansion in the post-independence period to become one of the largest in the world, thanks to its economic growth. At the macro level, it may appear that women are doing better in numbers when it comes to enrolment in higher educational institutes but the harsh realty surfaces when these numbers are dissected from different lens. Furthermore, better education attainment among women should get reflected in improved employment outcomes especially in the traditionally preferred academia labour market. But this is not true in the case of India as improved gender parity index is not translated in improved gender composition of faculty. In fact, gender disparity widens as women progress from junior level faculty positions to leadership roles. Using time-series data, this paper explores evidences of existing gender disparity from a multi-faceted lens in the period of high economic growth. It delves into examining gender disparities in total enrolments, by minority groups, academic and professional courses and academic faculty etc. Using a gendered lens, the findings highlight the vicious circle of gender disparity in the academic space and how the transition of women from graduate to academic employment is weak due to existing gender stereotypes and societal norms that affect choice of subjects. The paper reveals that gender disparities in higher education when analysed through various dimensions - by level, social category, technical education, STEM etc. continue to exist prominently despite of massive economic growth in India. These are further challenged by the structural and institutional inequalities and embedded social apathy. Such inequalities can get further perpetuated in academic labour market, in turn reinforcing life-long inequalities and discrimination

that have the notorious capacity to trigger a vicious cycle of inter-generational inequalities. It's time to break the vicious circle of Gender Disparity in Indian Higher Education at various points in both covert and overt ways to not just mend the broken pipelines or plug the leaky pipelines but to build a strong foundation of gender balance and continue to take it to a high rising space of gender balance in the academic labour market. Also, if economic growth fails to address and eventually solve gendered outcomes in the education and academia, then the nation will continue to sit with huge surplus of unproductive labour.

Are Working Women Ready to Retire? **Evidence from a Thematic Review**

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With an increasing number of older women staying alone and social security being the main source of sustenance after retirement, the need for research on women's financial security post-retirement has garnered much scholarly attention in recent times. Looking through a gender lens there is an increasing need for effective preparation for women's retirement planning during one's tenure in the active labour force. It appears to be more pressing than that of their male counterparts owing to the relatively high perceived vulnerability of the former during their old age. Women's retirement is an issue that is studied in various research fields. It is a subject that is not given a definite boundary but means something different for every woman subject to her background, experiences, constraints, and opportunities in life. This article aims to chart and discuss the findings through a thematic review to discern the drivers of the decision to retire. Accordingly, the research questions that form the basis of this review are a) What are the meanings/perspectives women associate with retirement? b) What are the factors that influence the attitudes and decisions of women towards retirement? The results have been charted using Bibliometrix - an 'R' package followed by a thematic review. The relevant documents were screened based on the PRISMA guidelines and the review was conducted in accordance with the guidelines of Joanna Briggs Institute. The review has identified various coherent themes related to women's perception of retirement and those that structure the basis for their attitude towards it, influencing the timing of retirement and the decision to retire. Five predominant aspects were observed about the women's perspective on retirement: freedom, end of paid employment, resistance, to be useful, and husband's retirement. Literature has evidenced that demographic traits, minor psychiatric morbidity, and perceptions of work are associated with retirement thoughts and preferences. Women are understood to have admitted having started thinking about retirement only when they are due for shortly due for it. Moreover, women's decision to retire is influenced by other aspects of the domestic context, such as health problems, care-giving responsibilities, or long-term divisions of work between spouses. To the best of our knowledge this is the first study that has

organised the scattered literature on women's perception on the meaning of retirement and decision to retire. The dearth of such a review in the social sciences field ascribes to the originality of this review. The scope of this review is limited to research in social sciences though medical sciences steal the bulk of existing literature. Implications: The outcome of this review would be of significant interest to the public, policymakers, financial advisors, and researchers as it provides an insight into the areas that affect the financial decision for women's retirement planning, concomitantly the factors that shape the post-retirement life of women. The findings reiterate the necessity of employers to pay more attention to the orientation of women towards their retirement preparation right from the beginning of their career life. Future studies can focus on the effective measures that can be undertaken to positively influence women's ideas and attitudes towards retirement which can lead to better financial preparation for their retirement phase.

Determinants of Livelihood Diversification in Phek District, Nagaland

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The ever-increasing population has become one of the major causes of unemployment in the present world. Therefore, diversifying livelihood activities have become an important component of livelihood especially among rural households. Rural households combine multiple activities like cropping, livestock and forest production, wage work, small industry to supplement income in which they also stated that the ability for rural household to diversify depends on the availability of assets they possess and the economic shocks which they have faced. Thus, livelihood diversification is considered as the effort of individual which enables them to find numbers of ways to increase their income rather than depending in an activity alone so as to lessen exposure to livelihood shocks. Nagaland is a state with the absence of any major industry which has resulted in the dependence of the people on the government, seeking for government jobs. As a result, the need for survival and to maintain the standard of living has forced the household to expand and diversify their livelihood activities by adopting multiple jobs. Numerous factors determine the ability of a household to diversify their livelihood where extensive studies are done on factors determining livelihood diversification. However, such studies in Nagaland are limited and therefore, this study aims to examine some influential factors of livelihood diversification in Phek district of Nagaland. The data were collected from four villages randomly selected in Phek district of Nagaland where 10 percent of its population from each village were selected as the sampled households. A total of 170 households are selected as the sampled household for this study. The Simpson Diversity Index (SDI) is used to measure the extent and level of diversity where the livelihood activities were categorised into three sectors; non-farm, off-farm, and farm sectors. Activities that are non-agricultural such as trading, business, formal and public services, pensioners, rental activities, handicrafts, and artisanship are included in the non-farm sector. Off-farm sector includes and daily wage labourers both in agricultural and non-agricultural activities such as carpentry, wood works,

charcoal making, etc. Farm sector includes farming own-land, livestock, horticulture, and floriculture The value of this index ranges from 0 to 1 with 0 meaning no diversity and 1 meaning high diversity. The study investigates the determinants of livelihood diversification by using the Tobit regression model where SDI is taken as the dependent variable with age, gender, education qualification of the head of household and household size is taken as the independent variables. The study found that both non-farm and farm have a high diversity level and that maximum percent of the household does not diversify their livelihood activities. The result also shows that education have a negative significant impact on the household's decision to diversify their livelihood activities. It can be concluded that more development should be introduced in the off-farm sector for more employment opportunities and also credit facilities to be made easily accessible for younger and illiterate households for investment motives. Proper guidance and knowledge should be given to broaden the mindset of the people to adopt multiple livelihood activities so as to enhance income and improve their living conditions.

Unravelling the U-Shape: A Comprehensive Analysis of Female Labour Force Participation in India with a Special Emphasis on West Bengal

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The feminisation in U shape hypothesis was first mentioned by Sinha (1965) in his study, later on Claudia Goldin conducted a series of studies on this topic which led her to get the Nobel Prize in 2023. According to the U-shaped theory, at the beginning of the economic development when there was only the agricultural sector, the female labour force of the society was significantly high. Later on, when the countries went through the Industrial Revolution, there was a rise in the number of industries and the participation of women in the labour market started to fall gradually which follows basic labour economic theory, as there was an overall increase in productivity and family's net earnings, there was a negative income effect on the female labour force participation. In later stages of economic development, the female labour force started to rise because of rising enrolment in education, a decline in the fertility rate and a change in sociocultural attitudes Many researchers have conducted studies on U-shaped hypothesis of female labour force participation across the countries using micro and macro level data. The main aim of those papers was to check whether the feminisation of the U-shaped hypothesis is applicable to their country-based studies or not. In this context, some of the researchers conducted similar studies in India. Various studies explain the U-shaped hypothesis focussing on the relationship between economic development and female labour force participation. However, there are lack of state-specific studies in India except in Tamil Nadu. Moreover, most of the studies have not used recent data as well as not been conducted in West Bengal. Therefore, this particular study tries to address the above research gap by conducting research in West Bengal. The main objective of this paper is to examine the trends and patterns of female labour force participation in India with reference

to West Bengal. It also tries to examine whether the U-shape hypothesis applies to female labour force participation in West Bengal. Furthermore, it also tries to explore the determining factors that are responsible for the trends of female labour force participation in West Bengal, India. This study is based on secondary data which is collected from various rounds of the National Sample Survey (NSS) for the period from 1983 to 2011-12 and PLFS data from 2017-18 to 2022-23. To examine the U-shaped hypothesis of female labour force participation, this study tries to find out the relationship between economic growth and female labour force participation in West Bengal. For this estimation, this study uses Gross State Domestic Product (GSDP) data and PLFS data. Furthermore, to explore the socio-economic determining factors of female labour force participation in West Bengal, probit and IV probit regression models are used with their marginal effects. We have used only PLFS data for regression. A simple probit regression model is used to determine the socio-economic factors that affect female labour force participation in WB. These major findings of the study expect to explain that the total female (15 years and above) labour force participation (LFPR) will increase in both rural and urban areas over a period of time. Moreover, it is also expected that female labour force participation will increase over the years due to rising levels of education, employment opportunities in industry and service sector, advancement of society etc. It is also expected that socio-economic factors will affect women's participation in the labour market. As we know more than 50 percent of people in West Bengal are depended on the agriculture sector for their livelihood. However, with the increase of industrial and service sectors, it is expected that there will be a rise in female labour force participation in West Bengal. Hence, it can be expected that the U-shaped feminisation hypothesis will be applicable to female labour force participation in West Bengal.

Globalisation, Skilled-Unskilled Wage Gap and Welfare: A General Equilibrium Analysis

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Globalisation is a process of integration of the national economy into the world economy. It is the process of a policy shift from inward-looking approach to an outward-oriented approach to development. The expansion of world trade through the elimination or reduction of trade barriers, such as import taxes, is a key component of globalisation More broadly, trade improves national competitiveness by encouraging workers to concentrate on occupations in which they, as well as their country, have a competitive advantage. Greater openness can also encourage foreign investment, which can provide employment for the local people and introduce new technology, resulting in higher productivity. In recent times, effects of globalisation cannot be independent of the pandemic crisis. Globalisation not only unlocks the means for the market, it also adds wings to epidemics that spread in no time across the geographical, political and social borders and boundaries. Given this situation, the increasing use of services as inputs into all sectors of economic activity, the adverse impact on services had a significant knock on effects on the rest of the economy. Given this backdrop, we construct a three-sector general equilibrium model for a small open developing economy. We use this structure to analyse the effects of

a rise in the price of skill-intensive good, increase in endowment of unskilled labour and fall in wages of skilled labour, return to capital as well as endowment of domestic capital on the production levels, factor prices, government expenditure and level of social welfare. we consider different comparative exercises to analyse the effects of an increase in the world price of skill-intensive service, an increase in the endowment of unskilled labour, fall in the wages of skilled labour, fall in the return to foreign capital, and a fall in the endowment of domestic capital on the skilled-unskilled wage gap, income distribution and social welfare. An increase in the price of the skill-intensive commodity leads to no change in the wages of unskilled labour however it raises the return on domestic capital and the price of the non-traded agriculture sector, while negatively affecting the output of this sector. This leads to a rise in social welfare. An increase in the endowment of unskilled labour leads to an expansion of the manufacturing as well as the non-traded agricultural sector, but a contraction of the skill-intensive sector. However, there is no change in the returns to the factors of production or the commodity price. There is an increase in government expenditure as well as a rise in the welfare of the people. A fall in the wages of skilled labour causes domestic interest rate and wage of unskilled labour to rise. It leads to a contraction of the Z sector and causes an expansion of the X and Y sectors. We also obtain a fall in welfare and a rise in government expenditure. A fall in the endowment of domestic capital leads to no change in the factor or commodity prices. However, it causes the X and Z sectors to contract while the Y sector expands. There is a decrease in social welfare subject to certain conditions. We obtain that the wage gap between skilled and unskilled labour decreases when there is a fall in the wages of skilled labour. However, it remains unchanged in all the other cases. In case of social welfare, it increases if there is an increase in the world price of skill-intensive service and increases conditionally when the endowment of unskilled labour increases. In all other cases, we find a decrease in the social welfare.

TECHNICAL SESSION 2.17

Transition of Informal Enterprises and Growth of Employment: Does FDI Matter?

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Like other developing economies, Indian economy is facing challenges to provide employment opportunities for the masses. In this context Informal manufacturing sector of India plays an important role in the Indian economy by generating huge employment opportunities. In the existing literature the employability and size of Indian informal manufacturing enterprises are well examined. However the existing literature is unable to consider the gradual globalisation and its possible impact on the employability of the informal manufacturing enterprises. The globalisation created a scope of good linkage with formal and informal manufacturing enterprises through way of subcontracting. Again, the subcontracting may affect the employment of informal manufacturing enterprises. To examine this research gap the present study sets the following objectives: a) to analyse the employment elasticity of subcontracting and non-subcontracting informal manufacturing enterprises across major states/ union territories (UTs); b) to examine the determinants of growth of employment in the informal manufacturing enterprise across states/UTs. This research work is pioneering as it examines the role of subcontracting to enhance the growth of employment in the informal manufacturing sector of India. The latest four quinquennial rounds of the National Sample Survey Office (NSSO) were used to conduct the study. These rounds are namely 56th (2000-01), 62nd (2005-06), 67th (2010-11) and 73rd (2015-16) rounds of NSSO. We developed a theoretical model to show the positive linkage between the formal and informal manufacturing sectors through the subcontracting. Further, we investigated the empirical relation between the growth of subcontracting and the growth of employment of the informal manufacturing enterprises on the basis of an econometric model. It is observed that the per enterprise employment in the subcontracting informal manufacturing enterprise is higher than the nonsubcontracting informal manufacturing enterprise. We found that one third of informal manufacturing enterprises are engaged in subcontracting. Although, the informal manufacturing enterprises without hired workers are more engaged in the subcontracting. Interestingly, in the latest year we found that more than 60 percent of rural enterprises are engaged in subcontracting. The subcontracting informal

manufacturing enterprises contributed 30 percent in total informal manufacturing employment whereas in terms of gross value added (GVA) of informal manufacturing enterprises its contribution was 25.8 percent. It is observed that there are eleven states which improved their rank according to subcontracting. These states are namely West Bengal, Tamil Nadu, Andhra Pradesh, Jharkhand, Odisha, Kerala, Assam, Bihar, Uttaranchal, Haryana, and Himachal Pradesh. There are seven states where the per enterprise employment in subcontracting informal manufacturing enterprises is higher than the non-subcontracting enterprises. These states are namely Andhra Pradesh, Assam, Jammu & Kashmir, Jharkhand, Karnataka, Kerala, and Odisha. Our regression analysis confirms the Kaldor's second hypothesis in the case of informal manufacturing enterprises. Moreover, we observed a positive and significant relationship between the growth of employment and the growth of subcontracting enterprises. This means that subcontracting has a significant role on the employment generation in informal manufacturing enterprises. Thus, the government should give incentives to formal manufacturing enterprises to promote subcontracting. This may create a gainful employment opportunity for the masses. Moreover, the government can provide required training to informal manufacturing enterprises which in turn enhances subcontracting and productive employment.

Productivity Growth in High Technology Manufacturing Industries: An Analysis of Gujarat and Maharashtra

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The catalysts of economic growth on a global scale have historically been manufacturing and production activities, serving as the foundation for bolstering productivity, competitiveness and innovation. Maintaining a resilient manufacturing sector is imperative for nations aiming to sustain economic growth and create job opportunities. Within the manufacturing sector, the high-technology sector stands out as drivers of economic growth, given their elevated productivity, dynamism, and the positive externalities they generate. This paper delves into the total factor productivity growth and its components within the high-technology manufacturing sector in the states of Gujarat and Maharashtra. The study uses Sequential Malmquist productivity index to evaluate total factor productivity growth and its decomposition components. Further, an attempt is also made to investigate the factors influencing total factor productivity growth in high-technology manufacturing industries in both states. To analyse the determinants of total factor productivity growth, feasible generalised least squares (FGLS) regression has been used. The research relies on secondary data collected from the Annual Survey of Industries from 1991-92 to 2018-19 covering three-digit manufacturing industries. The findings reveal that Gujarat outpaces Maharashtra in total factor productivity growth of hightechnology manufacturing sector. The decomposition of the sequential Malmquist productivity index indicates that the enhanced productivity growth in both states is primarily attributable to a faster rate of technical progress. However, Gujarat surpasses Maharashtra in terms of technological progress. Thus, it can be concluded that enhancing productivity in the high-technology manufacturing sector

can be achieved through technological advancements, implying improvement in production techniques through more advanced technology and innovation by firms. However, both states exhibit technical inefficiencies across high-technology manufacturing industries signals a worrisome deficiency in the efficient utilisation of resources. Furthermore, scale inefficiency also persists in both states throughout the entire time period, suggesting that firms are not operating at an optimal production scale. Gujarat exhibits a higher intensity of both technical and scale inefficiency as compared to Maharashtra. The results of the feasible generalised least square regression analysis for Maharashtra indicates that both firm size and the growth rate of output are statistically significant, exerting a positive impact on total factor productivity growth. This suggests that firms should prioritise expanding their production scale to enhance productivity growth. However, the capital-labour ratio exhibits a significant but negative influence on the productivity growth of high-technology manufacturing industries in Maharashtra. This scenario may arise when an increase in machinery and technology is not accompanied by a simultaneous rise in skilled labour. In such cases, capital-intensive technologies may not be optimally utilised and negatively affect total factor productivity growth. This underscores the need for firms to focus on resource efficiency along with adoption of more advanced technology, achieved by enhancing the skills of the workforce. The regression results for Gujarat reveal that wage rate and the growth rate of output positively and significantly impact total factor productivity growth across high-technology manufacturing industries. This implies that firms in Gujarat can enhance their productivity growth by increasing its scale of production and by attracting more skilled labour through increased wage rates.

Dynamics of Rural Credit Relations: Evidence from Two Villages in Bihar

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This paper analyses the factors that determine access to credit in rural Bihar, within the context of the policy of financial inclusion. The policy of financial inclusion has been pushed for the last two decades to promote universal access to financial services, by everyone of the population, without discrimination. Access to cheap credit is crucial for income-poor and asset-poor rural households in India, particularly in Bihar, which has the lowest per capita income among all states in India. While financial inclusion has helped increase bank deposits significantly in rural areas, access to credit remains poor. As of 2018-19, the share of the eastern region in disbursal of formal credit was minimal (9 percent) compared to other regions. Non-banking financial companies (NBFC)-backed self-help groups (SHGs) and microfinance institutions (MFIs) have improved the penetration of rural credit. Still, the cost of borrowing is comparatively dearer, as they are higher than commercial banks but cheaper than informal sources. Based on a village studies dataset of the Foundation for Agrarian Studies (FAS) of 2 villages in Bihar (Samastipur and West Champaran), this paper studies factors like credit access, lending terms, loan size, and caste-credit interlinkages. The locus of analysis is access to credit and the role of caste in determining the same. It also analyses the cost of borrowing across various caste communities. This study finds that the incidence of debt highlighted by secondary data

sources is an underestimate and the demand for credit in villages is quite high. The marginalised sections still find it difficult to avail cheap credit from formal sources, because of their inability to provide physical collateral, as they are asset and income-poor. They depend on informal sources like moneylenders and landlords who charge them exorbitant rates of interest for their loans. The analysis provides insights into the dynamics of credit relations in villages and explores how the social construct of caste acts as a deterrent to credit availability and affordability. The broad research objectives of this paper are: a) to understand the magnitude of the demand for credit in rural areas and how the demand is met, considering the lack of adequate incomes in the study state; b) to analyse the distribution of credit across social groups and how symmetric (or asymmetric) the distribution is. For this study, two data sources were used to understand the penetration of credit in the state of Bihar. The Database of the Indian Economy (DBIE), a secondary dataset of the Reserve Bank of India was analysed to study variables from 1970s to 2017, covering four decades. The primary data were obtained from the Project on Agrarian Relations in India of the FAS, which has information on all factors that determine access and availability of credit. This was a household-level survey conducted in the two villages of northern Bihar. There are three major findings of this paper. Firstly, demand for credit remains high in rural areas and is catered to by informal sources in the absence of the formal sector. Secondly, scheduled caste (SC) households, which were the poorest among all caste groups, depended entirely on the informal sector for their credit requirements. Thirdly, the cost of borrowing continues to be high and even more so for SC households.

Prospects of Employment Generation through Vocational Education in Madhya Pradesh: A Case of School Education Department

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Madhya Pradesh is a welfare state in which the major part of education institutions is covered under public sector. The vocational education and training programmes enable workers for getting jobs and make capable ones to start self-employment. The vocational courses and vocational training programme can play an important role to solve the problem of job crisis in Madhya -Pradesh state. This paper is based on the current status of vocational education in school education department of Madhya Pradesh. This paper analyses number of schools, number of schools running vocational courses and number of important vocational courses which are running in schools. In this state, there are 52 districts and the number of schools running in these districts are 90164 under public sector. Under the department of school education of the state, there are Seven types of schools – 1-Primary schools 59041 (up to 5th standard), 2-Primary & Middle schools 17344 (up to 8th standard) 3-Primary, Middle & High schools 1399 (up to 10th standard), 4-Middle schools 7471 (6th to 8th standard), 5-Middle &

High schools 1219 (6 to 10th standard), 6- High schools 1881 (8th to 10th standard), and 7-Higher Secondary schools 1809 (10th to 12th standard). Only Secondary schools are running vocational education courses. Out of 1809 Higher Secondary schools, 313 Higher Secondary schools are running vocational education courses. This ratio is 17.30 percent which is very low. And the ratio with all school education institutions is 0.35 that is considerably low. This situation needed to improve by adding more vocational education courses and adding more level institutions in school education in Madhya Pradesh. In this state, there are 52 districts and the number of schools running in these districts are 90164 in Healthcare, IT/ITeS, Electrical & Electronics, Travel & Tourism, Banking & Financial Services, Retail, Travel & Tourism Healthcare, Physical Education & Sports, Beauty & Wellness, Travel & Tourism IT, Security. On the basis of findings of the study, current crisis of employment, present status of unemployment in economy, vocational education is the rays of hope in the dark. Therefore, it is warranted to redesign the strategy to expand vocational education at all standard schools. 1) More and more vocational courses should be introduced. 2) More coverage of institutes under vocational course and training programmes. 3) Extension at all level institutions under vocational education. 4) Interlinkages of institutions running vocational courses with industries. 5) State support to institutions to promote and sustain vocational courses. 6) Establishment of formal collaboration with industries and other employment authorities. It is also required to add more and more new vocational courses in Vocational Education Network according to present challenges knowledge and skill. Nearly 50 percent schools of all standard should be included under vocational education formwork in school education department of Madhya Pradesh. These are some important measures which can help in achieving the targets of Vocational education set in National Education Policy (NEP) 2020. for the purpose of capacity building in people to get jobs and as well as in starting self-employment.

Women's Financial Inclusion and Economic **Development: Evidence from India**

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Access to formal financial services (including formal financial institutions) is essential to women's economic and social empowerment. Past studies have shown that financial services positively impact women's control over resources (economic) by expanding access to such services. Yet, women globally face barriers to accessing financial services, including lack of identity proof, mobile phone, and distance to nearest bank branch. Nearly 20 percent of the women in India still lack access to a bank account. Women face many issues at home as well as in the workplace. This trend has been continuing in the 21st century in a variety of forms. Working women face more. Access to credit, that is, a formal bank account, will have a more significant impact on economic development. Economic development in terms of economic growth, reducing poverty and inequality, increasing business and entrepreneurship, rising educational outcomes and health-related outcomes, and, more importantly, access to formal credit or bank accounts (financial inclusion) will improve women's autonomy and power in the family.

It also has a more significant impact on the decision-making and bargaining power in the household. Recent studies mainly focussed on the macro levels of evidence, such as cross-countries and states. In contrast, a few studies focus on the micro level, such as individual and household levels. Some studies used micro-credit programmes to see the impact on women's economic outcomes. In this study, we use data from the National Family Health Survey (NFHS), where we have access to individual and household-level data. Further, we will add macroeconomic variables such as state-level gross domestic product (GDP), etc., to see how access to formal credit will impact women's economic development. The study uses India's most recent National Family Health Survey (NFHS-4 and 5). Further, we also use the data from the FINDEX (Financial Inclusion Database-World Bank) to explore the impact of access to credit on women's economic development. Since 2011, the Global Findex Database has been the definitive source of data on global access to financial services, from payments to savings and borrowing. The 2021 edition is based on nationally representative surveys of about 128,000 adults in 123 economies. Meanwhile, the NFHS is a large-scale, multi-round survey conducted in a representative sample of households throughout India. Three rounds of the study have been undertaken since the first survey in 1992-93. Using exogenous variation in our instrument, we show a statistically significant and higher chance of working women having bank accounts. The results indicate a greater likelihood of bank accounts for those working. Our results are robust to various sample restrictions, alternative methods of estimation, and the inclusion of additional controls. Our findings highlight the significance of emphasising women's employment status (whether employed?) and enhancing financial literacy and access to digital and mobile financial inclusion, which will have a more significant policy impact. Hence, the government and other stakeholders should improve women's access to formal banking services, especially in low-income and rural areas. Here, traditional banks and other formal financial institutions, such as insurance, pension, legal institutions, and financial markets.

Agriculture, Livelihood and Vulnerability: A Case Study of the Char Dwellers in Bankura District, West Bengal

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Based on an ethnographic study conducted between July 2022 and March 2023, this paper underscores the complexities of perceiving threats to agriculture and livelihood vulnerabilities in Mana char. Being in a semi-permanent state, chars suffer from multiple troubles from an environmental lens, they are prone to floods and riverbank erosion, and from a political standpoint, they are the sites that get the least benefits of proper governance because they lack the physical permanence in time, which can qualify them for the official category of 'land'. Regardless of the degree of marginalisation the charlands face in terms of environmental and politico-economic vulnerabilities; in a world of ever-increasing population size and an alarmingly falling trend of availability of land to scratch a livelihood from, they provide a unique platform for people to settle and build social relations on. However, such settlements

mostly emerge out of compulsion derived from the non-feasibility of accessing the mainland and not out of choice. Quite interestingly, the lives of such groups of people are also controlled by the rivers' mood. In light of the lack of land availability, it might so happen that people have had to move out of one char, mainly because of its inundation and submergence, only to re-settle on another. Given the close relationship between people and the semi-fluid base that contains them, the marginalisation of chars places the 'chouras' (people inhabiting chars) amongst the rungs of the most vulnerable group of people trying to combat uncertainties along various lines. This study is chiefly drawn from people's responses to the char dwellers, who suffer from various types of vulnerabilities and devise respective coping strategies. It gives an empirical focus on modifying the framework within which chars are usually viewed, thereby raising a question against the generic, oversimplified emphasis on the natural vulnerability of a char and its dwellers. In this paper, we examine people's perceptions of agricultural threats and their impacts on livelihood. The idea is to weave an analysis around subjective interpretations of threats to agriculture and livelihood vulnerability based on that. To validate this idea, phenomenology has been used as a conceptual framework. The data collection tools include non-participant observation, focus group discussions, and personal interviews. The major share of importance can be attributed to in-depth personal interviews amongst the three tools. To set the background of the study, narrative analysis, considering oral histories, has also been done. This study is an account of the findings as worked out of the responses of 25 people, which implies the sample size is 25. Purposive sampling has been used for the completion of the research. An approximate area of 18 kilometres has been covered along River Damodar, in the lower section of the Durgapur barrage to select the respondents. Since, this study is about the analysis of perceived agricultural threats, its linkage with livelihood vulnerability, and its solution through occupational diversification, in a char setup, thus, these people have been carefully selected in a way that the aforementioned ideas are realised. Data drawn from empirical study has been supplemented by secondary sources like journal articles, books, and bulletins.

A Causal Analysis between Innovation and Labour **Productivity Growth: Evidence from India**

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Innovation is not a recent phenomenon; it is as old as humankind. Schumpeter first defined innovation as a new product, process or method of production, market or raw material source, field of business, or financial methodology. Innovation, technology and increased research and development expenditures are the prerequisites of competitiveness and progress, further leading to sustainable economic growth. Today, developed countries spend more on invention and innovation than developing and underdeveloped countries. That's one of the main driving forces that make developed countries more progressing than the other follower countries. To become a global leader, long-term sustainable economic growth is one of the most desired goals for any country. A country can achieve this goal by increasing its output, that is, GDP (gross domestic product), which is the total output produced by a country in a given period. GDP can be increased by increasing the number of inputs used and transform it into the output production and the enhancing productivity of inputs, and productivity can be increased by innovating new products or production processes. When we say input, we consider both capital and labour. Existing literature argues that innovation increases the efficiency and productivity of capital and the labour force as well. Technological progress and innovation improve the production processes, and in this process, significant changes happen in the quality of the labour force. Developments related to various technologies, especially information and communication technology (ICT), provide opportunities for countries with a high population and labour force to excel due to an increase in efficiency and productivity of the labour force, which also helps them to have easier and faster economic growth. However, understanding this intricate relationship between innovation and labour productivity growth has become paramount in global economic development. Compared to other developed nations and a few emerging countries, India needs to catch up in innovation activities, measured by the number of intellectual property applications. The country's low aggregate expenditure on research and development (as a percentage of GDP) also reflects fewer innovation activities. However, India's technological landscape has been evolving through various policy initiatives taken by the government in recent days, which serves as an ideal context for this investigation. In this study, we test the causal relationship of innovation with India's labour productivity from 1996 to 2020 by applying Granger causality analysis based on the Vector Auto-Regression (VAR) model. This research delves into the critical nexus to provide an empirically grounded perspective on the causal relationship between innovation and labour productivity growth, with a specific focus on the context of India. The study's findings produced a positive causal relationship between innovation and labour productivity. This means innovation has a causal effect on labour productivity growth in the case of India. For policymakers, a causal understanding of the innovation-productivity relationship can inform the design and implementation of targeted policies to spur economic growth. Therefore, it is suggested that the government should play a more positive role in fostering innovation and integrating it with the development of labour quality and productivity, further increasing per capita economic growth.

Global Value Chain Participation and Employment: A Firm-level Analysis of the Indian Manufacturing Sector

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As production is getting increasingly fragmented across nations, the world is integrating into the global value chain (GVC) framework of production and trade. The whole production process is fragmented into various steps such as design, assembly, manufacturing, marketing, customer support etc. Countries can participate in GVCs either through backward participation or through forward participation. If the imports from a foreign country are reflected in the exports of the home country, it is considered backward integration. If the exports of the home country are reflected in the exports of another country, it is considered forward integration. Firms can participate in downstream activities, activities

where the distance between the activity and end consumer is less such as importing intermediaries, or in upstream activities, where distance is more such as exporting raw materials. The literature studying global value chains and their various aspects is rising, but the firm-level studies, especially for developing countries, are scant. In this paper, we have empirically explored the relationship between labour demanded by a firm (employment) and firm participation in GVCs. Rich firm-level data belonging to the Indian manufacturing sector for the period 2009 to 2020 have been used in this analysis. The data has been sourced from the Prowess database maintained by Centre for Monitoring Indian Economy (CMIE). The data from the Annual Survey of Industries (ASI), published by Ministry of Statistics and Programme Implementation, is also used to derive labour employed by the firms. While there are better measures available to measure GVC participation at the sectoral and national level because of availability of Input-Output (I-O) tables, there are few measures to identify whether a firm is participating in a GVC or not. The strictest definition of a GVC firm is one which does exporting activity, importing activity, have an international certification and have foreign shares in the capital of the firm. Due to data constraints, a GVC firm is defined as one which does both exporting and importing activity in this paper. Thus the GVC is a binary variable which takes the value 1 if the firm does both exporting and importing activities, or 0 otherwise. Based on the Hausman test, the fixedeffects model has been found out to be more suitable than random effects model and accordingly Fixed Effects model has been used to study this relationship. To deal with the Heteroskedasticity, Feasible Generalised Least Squares Method is used for analysing the relationship. The empirical results of both Fixed Effects model and Feasible Generalised Least Squares Method show that firms' participation in GVCs has a positive and significant impact on employment (labour employed by firms). The conclusion is that as more and more firms get integrated into GVCs, more employment will be generated. The major policy suggestion based on this study is that the government should remove barriers such as streamlining and liberalising the regulations pertaining to trading activities and create more incentives such as giving tax breaks and subsidies for more number of firms to participate in Global GVCs so that more employment will be generated in the Indian economy.

Dynamics of Comparative Cost Advantage and the Development Paradox

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We study the impact of trade in shaping the domestic factor market and the influence it has on an individual's decision to acquire a particular skill level using a General Equilibrium framework, and whether this allows for functional upgradation in domestic firms integrated into a global production network which allows firms to capture a larger share of gains from trade. For the theoretical framework, we consider two regions the Global North and Global South, where the developed North has a relatively higher mean skill level in the initial period. Individuals are assumed to be heterogeneous in terms of opportunity cost for higher skill acquisition. We assume that individuals cannot foresee the future skill requirement perfectly but make an estimate based on their network through which information about the current job market and the future skill requirement is transmitted. Drawing from the recent evidence

of restricted labour mobility across nations, the labour is immobile across regions which implies that the information available is of the domestic labour market. This influence on the skill acquirement determines the comparative cost advantage and the direction of trade, forming a pattern. This paper also indicates the possibility of unemployment in both developed and less developed nations due to the offshoring of a fraction of the production. We show that workers in the Global South are overskilled for their jobs, for which we find evidence in India using the Periodic Labour Force Survey for 2022 - 23, and we draw a comparison with the situation for Indian migrants to the USA where the share of over-skilled workers is very small. The theoretical formulation also suggests that the wages in the North are higher than in the South, with just the mean skill level being the difference between the two countries. The model suggests that similarly high skilled individuals in the South earn less than their counterparts in the North, highlighting that job opportunities do play a role in determining inequality and it cannot just be the difference in ability (or opportunity cost of skill acquisition) for an individual. Therefore, the missing opportunities in the Global South coupled with the wage difference for similarly skilled workers could explain a skill bias in migration, which is typically higher for the less developed nations. Through our theoretical analysis, we conclude that individuals in the south in every period have a lower mean skill level than in the North, which does not allow functional upgradation and could lead to an income trap. To empirically explore the findings of the theoretical framework, we test the hypothesis by investigating 119 countries. We form an index for skill bias in migration and use spatially lagged variables of High Technology Intensive (HTI) exports. These variables are indicators of missing job opportunities (and the extent of it) in a particular country and the spatially lagged term indicates the flow of information through imports as well as reflects upon the level of integration into the production network for technology-intensive commodities. We suggest that greater integration into the production network for HTI commodities leads to greater skill acquisition in the trading countries, which leads to greater export of HTI commodities in the subsequent periods. We use the General Method of Moments Instrumental Variable Approach (GMM2SLS) which accounts for the problem of endogeneity, and also as the OLS estimates are inconsistent and biased for models whose error terms are spatially correlated. We find that countries tend to export higher amounts of High Technology Intensive commodities in the subsequent period if (1) They import larger volumes of HTI commodities from countries that overall export a larger volume of HTI commodities and (2) Countries that have experienced a more considerable skill bias in migration, export lower volumes of HTI commodities in the subsequent period. These support the results from our theoretical model. Keywords: Development Trap, Skill Acquisition, Dynamic Comparative Cost Advantage, Multistage-Production

Impact of Hiring and Firing Laws on Total Factor Productivity: A Unit Level Analysis Using Judicial Outcome Index

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This paper delves into the intricate dynamics between hiring and firing laws, commonly referred to as employment protection legislation (EPL), and the total factor productivity (TFP) of India's formal manufacturing sector. Historically, labour market literature has portrayed stringent EPL as potentially inhibiting labour adjustments, resource allocation, and overall productivity. Firing costs associated with such regulations have been implicated in creating a bargaining power dynamic favouring incumbent workers, thereby hindering wage adjustments, even amid high unemployment rates. However, recent perspectives from empirical studies introduce a more nuanced view, suggesting that EPL can foster positive outcomes by ensuring workforce stability, thereby incentivising investments in firm-specific skill enhancement and innovation. India's labour law landscape, historically considered stringent, has witnessed recent reforms at both central and state levels. The proposed consolidation of 44 central labour laws into four labour codes at the central level, and state-level amendments in Rajasthan, aim to strike a balance by providing more flexibility to businesses. The empirical investigation presented in this paper contributes to the understanding of the relationship between hiring and firing laws and TFP in India's formal manufacturing sector. By constructing a novel quantitative indicator of EPL and employing a rigorous analysis using plant-level data, the study reveals a negative association between pro-worker strictness in EPL and TFP. This finding suggests that stringent labour regulations may adversely impact productivity levels in the formal manufacturing sector. Our results show that the coefficient on EPL is -0.03 and it is statistically significant at 1 percent level of significance. In the second regression, we include year effects also. As a result, the coefficient on EPL goes up to -0.027, but it is still significant at 5 percent level of significance. The negative coefficient on EPL indicates that pro-worker strictness in EPL is associated with a fall in total factor productivity. In the third regression, we account for control variables, including dummies for medium and large size factories. Both these dummies are positive and statistically significant at 1 percent level of significance, indicating that average total factor productivity remains higher in these types of industries. We also control for skill intensity at the factory level by taking logarithms of wages per worker as a proxy. The coefficient on the skill intensity is positive and statistically significant, suggesting that skill intensive firms have higher level of total factor productivity, keeping other things constant. This study makes a significant contribution to the existing literature by offering nuanced insights into the impact of hiring and firing laws on productivity within the specific context of India's formal manufacturing sector. It underscores the importance of a balanced approach in labour regulation that considers both worker protection and the dynamic needs of businesses to foster sustainable economic growth. As policymakers grapple with the delicate balance between labour market regulations and economic efficiency, evidence-based decisionmaking becomes crucial for shaping effective labour policies in the ever-evolving global economic landscape. The findings of this research provide valuable insights for policymakers, businesses, and researchers seeking a comprehensive understanding of the intricate relationship between labour regulations and economic productivity in India.

Classification of Workers in MSMEs in Tiruchirappalli Taluk of Tamil Nadu: A Study

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The Micro, Small and Medium Enterprises (MSMEs) play a pivotal role in the Indian economy. In recent years the micro, small and medium enterprises sector has consistently registered a higher growth rate compared with other sectors. They also help in industrialisation of rural & backward areas, thereby, reducing regional imbalances, assuring more equitable distribution of national income to wealth, reducing poverty and youth unemployment. It is the biggest employer after the agriculture sector, despite the fact that the agriculture sector's contribution to gross domestic product (GDP) is less than MSMEs. While it contributes about 45 percent to the manufacturing sector, and perhaps 40 percent to exports, it forms the highest share of the employment sector in India, contributing around 69 percent to it. Tamil Nadu accounts for the largest number of MSMEs in the country (15.07% percent). Further, it has the second largest number of medium enterprises (12.51% percent) and the third largest number of small enterprises in the county (9.97% percent). The number of registered MSMEs units has increased from 0.27 lakhs in 2007-08 to 15.73 lakhs in 2014-15, indicating more than 58.26 fold increase during the study period. The average annual growth rate is 78.72. The number of persons employed increased from 2.43 lakhs in 2007-08 to 33.26 lakhs in 2014-15, more than 13.69 fold increases during the study period. The value of output of the total MSMEs increased from ₹2,547.14 crores in 2007-08 to ₹74,662.27 crores in 2014-15, indicating more than 29.31 fold increase at current prices during the period. In 2020, the state of Tamil Nadu was divided into 38 districts. Chennai, Coimbatore, Tiruchirappalli, Dindigul, Kanchipuram, Salem, Thiruvallur, Vellore, Thoothukudi and Ariyalur are the main districts of industrial and commercial activities. In these districts, Tiruchirappalli district is one of the industrially advanced districts in Tamil Nadu. This study aims at analysing the classification of workers in MSMEs in Tiruchirappalli taluk of Tamil Nadu. The primary data have been collected from 50 MSMEs through the well-structured interview schedule. This study is completely based on the census sampling method. The study has also used secondary data collected from District Industries Centre, Inspector of Factory, District Statistical Office, published materials like Journals, News Papers, Periodicals, Books etc. The primary data collection on 50 MSME units established in Tiruchirappalli Taluk of Tiruchirappalli district, registered with the Inspector of factories in the year 2000 and earlier, and still functioning were taken for the study. The survey revealed that the entire 50 units have been set up and are managed by males. The survey study identified that most of the small scale engineering

units would adopt the activity of job work. This is directly given by BHEL Rice mills, crusher industries and saw mills would carry out processing & trading. Plastic industries, furniture industries and masala industry would follow manufacturing and trading activities and rest of the industries would follow their own pattern of activities. Through which, the performance of MSMEs would be more in the study area. Employees include all workers and persons receiving wages and holding supervisory or managerial positions engaged in administrative, store keeping, welfare activities and sales as also those engaged in purchase of raw materials etc. Initially, total number of male and female workers was 872 and 310 respectively at the inception of MSMEs. Currently, the male workers are 1432 and female workers are 236. This study shows the increment in the number of male workers (skilled) and the decrease in the number of female workers (unskilled) due to the advent of modern methods of production in MSMEs in the study area. There are 538 skilled male workers and 25 skilled female workers (much wanted) in MSMEs. Number of unskilled male workers and unskilled female workers are also wanted in MSMEs due to the continuous orders. In the beginning, the 50 MSME units totally spent around ₹20,93,000 per month on wages. Of which, engineering units alone spent around ₹12,59,000 per month on wages. Currently, the 50 MSME units spend a total of around ₹85,12,000 per month on wages. Hence, it is concluded that there is proportional increase in the employment generation with the amount spent on wages in MSMEs in Tiruchirappalli district.

Dynamics of Capital, Technology and Employment in Contemporary India: A Need for Industrial and **Employment Policy**

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India has been witnessing jobless growth, even during a period of high economic growth. With the advent of industry 4.0, it becomes imperative to have a relook at our industry from the perspective of changing technology and capital intensity. The sectors that have high-level capital efficiency should ideally be incorporating capital intensive mode of production, while sectors with low capital efficiency should be promoting a labour-intensive mode of production. Capital intensive mode of production may not be an efficient choice always. However, India has been indulging in the capital intensive mode of production, even though it is a labour surplus country. Also, there has been a skewed spread of capital across industries, which needs to be relooked in terms of employment. High capital intensive industries also at times provide for low employment elasticity. The need for an Industrial Policy for India is reiterated by the needed not just to prepare for Industry 4.0, but also to overcome jobless growth and dangers of premature de-industrialization. Thus for employment generation, it is imperative to allocate capital to such industries that generate the highest employment. We need a manufacturing policy that looks into the forward and backward inter-linkages of the economy and provides a policy

that maximizes output growth along with employment generation. Manufacturing is essential for increased productivity, better opportunities for attaining economies of scale, and most importantly to embody and further technological progress and innovations. The backward and forward linkages of manufacturing with the rest of the economy may then be expected to gradually result in positive spillover effects throughout other sectors. Productivity gains across sectors are fuelled by the spread effects of technological change. The main objectives of this paper are thus: 1. To analyse the trends and patterns of capital stock, growth, returns to capital & gross capital formation in India; 2. To estimate the incremental capital-output ratio and employment elasticity with respect to capital investment; 3. Overview of firms in India based on the technological classification of the output; and 4. Trends and Patterns of ICT Investment in India across sectors, its inter-linkages with the economy, along with international trade in ICT goods from the perspective of self-sufficiency. This analysis pertains to a long-term trend since 1990s till the pre-pandemic phase. This study set out to have an overview of the labour market for youth with a focus on skills and technology. Given the advent of Industry 4.0, the preparedness of the Indian economy and labour market to automation remains an important question. The main highlights with regard to the same are summed up as follows. The paper outline the demographic 'dividend' in India is at risk of becoming a demographic disaster if employment trends continue at the current trajectory. For instance, the share of youth not in education, training or employment (NEET) continues to remain high, though a section of youth has gradually started moving towards education. Share of youth in NEET remains high despite the declining share of youth in casual work and an increase in regular salaried work due to declining preference in agriculture and NREGA. Generation of employment also remains slow. On the industry side, this paper looks at firm-level analysis, which clearly suggests that employment elasticity is higher for service sector as compared to the manufacturing sector (overall it is highest for sectors such as plastics, electrical and paper industries, and business, transport, construction and financial services). Although ICT is a very important sector for the Indian economy, its low ICOR implies less investment is needed for more output which should ideally increase employment, but employment elasticity of the ICT sector is very low. This suggests that automation and Industry 4.0 may prove detrimental for employment generation. In addition, trading patterns of technology and capital goods suggest that by import substitution of a portion of such goods meant solely for consumption and not capital generation, labour demand can be generated to a certain extent. For Indian manufacturing to be prepared for productivity gains from Industry 4.0 as well as for labour market to be protected from the negative impact of automation, a manufacturing policy and a corresponding employment policy focussed on the provision of new skills will be imperative.

THEME 3



CARE ECONOMY AND LABOUR MARKET

KEYNOTE PAPER

Decent Jobs Generation through Investments in the Care Economy: A Policy Framework for Inclusive Labor Markets

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The academic and policy discourse on the care economy has its origins in feminist debates emerging under the first women's movement around the conventional gender division of labor, women's unpaid work and associated gender economic gaps. There has been a drastic transformation in this discourse from one where care was considered primarily as an issue of women's unpaid domestic work, a burden, limiting access to the market, to one where 'investing in the care economy' has been identified as a macroeconomic sectoral strategy for decent jobs generation, inclusive labor markets and sustainable economies. This lecture starts off with an overview of the transformation of this conceptual framework tracing the changes through evolving terminology: reproductive labor, domestic work, unpaid work, care work, caring labor, paid/unpaid care work/ers, care economy, care crisis, care economics, care society, caring economy, caring democracy, purple economy akin to a green economy. The evolution of feminist terminology and debates on care has enabled identification of its complex economic and social dimensions and contributed towards expansion of the conceptual and policy framework over time.

Against this conceptual background, the lecture will focus in on various components of the emerging care economy policy framework. First, I discuss the proposals on investing in a social care services infrastructure and recent feminist economics applied work on economic returns to such investments. Sharing findings from numerous country-level analyses, I argue that there is overwhelming evidence regarding the substantial potential returns to care investments in terms of robust jobs generation, narrowing gender gaps in employment and earnings, and poverty alleviation. Second, I discuss the complementary policy pillars to social care services expansion, using the framework of the Purple Economy. Namely labor market regulation for work-life balance and decent jobs, investing in time-saving physical infrastructure and sustainable rural economies, and care-aware macroeconomic policies.

The lecture concludes with reflections on the current political and economic landscape caught between rising conservative populism and persisting neoliberalism and implications for the dual objectives of a gender equal and caring economic order.

TECHNICAL SESSION 3.1

'We Came Here to Work': Mother's Employment and the Education of Children of Migrant Labour

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The interconnectedness of women's employment and children's access to care and education is sharply visible in the context of inter-state labour migration in India and furnishes strong grounds to argue for improvement of child care infrastructure to serve both ends. The Integrated Child Development Scheme (ICDS), the most extensive programme of pre-school education and care (Early childhood care and education, ECCE) in India, pertains to children over 3 years and below 6 years of age but operates to timings that could make it difficult for working parents to provide access to their children. In the early years of education (pre-school and the first year or two of primary school), children are too young to be sent to school on their own; they are accompanied usually to the school or to a safe mode of transportation. The assumption implicit in the timings of the AWCs and schools that there is someone to accompany a child is gendered as the responsibility for child care rests usually on the mother or another woman member of a family. Children of migrant labour families are likely to be affected severely by this assumption as their families may be more unwilling than others to forgo the employment of the mother or any other working member to accompany a child to the AWC or school. This paper seeks to analyse the responses of inter-state migrant families to a potential tradeoff between the mother's employment and children's education with material generated through field work in migrant labour clusters in two industrial manufacturing sites in Hosur (Tamil Nadu) and Perambavoor (Kerala) respectively. A significantly higher proportion of mothers in the sample was employed in Perambavoor (67.5 %) compared to Hosur (46.9 %). Where mothers were not employed they were available to take a child to the AWC or other pre-school but may also choose to provide care at home. The responses of migrant families drew attention to a notable differences between the two sites.

Considering employed mothers in Perambavoor, only a third of their children (35 %) attended preschool. The more frequent practice was for children to accompany their mothers to the work place or remain in their rented rooms under the supervision of older children. Children were able to attend pre-school in specific circumstances. One, where parents lived at the workplace which made it easy for them to put the children on a school bus and two, where parents did not live at the workplace but negotiated an arrangement with employers to take time off to ensure children's attendance at school.

In several instances, parents were hard put to pay the charges for the school bus and preferred not to send children to school. By contrast, more than half the children of employed mothers in Hosur attended pre-school or a creche and those who did not were left under the care of an adult member of the family. Private creche services worked to extended timings and mediated the clash between work timings of parents and school timings. Parents could entrust young children to these creche facilities for the staff would put them on the school bus and after school to pick them up at the designated times. Private pre-school cost Rs 18000 annually and the creche services cost Rs 1000 a month but many parents were willing to pay for these services.

Where mothers were not employed, more than half the families sent their children to pre-school in Perambayoor compared to only one third of families in Hosur. Some of the AWCs and government pre-schools were proactive in reaching out to children of migran labour which accounted for the sizeable number of children attending them. In the Hosur site, not all parents were willing to pay the cost of a private pre-school but they said that taking care of children at home was preferable to the AWC.

The paper will probe the differentiated responses of migrant families to the trade-off between mothers employment and children's early education in the light of structural constraints and contextual factors including the social profile and aspirations of labour migrants in the two sites, the dominant patterns of migration to these sites and demand side conditions. In addressing the potential trade off between mothers employment and children's early education in the context of migrant labour, the paper seeks to contribute to the extant debate on whether the low levels of women's employment in India (notwithstanding the recent increase according to the PLFS data) may be explained by supply side constraints or the lack of opportunities on the demand side. In the case of migrant labour, women's work participation rates are significantly higher than among non migrant women at the macro level as well as in the field study sites. In Perambayoor in particular, families and women chose employment over child care and in Hosur, mothers engaged in full time child care observed that they would rejoin the work force as soon as their children were old enough to be sent to school. The case of migrant labour underscores the need for child care infrastructure that at one and the same time, provide greater protection to children (than being at a workplace) and reduce the burden of family care, which falls disproportionately on women.

Uncovering Unpaid and Care Work through Time Use Surveys: Implications for Policy

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This present paper situates women's unpaid and care work within the broader discourse on women's employment. The paid and unpaid work continuum and the role of public policies in addressing unpaid and care work is one of the central arguments in the paper. The paper draws from a feminist analysis on unpaid care and also relies on feminist legal jurisprudence theories for addressing unpaid care through recognition in labour laws. The paper analyses data derived from the National Time Use Survey 2019

for uncovering estimates on unpaid and care work through unit level data. The paper engages in a discussion on employment trends of women and also tries to understand the linkage of women's paid employment with unpaid work. While understanding the time use patterns of women workers, a disaggregated analysis on time use and status in employment, education, marital status etc are explored for a more nuanced understanding on gendered effects of unpaid care work on employment. At the end, policy perspectives, particularly investments in care as a part of social protection policies to address the burden of unpaid and care work is analysed. The paper also contributes to the larger discourse on the issue of recognition of reproductive labour to be a part of employment legislations. The paper uses secondary data from the Periodic Labour Force Survey (PLFS) and the National Time Use Survey (TUS) 2019 for the 15 plus age group for kinds of analysis. It provides for policy and legislative interventions aimed at reducing unpaid and care work thereby promoting a broader vision for care policies towards achieving gender equality. This present paper situates women's unpaid and care work within the broader discourse on women's employment. The paid and unpaid work continuum and the role of public policies in addressing unpaid and care work is one of the central arguments in the paper. The paper draws from a feminist analysis on unpaid care and also relies on feminist legal jurisprudence theories for addressing unpaid care through recognition in labour laws. The paper analyses data derived from the National Time Use Survey 2019 for uncovering estimates on unpaid and care work through unit level data. The paper engages in a discussion on employment trends of women and also tries to understand the linkage of women's paid employment with unpaid work. While understanding the time use patterns of women workers, a disaggregated analysis on time use and status in employment, education, marital status etc are explored for a more nuanced understanding on gendered effects of unpaid care work on employment. At the end, policy perspectives, particularly investments in care as a part of social protection policies to address the burden of unpaid and care work is analysed. The paper also contributes to the larger discourse on the issue of recognition of reproductive labour to be a part of employment legislations. The paper uses secondary data from the Periodic Labour Force Survey (PLFS) and the National Time Use Survey (TUS) 2019 for the 15 plus age group for kinds of analysis. It provides for policy and legislative interventions aimed at reducing unpaid and care work thereby promoting a broader vision for care policies towards achieving gender equality.

Motherhood Penalty or the Burden of Patriarchy?

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The organization of care work is an essential aspect of patriarchy. However, the organization of care work has changed historically across socio-economic formations. Though women have borne the main burden of performing care work, this has often involved the family and community, whether in gatherer-hunter societies, hoe agriculture or plough agriculture. Women have performed the main work, along with husbands, older children and members of the community, such as the older generation. These arrangements combined care work (reproductive labour) with production labour. A critical question in understanding the intersection of the care economy and the labour market in

a capitalist economy is the nature of the household division of labour in the context of women's participation in the labour market:: should we call it a motherhood penalty, as Nancy Folbre (2020: 78) and Claudia Goldin, Kerr and Olivetti (2022: 1) or a burden of patriarchy (with patriarchy having other burdens)? This is important from an analytical and a policy point of view. A motherhood penalty suggests that the penalty is the result of the biological process of mothering. In this case, the policy interventions would be one of intervening in the labour market, which is exactly what Claudia Goldin suggests (2014). On the other hand, a penalty or burden of patriarchy would suggest that this is due to the patriarchal organization of care work subsequent to childbirth. In this case, the policy could also be a change in the manner in which care work around children is organized. The paper will look at the manner in which care work and the labour economy intersect and produce outcomes in both the organization of care work and positions in the labour market. Care work will be divided into three forms of organization - unpaid work, mainly by women in the family and community; privately paid labour in the market economy; and publicly provided service. The labour market will also be divided into three segments - low-paid wage labour and low-income self-employment, intermediate wage employment, and high- wage employment. These segments of the labour market also correspond to differences in the knowledge-intensity of the tasks involved. This paper sets out the framework of analysis that could then be used for a larger cross- country analysis.

Bridging Care Gaps in Selected Sectors: Policy Challenges and Solutions

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Care work is necessary for wellbeing and survival. A very large proportion of it is unpaid. It includes a wide range of tasks that are predominantly carried out by women, such as cooking, cleaning, fetching water, nurturing children, caring for the sick and the elderly in the household. The value of time, energy and resources required to perform this unpaid care work, is largely unrecognised and unaccounted for, despite its vital contribution to sustaining the overall economy and society. Paid care work includes care provided by domestic workers, doctors, nurses and staff at hospitals, clinics, nursing homes, teachers and staff in schools, workers and helpers in creches, workers in old age homes and other care establishments. The majority of the paid care workforce in education, health, social work, and domestic work sectors, consists of women. For instance, in Asia, women perform 75 percent of paid and 80 percent of unpaid care work.

It is important to note that unpaid care work is not counted while estimating Gross Domestic Product (GDP). Those providing unpaid care work are not counted as workers. However, paid care work is included in GDP and those providing it are counted as workers. This anomaly became sharper during the pandemic and ensuing lockdown, when children were home schooled and patients were

cared for at home. On average, women spend 9.8 times more time than men on unpaid domestic chores and 4.5 hours a day caring for children, elders and the sick. During the pandemic, their share of unpaid care work grew by nearly 30 per cent.

This paper draws attention to these issues. It builds on analysis conducted by the authors in earlier research as well as work on two sectors, education (including early child care and education), and health (including short term illness and patient care, long term care for older persons and persons with disabilities and chronic illness). Coverage gaps in these two sectors in India are estimated on the basis of the 'scenario analysis' approach adopted by ILO's global study. The scenarios analysed include the Status Quo 2030 (SQ30) and High Road 2030 (HR30) using SDG targets relevant for India. The paper highlights the importance of bridging unmet care needs in these sectors through substantial investments in the care economy. As Folbre notes: "undervaluation and poor measurement of unpaid care has contributed to significant gender bias in public policies and a failure to invest in publiclyprovided services that can address families' basic needs." This is precisely why substantial investments are needed in the care economy to enable recognition, reduction and redistribution of unpaid care work combined with decent remuneration for paid care work based on participatory decision making.

Gendering the Gravity Model of Migration in South Asian **Context: Evidence of Capabilities-Growth Nexus**

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The present paper examines the drivers of women's migration from South Asia and changing patterns of women's mobility that is shaped both by economic and non-economic determinants. Often the migration analysis has often looked at pattern and forms of migration and classified migrants as 'South' or 'North'. While the former is considered to be belonging to low income, poor skilled manpower, those from the latter as high income and high human capital labour. This distinction has entrenched the understanding of the larger theorisation of migration processes. While the explanation of Global North labour has been addressed in migration theories, conceptualisation of Global South migration continues to be at the nascent stage. One of the main reasons for the changing economic structures in the Global South was the comparative advantage that the Newly industrialized countries (NICs) and other late-industrialising countries sought in terms of abundance of cheap and flexible labour. Women in South Asia are more likely to be concentrated in informal and unorganised sector occupations. This sector is typified conditions of flexible specialisation, organising through sub-contracting, sweatshops, and home-based production systems where workers often do not fall under the purview of the state regulations making them vulnerable and insecure in job, work, skill reproduction and representation in the labour market. Increasing casualisation, contractualisation, rise in self-employment and home-based activities and feminisation of the labour force are visible as a structural dimension that is common across most economies. This paper focusses on "South Asian Migrant", it reflects on the complex process of how contiguous boundaries, ethnic commonalities, historical linkages have

been shaping lives and well-being of the migrants in general and women's mobility in particular. The analytical analysis provides critical perspective of the limitation of contemporary migration theories for India, Bangladesh and Nepal. The gravity model estimates for panel data (since 1990) examines determinants of migration using the Lewer and Van der Berg, (2008) the gravity equation. Evidence shows that women migrants follow similar pathways but yet are distinct in their choice of destination. The hypothesis is tested for effects of human capabilities and human capital determinants. We find that female migration and rely significantly on socio-cultural determinants and level of human development in destination. Qualitative dummy variables like the political stability and cultural affinity are extremely crucial in determining women's migration. The empirical panel data analysis highlights that the clubbing of the most developing countries with an umbrella nomenclature Global South, has created a monolithic understanding of migration process. While the aggregate understanding has contributing to distinct categories across North and South; the camouflaging of all the southern countries into a single category has oversimplified the analysis. Given the complex processes, the paper calls for South Asian dialogue on migration to reorient itself these dynamic determinants of migration for women to protect and promote their global mobility. Even more discerning is the fact that the gender analysis has narrow representations of male and female groups. Such a narrow conceptualisation has impacted data systems that have often failed to enumerate population groups due to ethnic commonalities. Thus, the regional policy on understanding female migrants also needs to relook at them away from the gaze of 'distressed, victimised, and trafficked' individuals who follow their husbands upon marriage to agents of their own, who make proactive choice of participating in labour market opportunities.

Women's Unpaid Work in Mountain Contexts: Insights from a Time-Use Survey

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Hill economies are typically characterized by greater participation of women in productive work. The agricultural activities in the Himalayan region are sustained to a large extent by a high proportion of unpaid labour force (especially women) / in the form of family labour or tenant labour. As the mountain's economic formations are being transformed radically over the past decades, the economy is also being gradually commercialized (Mishra and Upadhyay, 2017; Harriss-White et al., 2009; 2022). Consequently, what has changed is not just the traditional gender division of labour; but also, the social valuation of women's work. The working patterns of rural women in the hills of the Indian Himalayan region are influenced by many factors. The mountainous terrain and the migration of male household members to urban centres in search for gainful employment creates a difficult work situation for the women in the households (Mishra 2007; 2018; Upadhyay 2017; 2020). Although most women are engaged in work and contribute to the economy in one form or another, much of their work is not documented in official statistics. The contribution of women towards the households' food and energy security is immense, but there has been no measure as to how much they contribute towards it. Women's contribution in the form of both 'visible' and 'invisible' work can best be captured by

investigating the time-use pattern of women's activities (Hirway, 2009, 2015). Hence, the study of women's unpaid labour through the time-use survey in the context of hill economies is crucial because most of these economies are only partially market economies. Non-market transactions are still very significant (Harriss-White et al., 2009; 2022). The work that women do is often overlapping across sectors and activities. Women who work in agriculture, for example, also work in raising livestock, weaving, food processing, petty trading and most important even as care givers. In the mountain economies the time use survey (TSU) has an added significance, given the relative importance of subsistence production and low levels of commercialization of the economy (Upadhyay, 2014; 2015; 2020). The underestimation of women's work is far more severe in the hilly regions. To investigate the gendered division of labour (in SNA, extended SNA and Non-SNA work), field survey was conducted across the twelve states in the Indian Himalayan Region (IHR), namely, Assam, Arunachal Pradesh, Meghalaya, Manipur, Tripura, Nagaland, Sikkim, Uttarakhand, Himachal Pradesh, Kashmir, Jammu and Ladakh. A total of 15,399 sample households were surveyed across 99 blocks in 150 districts in the Indian Himalayan Region (IHR). The paper deals with the time utilization pattern of women in the Indian Himalayan region (IHR), focusing on the gender distribution of labour, crucial to the reality of women spending a considerable amount of their time in SNA and ESNA related activities, thereby contributing to the food and energy security needs of the households and as care givers, which is mostly unpaid in nature. An attempt has been made to study the involvement of the female workforce in both paid and unpaid activities, along with an assessment of the economic contribution from their engagements in the IHR. The time-use pattern of women in the IHR provides details of the process of economic transformation currently underway and the changes in the sectoral composition of output and the occupational structure. It has highlighted the absence of gender-neutral transformation processes resulting in women having to shoulder a dual burden — both domestic responsibilities and also the burden of those tasks and activities traditionally performed by men. It was found that for the IHR as a whole, female participation in SNA primary activities was relatively high in crop farming, followed by animal husbandry and animal care. As far as female participation in SNA secondary activities was concerned, it was found that a small percentage of them participated in trade and business, and in manufacturing activities at the household level. Female participation was highest for SNA primary activities compared to SNA secondary and tertiary activities. The gendered participation rate in the IHR is highly skewed towards women. Even in the case of secondary and tertiary activities, the female participation rate was much higher than that of males in the IHR. Further, the time contributed by women in the Himalayan region under the extended SNA activities in a day was found to be very high. On an average, they spent around 13 hours a day in various ESNA activities. At a disaggregate level, it was observed that the time women spent on household chores and as caregivers at home in a day was as high as 9 hours and another 4 hours was spent collecting water, wood, fruits and vegetables in the IHR. Thus, we observe that the economies in the Himalayan region are typically characterised by greater participation of women in productive work, so much so that 'Boserup' very aptly categorized the 'shifting cultivation system' as the 'female farming system' (Boserup, 1970). The analysis of both paid and unpaid activities, reflects that, women contribute immensely to the economy of the Himalayan region, which largely remains unrecognized and invisible.

TECHNICAL SESSION 3.2

Women and Time Poverty: Examining Uncompensated Care Responsibilities in Urban India

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Time poverty, which is the term for the lack of time available to meet personal and family demands due to several responsibilities and commitments, is one of the specific issues that women frequently confront. Women often have two distinct household responsibilities: primary care givers and contributors to the formal workforce. However, a crucial research gap exists in thoroughly investigating the causes and effects of time poverty from this dual burden. This article critically investigates the widespread problem of time poverty women face in urban India. Rapid urbanisation has intensified time pressures as individuals, particularly women, juggle work, commute, and honour family responsibilities. Understanding time poverty in urban India is especially crucial for urban women. The disproportionate burden of domestic responsibilities and societal expectations often leaves urban women time-poor, limiting their personal and professional growth opportunities. Recognising and addressing these gender-specific time constraints is essential for achieving gender equality and empowering women in urban areas. This paper examines how their participation in paid jobs and the demanding duties of unpaid care work interact in detail. The study recognises the variety among urban Indian women by using an intersectional lens. and considering the impact of variables, including socioeconomic position, education, and geographical differences in the urban environment. By taking this track, the research aims to transcend broad generalisations and emphasise the disparate effects of time poverty on diverse groups, promoting a more inclusive comprehension of the problem. The study also identifies potential avenues for intervention, drawing attention to the need for policy measures that recognise and address the systemic barriers contributing to time poverty. Using the Time Use Survey (TUS) data of 2019, the most comprehensive and nationally representative data, the study aims to identify potential avenues for intervention, drawing attention to the need for policy measures that recognise and address the systemic barriers contributing to time poverty. By building

on the conceptual framework proposed by Folbre (2001), the research will attempt to advocate for a re-evaluation of the value assigned to care work and policy recommendations that promote a more equitable distribution of caregiving responsibilities. In order to establish statistical causality between women's time allocation, job patterns, and numerous socioeconomic characteristics, this study uses econometric modelling. The econometric approach provides a quantitative perspective to enhance qualitative insights by facilitating the identification of critical factors impacting time poverty among urban Indian women. The quantitative analysis involves a representative sample of urban women across different demographic strata. It focusses on their daily time allocation, employment patterns, and the distribution of care responsibilities derived from the NSSO's TUS data published in 2019. The research attempts to provide a more nuanced understanding of the causal linkages between factors and provide evidence-based policy suggestions for reducing time poverty and improving gender parity in urban India by utilizing advanced statistical techniques.

How do Gender Roles Influence Work, Learning and Leisure Time Allocation for the Indian Adolescents?

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Recent studies in economic development talk about the disproportionately high burden of unpaid work on adult women. However, gender segregation of paid and unpaid work usually starts in early adolescence. By the time the girls enter late adolescence, the burden of unpaid work is substantial and sometimes even offsets the time available for studying. This lower investment in human capital, along with the traditional gender norms, limits the occupational choices for these girls and ensures the continuation of the gender-specific division of work. The study is based on two strands of literature: (1) theoretical and empirical models showing the effect of societal gender norms on time allocation by women and the intergenerational transfer of such norms, and (2) fertility choice models that view children as investment goods since they can provide old age security to the parents. For this purpose, we use the Indian Time Use Survey (ITUS) conducted by the National Sample Survey Organisation (NSSO) in 2019. The survey categorises all the daily activities by household member (6 years and above) into nine major groups and various subgroups as per the International Classification of Activities for Time Use Statistics (ICATUS) 2016. Given the objective of the present study, we combine the major groups into six broader activity groups as follows: (1) paid work, (2) unpaid work comprising of unpaid domestic and care work, (3) own production, (4) learning, (5) leisure comprising of socializing, cultural, leisure and sports activities; and (6) other comprising of volunteer work and self-care activities. The present study focusses on adolescents in the age group of 15-19 years. Using this dataset, we first estimate a system of equations for the timeshare of different activities using the seemingly unrelated regression (SUR) model. The observed difference in time allocations between genders might be due to: (1) the endowment effect, and (2) the gender norms. In order to understand the contribution of each of these factors, we use the Oaxaca-Blinder decomposition method. The

findings suggest substantial variation in time allocation across genders. When it comes to unpaid work, there is a striking difference between the time spent by girls and the time spent by boys. Around 75 percent of the girls spend some positive time in unpaid domestic and care activities. Meanwhile, the boys spending some time on unpaid work are the outliers. This additional time spent on unpaid work by the girls comes as a cost in terms of less time available for learning and leisure. These results are also confirmed by the Seemingly Unrelated Regression model. We further carry out the decomposition analysis to understand the contribution of gender norms towards the difference between time allocations. We find that more than 80 percent of the total gender gap in the time allocated towards unpaid work and leisure is due to gender norms. At the same time, in the case of learning, this proportion is considerably lower at around 35 percent. The findings of this study point towards the persistence of gender segregation of paid and unpaid work for the years to come. Policies aiming at the continuation of girls' education beyond the school level and an increase in the age of marriage are some of the factors that are likely to break this chain.

Unseen Contributions of Care Economy: A Feminist Perspective

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Examining the economic empowerment of women cannot be all-encompassing if it solely revolves around women's engagement in the workforce, neglecting a broader understanding of economic empowerment. A holistic perspective on women's economic empowerment encompasses both their participation in the market economy, such as the labour market, and their pivotal roles in the household economy, where they undertake the responsibilities of sustaining and nurturing the market economy. Uncompensated labour plays a crucial role in individual well-being, household functioning, and the overall economy. Despite its significance, traditional economic theories have not acknowledged "unpaid work" as a component of the mainstream economy because it falls outside the realms of a market commodity or recognised economic benefit. Classical and neoclassical economics, in particular, have viewed unpaid labour as beyond the production boundary, as it lacks the characteristics of a market commodity or economic gain. Even Kuznets (1948) excluded unpaid labour from national income accounting, categorizing it as part of "housewives' production" rather than an economic activity. However, feminist perspectives in the late 1960s started scrutinizing women's domestic labour, emphasising that unpaid work disproportionately places a time burden on women. Unpaid domestic work, foundational to households globally, disproportionately falls on women's shoulders. Despite its pivotal role in maintaining societal structures, this labour remains largely invisible and undervalued. Using empirical data and secondary literature, this research paper magnitude of women engaged in domestic unpaid activities. Purposive sampling was used for

selecting a heterogeneous population and census method was used for identifying the respondents. Interview Schedule was used for collecting data from all 312 women and some typical cases were also selected for case study. This study is conducted in district Srinagar, of the Union Territory (UT) of Jammu & Kashmir (India). We have tried to compute the monetary value of unpaid household activities including care activities done by the women. We explored the factors affecting women work status as an unpaid domestic worker. The study aims to illuminate the challenges faced by women engaged in unpaid domestic work and suggest strategies for acknowledging and redistributing the burden more equitably. The findings of this study reveal that the intensity to be engaged in domestic work is high among women who are less educated and belong to the lower wealth quintile in society. The proportion of unpaid domestic work undertaken by women in India is high and steadily increasing, encompassing responsibilities such as caring for household members. We find that women's engagement in paid work has seen a decline of 11.1 percent, while the scale of unpaid domestic work has risen by 12.2 percent. We observe that juggling household duties, caregiving, and family management exact a toll, both physically and emotionally. The continual demand for multitasking, coupled with a dearth of time for self-care, contributes to mental exhaustion. Our interaction with the respondents reveals that numerous homemakers grapple with financial dependence, leading to sensations of helplessness and frustration. By shedding light on the nuances of unpaid domestic work, this research seeks to contribute to a more comprehensive understanding of gender dynamics, work valuation, and societal structures.

Women's Time Use between Paid and Unpaid Work, Growth, and Development in India

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Women spend a disproportionate amount of their time on care work in India. The first all-India Time Use Survey (TUS) was released in 2019. A few studies have examined the time spent and the socio-economic determinants of unpaid and care work in India. In this paper, we study the tradeoff between economic activities and care work for women across education levels and sectors using TUS 2019. In this paper, as we are interested in the relation between paid market work and unpaid household work, we group the unpaid non-SNA (System of National Accounts) work that lie in the extended production boundary and call them for simplicity, unpaid work. As explained above, this includes both the unpaid household subsistence work for own use, such as crop cultivation, animal husbandry, forestry, and fishery, collection of necessities, like water and fuel wood from common or private lands and time spent on household upkeep and unpaid household care work, such as cleaning, cooking, maintenance, care for children, sick, disabled and volunteer work. In the Indian context, particularly among rural own-account women, these two categories are merged seamlessly and interact in a simultaneous manner although capturing the nonlinear substitution between these two activities

remains a challenge. Women spend in the unpaid work of daily household upkeep activities such as cooking, washing, cleaning, shopping for own household, etc.), care work (e.g., care of children, the old, the sick, disabled and others that need care), and unpaid voluntary services for the family and in the community lie between 35-50 percent of their total time. Since the release of TUS 2019 data, there has been attention to the disproportionate burden of unpaid work on women in literature. Many factors have been cited to explain the unequal burden of unpaid work borne by women. Some of them are unexplained gender-based social norms, changes in kinship roles, and variations in states regarding utilisation of basic infrastructure and social norms. To further understand this argument, we were curious to know if women's disproportionate share of time on unpaid work was reduced with higher education levels, being employed or with development. The first set of regressions estimates the trade-off between participants in self-employment and wage employment across levels of education and sectors. We find that the time burden is highest for a rural woman participating in self-employment with primary and middle levels of education. The fuzziness in the boundaries of self-employment and unpaid work may be causing time burden for less educated women participating in self-employment in the rural sector. Women with primary and middle levels of education engage in family farm work and livestock within the homestead. The nature of crop and livestock activities may result in double burden (spending time on self-employment and unpaid work) for women. Firstly, participation in crop and livestock activities is seasonal, and women engage in it based on the availability of work. Otherwise, they engage in unpaid work at home. So, when they engage in such economic activities, they also carry out their routine unpaid work, resulting in more working hours. Secondly, the location of selfemployment activities is not distinct from home. The lack of a clear boundary makes the economic activities sporadic throughout the day, adding to the time burden. In the case of wage employment by educated women in the urban sector, the location of the workplace remains distinct from home, reducing the time on unpaid work. These results show that if women engage in self-employment, the time burden with unpaid work increases compared to their engagement in wage employment. We explain that the location and kind of employment play a role in determining the burden of unpaid work borne by women.

Invisible Care Work and Gendered Labour Market Outcomes

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Various studies have documented the determinants of women labour force participation in India, unemployment trends and levels of unpaid care work done by women. In this paper, we try to disentangle various dimensions of women's work both in the labour market, and outside the labour market. The work outside the labour market that women do is the unpaid work. We define unpaid work as the combination of two types of tasks: unpaid work in domestic household enterprise and unpaid care work. Further, we define unpaid care work as care of family, which not only includes care of children, elderly, sick and disabled, but also attending domestic duties. When a woman

is performing domestic chores or helping in household enterprise, she in turn is providing both financial services and care services to the family. Unpaid work in domestic enterprise and care work are often not even recognised, and are undervalued or underpaid, with women doing most of this work, leading to gender gaps in unpaid care and house work. We use the six rounds of Periodic Labour Force Survey (PLFS) datasets from 2017-18 to 2022-23 and Time Use Survey (TUS-2019) for India to disentangle various dimensions of women's unpaid work both in the labour market, and outside the labour market. Starting from determining the factors for the participation in the labour market, for the full sample of both men and women, we narrow down the analysis to determining the participation in unpaid work for men and women, and how it changes over time. We further tapered our analysis to focus on the determinants of unpaid care work, for both men and women. Finally, we restricted our sample only for women and analysed the socio-economic and demographic factors for women that make them to participate in unpaid work, both in household enterprise and for family. Since we have data for six years, it allow us to study the dynamics in unpaid work, especially the changing trends due to COVID-19 induced lockdown. We have used difference-in-difference strategy to study the changes in the extent of unpaid work that women reported to do in the post-COVID surveys. Our paper contributes to the literature in multiple ways. One, we have taken a broader definition of unpaid work for women and compare it with domestic duties as care work, when earlier literature have focussed only on unpaid care work. Thus, we study the trends in the participation of women in the unpaid work, both for family and for household enterprise, separately and as well as in totality, for the six year period from 2017-18 to 2022-23. This allows us to study the changes that have may happened due to COVID lockdown. Second, we compare our results with TUS (2019), though only for one year, yet comparisons gave strength to our results. Third, we also study the relationship of various socio-demographic characteristics that determine the changes in the participation of women in unpaid work, especially the family structure. Fourth, we have also studied the changing pattern of participation of educated women in unpaid work. Though the work is still in progress, our preliminary results reflect that over time, women are now participating more in unpaid household enterprise, with no significant reduction in the unpaid domestic work, which is indicating an increase in time poverty of women and hence worsening status of women in both labour market and in unpaid domestic work. This led to women to help more in domestic enterprises post COVID, yet their contribution is not counted. This gives direct policy implications for provision of creche facilities to allow women to participate in paid work (at least being self-employed women) and hence contribute to their social and economic empowerment. Proportion of self-employed women has increased over time. With respect to education, we find inverted U-shaped pattern with women who are highly educated are less likely to participate in unpaid work in household enterprise compared to women who are secondary level educated, however they continue to participate in unpaid domestic work. There are significant differences in the participation of women in unpaid work by social and religious groups, which could probably reflect cultural norms of different families.

Navigating Intersections: Exploring links between **Vulnerabilities and Social Protection for Migrant Workers**

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The paper attempts to explore the formal and informal social protection strategies available to the migrant workers in Kerala in the context of the vulnerabilities faced by them. The migrant workers are prone to vulnerabilities at different stages of their migration process; at source location, during transit and at their work destination. In-depth face to face interviews were conducted with the migrant workers in the plywood industry and narrative thematic analysis was employed to identify the frailties of the migrant workers and their access to the social protection strategies introduced by the state. The source location vulnerabilities typically identified as push factors of migration are often a confluence of individual, household and societal factors spurred on by undesirable social and economic conditions. Without ambiguity, the most important factor that led them to migrate is the poor socio economic condition coupled with lack of sufficient employment opportunities and low levels of wages in their native villages. The migrant workers in transit also identify themselves in perilous situations being exposed to longer hours of travel in unsanitary conditions, luggage and money theft and extortion. Though Kerala is hailed as a migrant friendly state, these workers are subject to contractor exploitation, longer working hours, unsatisfactory pay, work place discrimination and significant language barriers in the state. There are also exposed to precarious work environment making them prone to health vulnerabilities. Kerala has always been sensitive to the wellbeing of its migrant workers, and it is the first state in India to implement social protection programmes for the welfare of the migrant workers and their families. In addition to the central legislations, the Kerala state government has introduced the Aawaz Health Insurance Scheme and the Roshni Project in 2017. However, there are some gaps in the effectiveness of these schemes. We find that the schemes suffer from inadequate coverage, institutional barriers and language constraints which impede its successful implementation. Most of them relied on the Employees' State Insurance (ESI) card issued by the employer upon central government mandate. It was observed that the state and central government initiatives have overlapping objectives and targets which leads to duplication of efforts and confusion in accessing the benefits. These initiatives, do provide preventive and protective measures of social protection but it seriously lacks transformative measures which aims at creating awareness among migrant workers about their entitlements. The paper also attempts to capture the lived experiences of the migrant workers during the COVID-19 pandemic. In some industrial units, the migrant workers were not paid any wages but were provided with free meals and drinking water. For those who had returned to their natives and wanted to come back, bus transportation and separate quarantining facilities were arranged. The employers had to take some effort in retaining the existing migrant workers as the industry relied heavily on them. The Kerala government has been relatively successful in alleviating the challenges faced by migrant workers to some extent by providing ration kits and free vaccinations. Those migrant workers with strong informal networks and with invisible economies of care at their native homes were less vulnerable during the pandemic.

TECHNICAL SESSION 3.3

Paid, I Lose, Unpaid, You Win: The Gendered Use of Time and Care in India

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Care work is the work that makes all other work possible by providing direct support in the form of personal care and indirect support like cooking and cleaning. It sustains people from day to day and from one generation to the next. It is so ubiquitous that if the hours worked by all care workers were added together they would form the largest chunk of economic activities in the world. However, it is highly gendered and more than three-fourth of all care work is done by women. This has historical roots in the pre-industrial revolution period when tasks like taking care of the household and looking after children & elderly were performed by the entire family, just as the economic activities were also shared by all family members. However, industrialisation and separation of workspace from household led to division of labour along gender lines. This was a product of patriarchy as caregiving was thought to be 'natural trait' of the females. While a large part of care work is unpaid and performed by (female) household members, a paid care work system has slowly grown, mainly in response to shrinking of household size and emergence of micro families. Increased demand for institutional care has also led to expansion of care work that is marketed and monetised through educational, health, and foster care institutions. However, there is a paradox here. Most of the paid care workers are actually severely underpaid and their wages are routinely far below median wages. And here too, there is predominance of women workers. The care economy, sometimes also referred to as purple economy, encompasses all such care work - paid and unpaid, within household and outside in institutions, direct and indirect. While the issue of domestic (unpaid) work has been debated and discussed since last hundred years, it has gained increased significance in the current century as developed countries entered the third stage of demographic transition. With a rising dependency ratio, the demand for 'care' in its myriad forms has increased tremendously and so the 'care economy' has come to limelight in academia and policy making. It is expected that the demand for care work will also increase substantially in the global south in the next two decades. On one hand, there is an apprehension that this will lead to further burden on the women, prevent them from engaging in the labour market more fruitfully, and may even lead to unmet care needs. On other, there is also a potential to create an institutional framework where much of the care work is monetised through market activities leading to a tremendous increase in paid employment, especially for women. To achieve these goals, it is imperative to take stock of the present

situation of 'care work' in Indian context. In this paper, we attempt to explore three fundamental issues: (a) Who provides 'care' and what is the paid/unpaid distribution of care giving?; (b) What is the approximately monetary equivalent of such 'unpaid care work'? (c) What are the conditions of 'care givers' in the labour market? Using Time Use and Labour Market survey data, we find that the care work is highly gender biased and mostly performed by women. Even those women who are working outside have to share an unduly high burden of care work at home. We also see that the gendered nature of care work starts very early in the family and teenage girls are pushed into care work at the cost of their education. This handicaps them when they grow up in terms of skill and lacking the qualifications to enter labour market they are doomed to a lifetime of care work. The care economy is thus quite large in terms of both incidence and intensity of work and a conservative estimate shows that it contributes more than 7 percent towards the gross domestic product (GDP). However, the working condition of even the paid care workers is precarious and they are vulnerable to uncertainties and shocks in absence of social security benefits. Thus, policies that speak of monetising the care work and increased role of marketed care work should also take note of improving the working conditions of the care workers.

Gender Disparity in Unpaid Domestic and Care **Work and Female Labour Force Participation** in India: A Regional Analysis

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Unpaid work has often been overlooked in the economic assessments and policy formulations, be it in the form of economic production of goods for self-consumption or services enjoyed by others in the household. Across both developed and developing countries, women perform more unpaid caregiving and domestic work than men do. The ILO (2018) estimates that 606 million women, or 41 percent of the currently inactive women are out of the labour force because of their unpaid domestic and care responsibilities. The discourse on women's unpaid work is exclusively pertinent in the Indian context because India has one of the lowest female labour force participation rates in the world and there has been a steady fall since 2005, yet it displays a slight increase following 2018 (NSS, 2021). The objective pf this study is to analyse gender disparity in unpaid domestic and care work, and female labour force participation across regions in India. The present study examines the data from the Time Use Survey (TUS) (2019) and National Family Health Survey (NFHS)-5 (2019-21) to analyse the sexual division of unpaid domestic and care work and female labour force participation across National Sample Survey (NSS)-regions. NCRB (2019) data is used to observe crime against women across NSS-regions. Our study will focus on (1) Female Labour Force Participation Rate (FLFPR), (2) Time spent on unpaid domestic and care work by women, and (3) Gender disparity in unpaid domestic and care work. We consider women of working age groups i.e., 15 to 59 years in our study. We use global Moran's I to test the spatial independence of FLFPR, time spent on unpaid domestic and care work by women,

and gender disparity in unpaid domestic and care work across NSS-Region. The Local Indicators of Spatial Association (LISA) and the Getis-Ord Gi* statistic is used to detect statistically significant local spatial clusters and the geographic distribution of potential hot spots and cold spots. To analyse the determinants of FLFPR, time spent on unpaid domestic and care work by women, and gender disparity in unpaid domestic and care work, Ordinary Least Square (OLS) model is estimated. The study finds that FLFPR is high in most parts of the southern and north-eastern states. The LISA cluster map shows that for FLFPR, high-high clusters are mostly observed in the southern states, while low-low clusters are mostly found in the northern states. One of the reasons behind this could be higher completed years of education among women in southern states as compared to other states. OLS results also shows that regions with higher women's education are likely to have more FLFPR, lower gender disparity in unpaid domestic and care work, and lesser time spent by women in unpaid domestic and care work. Although FLFPR hotspot is found in Maharashtra, gender disparity in unpaid domestic and care work is also found high indicating women are subject to 'double burden of work'. Hotspots of gender disparity is majorly observed in northern, western and central states, with lower FLFPR. Although FLFPR is found high in the north-eastern regions of India, time spent by women in unpaid domestic and care work is also found high in this region. However, gender disparity in unpaid domestic and care work shows low-low clustering as well as cold spots in north-eastern region. We find higher engagement of men in unpaid domestic and care work in north-eastern states when compared with other states which could be a reason of lower gender disparity in unpaid domestic and care work in north-eastern states. It is surprising to note that, although western state like Maharashtra and northeastern states perform well in FLFP, crime against women is high in Maharashtra and fewer parts of the north-eastern states. High-high clustering of female unpaid domestic and care work is also found in some parts of the eastern and northern states, and low-low clusters are mostly found in the southern states. OLS results shows that FLFPR is likely to be lower and gender disparity in unpaid domestic and care work is likely to be high in regions with more Muslim population. Surprisingly, both FLFPR and gender disparity in unpaid domestic and care work is likely to be higher in regions of higher economic status.

Unpaid Care Work and Labour Market Outcomes of Women in India

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Unpaid care work, which is so essential for society, causes an employment penalty for the unpaid care providers. It constitutes the main barrier to women's participation in labour market. Globally, the main reason cited by most of the women in working age is unpaid care work, for their being out of labour market. The full-time unpaid care providers constitute a large pool of the workers lost to the labour market and also the loss of working and earning hours to the care providers, leading to employment penalty for them. We can easily find a huge parenthood employment gap among the couples with children less than 5 years. For the women in employment, the care responsibility also hinders their path

to move into better quality jobs, affecting the number of hours spent by them in paid employment. It further affects their earnings. Women with care responsibilities are also more likely to be self-employed or work in a home base unit, and less likely to receive the social security benefits. In this context, using the data from PLFS and TUS reports from NSSO, this paper is an attempt to examine the magnitude and nature of unpaid care work done by women in India. It further explores the impact of unpaid care work on female labour market participation and its outcomes in the country through the lenses of labour process theories. This study points out that larger involvement of women in unpaid care work restricts their availability for paid employment, even though, they are equally qualified as compared to their male counterparts. Moreover, their lower access to quality jobs leads to wider gender gaps in the earnings. Thus, inequalities in unpaid care work accentuate the inequalities in labour market outcomes, though these outcomes vary by education and quintile groups. Finally, as care work and decent employment are both very important objectives of a just society and gender equality in the labour market cannot be ensured without redistributing the care burden among men, women and the state, this paper will suggest some policy paths in this direction. Key words: FLFPR, unpaid care, labour market, decent employment

The Politics of [Work] Place

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While home-based work has for long been a preoccupation for feminist economists as collapsing the boundaries between paid and unpaid, regulated and unregulated, formal and informal work, it is in the post-COVID-19 era that the home as a place of work has received critical attention from a wider group of scholars interested in the future of work. Home-based gig work that is contracted or performed through platforms has been hailed as an answer to the challenges the job market, particularly for women who, it is proposed, can take advantage of the flexibility this offers, not to mention being a way to address issues of travel and balancing care duties. However, several studies in the aftermath of the pandemic made it clear that even for the more privileged tech workers, the work-from-home model was not without a considerable downside. On the other hand, artisanal workers have almost always worked in their homes, or in community spaces, in a manner that often romanticized as organic and rooted in craft traditions. Domestic workers, on the other hand, have always worked in the space of the home—in this case, homes that are not their own. In this paper, I draw on work done as part of an IDRC-funded project ("FemLab") to think through the complex social, cultural and economic questions that arise for different groups of women workers when the place of work is the home. What boundaries are messily traversed—and transgressed—as roles, materials, and expectations collide in a space that is at once domestic and occupational? While home-based work has for long been a preoccupation for feminist economists as collapsing the boundaries between paid and unpaid, regulated and unregulated, formal and informal work, it is in the post-COVID-19 era that the home as a place of work has received critical attention from a wider group of scholars interested in the future of work. Home-based gig work that is contracted or performed through platforms has been hailed as an answer to the challenges the job market, particularly for women who, it is proposed, can take advantage of the flexibility this offers, not to mention being a way to address issues of travel and balancing care duties. However, several studies in the aftermath of the pandemic made it clear that even for the more privileged tech workers, the work-from-home model was not without a considerable downside. On the other hand, artisanal workers have almost always worked in their homes, or in community spaces, in a manner that often romanticized as organic and rooted in craft traditions. Domestic workers, on the other hand, have always worked in the space of the home—in this case, homes that are not their own. In this paper, I draw on work done as part of an IDRC-funded project ("FemLab") to think through the complex social, cultural and economic questions that arise for different groups of women workers when the place of work is the home. What boundaries are messily traversed—and transgressed—as roles, materials, and expectations collide in a space that is at once domestic and occupational?

Formalising Care Economy will have Far-Reaching Implications for Women's Employment

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Care work is not only essential to ensure welfare of people in a society who need care, but also important support a productive labour force. Traditionally, women have been undertaking majority of care activities in households including child care, elderly care, care for the disabled or the ailing, and all related household chores that are essential for a well-functioning household. This is primarily because of gendered social norms expecting women to be the primary care-givers in patriarchal societies. In India, the burden of care responsibilities has resulted in a disproportionately high proportion of working-age women not participating the labour market. Moreover, as revealed by Periodic Labour Force Survey (PLFS), 2022-23, majority of women engaged in domestic duties revealed that child care and personal household commitments led to this situation. At the same time, the care sector that offers paid care services, is still at a nascent stage of development. This paper defines the care sector and the care workforce in India, based on the definition suggested by International Labour Organization (ILO), using unit level data from PLFS, 2022-23, and explores the characteristics of the care workers. The care sector consists of a range of activities under three broad industries- health & social services, education, and the household sector, employing 3.7 percent of the country's total male workforce, and 9.9 percent of female workforce, indicating higher concentration of women in this sector. Moreover, within the care workforce the share of females was much higher at 56 percent, than female share in overall workforce at 32 percent. It reflects both women's own preferences for care sector jobs, and employer's preferences for women workers in this sector. However, similar to most other sectors, a larger proportion of female care workers lack job security and basic social security provisions, as compared to the male care workers. We argue that if the care sector can be developed further and formalised, it can have far-reaching implications. It will not only create new job opportunities in the

economy for individuals across gender, but can also work as an enabler in women's labour market participation, which is significantly low at present. Further, a well-developed care sector can facilitate women to explore employment opportunities across a wider range of sectors and occupations, by making good-quality and affordable care services available in the market. This is expected reduced gender based occupational segregation of the labour market and thereby reduce demand-side rigidities for women. To achieve this, it is important that care services are of high quality as well as affordable to households. Unless care services are accessible and affordable for households across socio-economic strata, the care sector cannot work as an enabler for overall women's labour market participation. This can be made possible by increasing public as well as private investment in care economy. Various private sector entities such as civil society organisations, non-governmental organisations (NGOs), private companies etc. should be encouraged to invest in this sector though appropriate policy interventions. At the same time, there should be focus on improving work conditions and motivations of the care workers, by formalising working conditions through social security provision, job security, and ensuring compliance to labour laws. Ensuring decent work conditions is crucial for the care sector because it has a direct bearing on the quality of the care services being delivered by them. At the same time, development of a national policy for the care sector by adopting a gender-sensitive approach, with a long-term vision for the country, would be crucial to create a roadmap for taking up appropriate steps in this direction.

Gender Norms and Bargaining over Child Care: Case Studies of Working Class Women in the National Capital Region, India

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In this paper, we analyse the process of bargaining over child care for the working class women employed in the National Capital Region of India (NCR). These were those who held 'unskilled' or 'semi-skilled' jobs and which require little or relatively low levels of education. We look into the decision-making process for care arrangements, time duration till full time care was provided and participation of spouses in caring process. Using the bargaining approach as discussed by Agarwal (1997), we understand that gender norms mediated through social location of class, caste, migration, social network, aspirations for economic mobility along with the absence of care infrastructure, structure the bargaining process. We also use Fisher and Tronto's (1990) framework that explains care as process involving four phases: caring about, taking care of, care giving and care receiving. Average age of marriage was 16.5 years and 55 percent of the women had three or more children. Marriage at an early age confined several women to household care responsibilities and there has been an implicit expectation from them to take care of the family members and the children. When women had expressed their desire to take up work, they were denied permission to work or the child care support for the same. Only in rare instances, were they able to access paid care facilities hence for most part they were compelled to take children to the workplace or leave them in the care of extended family or others

including older siblings and neighbours. While some women left children behind in the village, where possible, mothers with children living in the NCR adjusted work timings to avoid leaving their children unattended at home. We also found that more than sixty percent of the respondents took full time care for the children at least till the age of one year and until they could be left under others' supervision. Nine women left infant children (less than one year old under replacement care) with others and nineteen women provided full time care to older children and sought replacement care for younger children. Participation of men in caring process was mostly non-negotiable and women shouldered most of the responsibility. Most women had negligible say in the marriage and migration decisions. It was implicit understanding that they should care responsibilities till children grew. Explicit negotiation only involved asking for minimal tasks. However, women have been proactive in deciding and looking for best possible care arrangements and organising day to day activities. The narratives reveal that earnings which have been key factor for the bargaining models for women were also determined by gender norms and labour market norms. In spite of explicit displeasure about their employment, women took the household financial management and organisation of child care on to themselves with older children supporting them. For a small group that left children to replacement care when the child was not even a year old, the process involved explicit discussion about aspirations to seek employment and better living but these women had part time jobs which needed spousal contribution for few hours. As the discussion on bargaining models suggests, marriages are non-binding contracts and break down is too costly, women should most responsibility of child care.

TECHNICAL SESSION 3.4

Does Care Worker Status Protect Women from Spousal Violence? Exploring the Gendered Interrelations between Women's Employment and their Experiences of Intimate Partner Violence in India

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Care is a vital source of employment, more for women than men. The nature of work, coupled with trends of occupational segregation and social acceptance, raises pertinent questions regarding the impact of care employment on women's lives. The National Family Health Survey (NFHS-5) data show that among women care workers in India, one-in-three has experienced spousal violence in their life. Although how care and violence affect women's lives have been widely discussed in research, they are rarely considered together. This study focusses on the relationship between gendered occupational segregation rooted in care and spousal violence by examining whether the type of work women do influences their spouses' responses. The distinction between care and non-care workers is highlighted. The root of imagining this work lies in the social reality pertaining to care workers, which corresponds to partial deviance and conformity with respect to gender norms — care workers deviate from the norms surrounding 'the familial responsibilities of caregiving' by joining the labour market but also partially conform to the norms by solely taking on 'feminine' jobs like care work. As marital preferences in India are shaped by the gender norms surrounding women's work and there is evidence of preference for care workers in the 'marriage market', it seems safe to suppose that marital relationships will also be characterised by the extant norms. The status of paid care workers back at home is peculiar in that they are seen to be offering care 'services' which are conventionally perceived as 'natural' women's work, despite changes in location and remuneration. Thus, there could be no perception of a challenge to or instability of the gender hierarchy through women's care employment, preventing men from resorting to violence to assert themselves. In other words, women's self-selection into care work and men's self-selection into partnering with care workers may reflect their 'traditional outlook', making women less threatening to their partners in their behaviour at home as well as via their paid work. This may have consequences for male backlash. A natural research concern that emerges is whether the care worker status makes it protective against violence even though women's fallback options and, therefore, bargaining power are increasing. However, a traditional outlook could also make women more vulnerable — less willing to assert themselves to escape violence. Men who

partner with a woman who does paid care work might also have more traditional attitudes, including believing that violence is expected. That is, women's roles shaped by gender mandates on care could expose them to violent experiences. In response, the study attempts to document how gender attitudes and violence levels correlate with women's paid care work. We consider this question in the context of India. The data come from the domestic violence module of NFHS-5, the most recent in the series of Demographic and Health surveys in India. Since information on both women's occupations and the incidence of intimate partner violence (IPV) is available, NFHS suits the purpose of the study. Using NFHS data and a logit regression model, this study examines whether care worker status acts as a protective or risk factor for women against IPV. Initial results suggest that a higher proportion of married women engaged in non-care work faced IPV than their counterparts engaged in care work. The risk of experiencing violence is also higher among non-care workers than they are among care workers. Additionally, there is suggestive evidence that the risk of facing violence is affected by the interactions of gender relations and attitudes variables with women's occupations. These findings indicate the absence of male backlash, where the social acceptability of care work and/or the traditional outlook protects women from violence. While there could be other channels that explain these findings, the analysis here emphasises the significance of gender norms. The above results extend the existing literature on the factors that affect the perpetration of IPV beyond absolute and relative occupational positions to the kinds of occupation and show the impact of women's occupational type on their risk of facing IPV. Decisions surrounding women's labour market participation and the nature of the work they take up thus have far-reaching implications, not just on marital preferences but also on marital relations and violence levels.

Women and Men in Employment: **Patterns of Care Burden**

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Care work economy includes paid care work, unpaid care work and non-market transfers, but 'unpaid care work' is especially important for women. Unpaid work encompasses a gamut of activities such as household activities from cleaning and cooking, fetching water and fuel to taking care of children and the elderly/sick, disabled as well as of livestock and fields. Not just actual care activities, women also spend a lot of time in 'supervisory' or 'on-call' responsibilities for children and for the care of elderly, sick or disabled. Women, especially in poorer households, struggle to balance paid work with unpaid care work. Women spend more time on unpaid care work compared to men. Such imbalance in the distribution of unpaid care work has serious adverse implications for the economic empowerment of women. Globally, care workers include workers in education, health and social work, domestic workers and non-care workers in care sectors, who support care service provision. Care workers continue to be among the most vulnerable workers in the global economy. In this paper, an attempt is made to look at the male and female workers engaged in paid work and their contrasting patterns of care burden.

Not only is the participation of women in paid employment lower compared to men, the daily timeuse pattern starkly reveals the disproportionately higher burden of unpaid work (including care) on them compared to men. The various factors influencing the burden of unpaid work (including unpaid domestic services for household members and unpaid caregiving services for household members) are assessed. The factors include, but are not limited to: age, marital status, education levels, location, social groups, etc. The unit-level data at two-digit and three-digit levels from the Time Use Survey 2019 have been used for this purpose. The time poverty experienced by women workers is also explored in this context. These findings are also compared with findings obtained from primary surveys conducted with female domestic workers working in the four cities of New Delhi, Noida, Kolkata, and Asansol.

Gender Discrimination in Paid and Unpaid Work in India: **Evidences from Time Use Survey 2019**

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In a world of work, the unpaid work done by women often goes unrecognised, but it is well documented that the unpaid work performed by women is pivotal for the community's growth. Traditional economists have never acknowledged the work done by women. The redefinition of women's work to be considered as productive work was done for the first time in the 19th International Conference of the Learning Sciences (ICLS) conference which set standards of guidelines to measure different forms of work. Globally women are found to be devoting a greater share of time to unpaid household work and care work restricting them from the greater work opportunities in the paid sector. In India, due to the rigid societal structure and strong patriarchal system, women are left far behind from adopting greater opportunities in the labour market. International Monetary Fund (IMF) chief Christine Lagarde, once reported that 217 million women are actually missing from the Indian labour force and if women and men were equally represented in the labour force, it would boost India's economy by 27 percent. The objective of the study is to estimate the gender inequalities in paid and unpaid work between men and women. To better understand the participation of women in the labour market, it is imperative to study their corresponding participation in unpaid work. The study examines the time allocation among women and men in the state of India by taking the time use survey 2019 to understand their relative time allocation in paid and unpaid work in the state. India's first comprehensive Time Use Survey (TUS) was conducted in 2019 which covered the whole of Indian states except Andaman and Nicobar. The TUS has used a systematic sampling method for the selection of households. It is considered a better measure than other labour force surveys as it has some built advantage for improved estimates and better understanding of the workforce. From the analysis of time use survey data, it is found that participation rate in employment by men in corporations, government, and non-profit institutions is higher for men than women. On the other hand, women have a higher participation rate than men

in the production of goods for own final use. Women are indeed found to be participating less than men in household enterprises to produce goods in both rural and urban areas as 38.96 percent of men are more involved in such work compared to 14.43 percent of women in rural areas and 14.37 percentage of men while only 4.42 percentage of women are involved in this work in urban areas. Even employment in household enterprises to produce services is lower for women than men in both rural and urban areas. The average time spent by men shows inclination towards the paid sector and women being more involved in unpaid work. This further depicts the gender inequalities in the household division of work which may restrict the participation of women towards the paid sector. The study suggests the role of strong policy interventions to reduce women's unpaid work and redistribute the same work to bring more equity in the household division of work. For the social empowerment of women, it is imperative to recognise, reduce and redistribute women's unpaid care work.

Labour Market Conditions for Care Work in India: An **Exploratory Study with Eldercare Workers in Two States**

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There has been a perceptible rise in the demand for and availability of paid in-home care services for the elderly in India over the last decade or so, even as the distinct role of non- professional care givers - including family, friends and even neighbours - in extending physical and emotional support is increasingly being emphasised. Momentous shifts in the demographic pattern having implications for human relationships, and fragmentation of labour market resulting from a decline in the standard or 'regular' forms of employment are the two major factors that seem to drive the growth of in-home care services. Added to this is the time-poverty of urban women, who are expected to participate simultaneously in the production and social reproduction economies, leading to what has come to be known as the 'crisis of care'. The extant knowledge on care work in India is overwhelmingly influenced by the vibrant feminist discourse on paid as also unpaid (and unaccounted for) reproductive labour of women. Within this literature, the case of domestic workers has received serious attention (Neetha and Palriwala, 2010). Sustained advocacy around domestic work has also led to legislative response, though delayed, in the form of extending the coverage of Unorganised Workers' Social Security Act, 2008 and the Prevention of Sexual Harassment at Workplace Act, 2013 to domestic workers. There are also a few fragmented studies available on community care workers like ASHAs and Anganwadi workers (Saprii et al., 2015) and organised care in institutional settings (Dutta, 2016). This paper, while taking its theoretical and conceptual moorings from these enquiries, attempts a systematic exploration of the dynamics of a distinctly different sub-sector of care work – the economically produced homebased elderly care work. This is done through (1) mapping the varieties/typologies/modules of such care work in select states in India; (2) understanding the imperatives of 'mediation agencies' (3) tracing the social and economic milieu of care workers engaged in elder care, and (4) unravelling the terms of employment, working and living conditions of care workers.

Insights from Time Use Data for a **Gendered Infrastructure Policy**

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Women bear a greater burden of unpaid work in India as well as across the world. This unpaid work includes activities which are not considered to be 'economic' activities like caregiving and domestic activities, as well as unpaid 'economic' activities like production for own use, which consists of activities like fetching firewood and collecting water. It has been argued that women are engaged in a larger proportion, and are spending more time in production for own use, as compared to men. In this scenario, infrastructure (like piped gas, electricity and water, among others) plays a crucial role in determining women's time-use on various activities. However, often when we use a gendered lens, we only discuss social infrastructure but when we talk about infrastructure it is often physical infrastructure. In this paper we attempt to delineate the linkages between infrastructure and women's time-use in India. Noting that all infrastructure is gendered and 'social' and can impact time-use, we utilise unit-level data from the India Time Use Survey (TUS) 2019 to examine how access to infrastructure underpins the various forms of unpaid work that women spend time in, focussing on production for own use as well as unpaid domestic activities. Through descriptive statistics and multivariate analysis, we unpack the various components of women's participation in these forms of unpaid work. We find that women, especially those from marginalised social locations as well as lower expenditure quintiles spend more time in these unpaid activities and have higher participation rates as well. Poorer and marginalised households have lower access to LPG as well as electricity, and rely more on firewood and chips for cooking and kerosene for lighting. We show that infrastructure, especially LPG connections and electricity, proves to be crucial in reducing probability of participation as well as time spent on both forms of unpaid work i.e. production for own use and domestic activities, along with freeing up time for leisure. Access to electricity reduces time spent on domestic services and increases time spent by women on leisure. Other forms of infrastructure like living in a pucca house and having access to mechanised washing and sweeping also have positive effects on women's time-use. Therefore, by alleviating the burden of unpaid work and increasing leisure time, access to social infrastructure is vital to women's work and empowerment since women face the brunt of double/triple burden of work. Building on this, we make the case for a gendered infrastructure policy. This entails one, ensuring access to forms of social infrastructure to all households and ensuring that this access remains sustained and affordable to households. Two, this process must take into account the fact that there are multiple marginalisations that women and households face, and therefore ensure that the issue of access to infrastructure is seen through an intersectional lens. The ILO suggests moving from ₹3 to ₹5, that is, "recognise, reduce, and redistribute unpaid care work, and reward and represent paid care work". This can only be achieved when we understand the various ways in which work manifests in women's life, for which time-use is an excellent tool. Therefore, it is imperative to understand the links between infrastructure and women's time-use through the lens of a gendered infrastructure policy to truly generate structures of work that are inclusive and equitable.

Does Marital Status Affect the Female Labour Force Participation Rate in India? An Empirical Examination from EUS and PLFS Datasets

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Women's labour market participation is often associated with greater economic opportunities and household decision-making power. The prioritisation of gender equity and the provision of decent work opportunities for women is evident in both Sustainable Development Goal (SDG) 5 and 8. Despite women constituting 50 percent of the population in India, their labour force participation rate stands at only 25 percent. In 2013, the International Labour Organization (ILO) ranked India's female labour force participation rate (LFPR) as the 121st out of 131 nations. From a macroeconomic perspective, a low level of women LFPR has serious implications for not only women's intra and interhousehold bargaining power but also the country's economic development. The continuous decline of female LFPR despite the rising growth rates and levels of education is a serious policy concern as it reflects the fact that economic growth is not being properly translated into the betterment of the economic conditions of women. If married women are taken into account, the problem becomes even direr. It is because, out of various factors, marriage is considered as an important factor for the decline in female labour force participation. After marriage, women's LFPR tends to decline due to a number of factors, including women's low levels of education and low mobility due to increased household responsibilities, as well as the social stigma attached against working of women outside the home. Several theories explain the decline in LFPR of women after marriage. According to Marxist model of capitalism, division of labour puts more burden of unpaid domestic work on women which further increases upon marriage. This makes it difficult for women to participate in paid labour force. Women's work under capitalism is being undervalued leading to lower wages which further reduces women's willingness to engage in paid work due to the additional burden of household duties and child care. The neoclassical economists developed a time allocation model to explain the declining participation of women in the labour force. This study examines the changing dynamics of female LFPRs and the impact of marriage on their participation rates in India from 2004-05 to 2021-22. It also investigates the influence of individual and social characteristics on women's outcomes in the labour market in India by utilising data from both the National Sample Survey Office (NSSO) Employment-Unemployment Surveys (EUS) and Periodic Labour Force Surveys (PLFS) within the age bracket of 20 to 49 years females. It employs an IV probit model for estimating various determinants of female labour participation. The estimates indicate that the female LFPR in India has exhibited a prolonged period of sluggishness and has experienced a consistent decline due to a multitude of factors. The empirical findings indicate that in India, there is a discernible pattern wherein women, exhibit a propensity to disengage from the workforce subsequent to entering into marriage. This aligns with an increase in their involvement in non-remunerated household labour. The phenomenon suggests that

the increasing prevalence of women taking on household chores and childcare responsibilities creates additional barriers for married women to participate in paid employment, consequently, they opt to exit the labour market. The decline in the female labour force participation rate can be attributed to a range of factors, including geographical location, religious or societal affiliation, and educational attainment. The IV probit estimates indicate a noteworthy influence of marriage on the diminishing female labour participation in India. In this regard, the implementation of women-centric work environments, reliable transportation systems, and enhanced employment prospects would serve as catalysts for augmenting female participation in the labour market within India.

Confronting Informality: Worker Mobilisations in Location-Based Platform Work in India

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A long history of trade unions action of formalised workers has often eclipsed the visibility of informal worker collectives in India. This has changed recently particularly as a result of the expansion of gig work in cities of India, and the crisis of the pandemic which contributed significantly to the rise of organized resistance among gig workers. This visibility offers a route to consider if there is novel collective action in sites where informality has been the norm. Based on an ongoing ethnographic study (since 2021), this article considers the similarities and distinction between the mobilisation of informal workers and gig workers through a focus on the latter. The article maps the transitions that shape labour organising of location- based gig workers in the Delhi National Capital region in India. Spread over three cities- Delhi, Gurgaon and Noida, the study analyses the move from spontaneous strikes undertaken in neighbourhoods, to coordinated city and national-scale collective action organized by new unions and associations. Aside from exacerbated conditions of work during the pandemic which spurred widespread collective action, the article indicates the role played by emergent unions in organizing gig workers through novel techniques of digital campaigns, and uniting workers across diverse sectors of food delivery, ride-hailing and home services. In following these routes of mobilization, this study charts a similar path and does not restrict itself to one sector of gig work, rather focusing on how solidarities are built across diverse kinds of work and workers. The paper also demonstrates how gig worker unions must navigate the legacies of older informal worker organizations even as they develop new strategies. In informal work, solidarities were typically crafted between sector-based unions in social movements, where the state was petitioned for access to basic social security. This has influenced gig worker unions' bargaining with the Indian state, evident in a continuing emphasis on social security rather than employment classification as witnessed in the Global North. The global spread of precarious work prompted Breman and Linden (2014) to suggest that the labour politics of the South with its history of informalisation can be educational. The alteration introduced by new technologies only emphasises that there is much to be learnt from both the usualness of informality and the unusualness of digital labour and organising.

A Suitable Girl: The Effect of Girl's **Education on Dowry Payments**

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The social and economic costs of marriage for the bride represent a significant burden for low-income families and contributes to the disempowerment of girls within their natal and marital households in multiple ways. In this paper, we use a large-scale primary dataset from rural eastern India to investigate the association of dowry with women's education. This paper is motivated by the observed changes and continuities in social norms related to marriages in rural India. On the one hand, development of educational and employment opportunities in the rural society has meant increased educational attainment for women, on the other hand restrictions on women's mobility and inability to exercise autonomy in matters of marriage and life trajectories continue to define gendered norms. Restrictions in marriages are well embedded in a social system characterised by caste hierarchies and controls on women's sexuality and conjugal life. Therefore, marriage practices become an important site to study the changes in social hierarchies in a developing country such as India. We test two hypotheses: (a) the education effect, that is, education can reduce the incidence of dowry by increasing the girls' human capital and improving her economic circumstances; (b) the matching effect, that is, education can increase the incidence of dowry via the search for a potentially higher-income groom who will demand a higher dowry payment in the 'marriage market'. Since the level of education of the bride may itself be affected by dowry concerns and so is potentially endogenous, we use a developmental policy intervention by the state governments intended to improve enrolment in secondary school. Using this we are able to show that the overall effect is positive, though the pure effect of education is negative, more educated girls will have lesser dowries, since the education effect is weaker than the matching effect. This paper seeks to study the site of marriage matching to understand the manifest gender script in context of a progressive state led campaign to promote girls' education. The re-framing of women's rights in times of economic development, however not only opens up the question on inheritance in their natal families but also on the continued lower valuation of women's economic contributions to the household they marry into. In recent decades, the focus on girls' and women's education in national policy campaigns of most developing countries after, the Beijing Fourth World Conference on Women, 1995 has meant that gender gap in education is indeed shrinking. However, the rate of returns for education are significantly lower for women as compared with men across rural and urban labour markets in India. Educational lives of girls are impacted by the prospect of marriage in ways that are different from the boys who are expected to orient themselves towards employment post education. In competitively hypergamous south Asian societies, marrying up therefore remains a preferred route to attaining social mobility for poor women. With more educated women in the marriage pool, the brides' families may seek better match, because all else constant, an educated groom would still prefer a more educated bride to a lesser educated one.

TECHNICAL SESSION 3.5

Shifting Macro Trends in Understanding Women's 'Recognised' and 'Unrecognised' Unpaid Work from Pre Pandemic to Post Pandemic Contexts

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The paper explores macro level and sectoral trends in understanding women's 'recognised' and 'unrecognised' unpaid work from pre pandemic to post pandemic contexts in case of the Indian economy. It enters the ongoing debate on the process of structural transformation in employment conditions in the Indian economy in the post pandemic era from the perspective of changing trends in women's 'recognised' and 'unrecognised' unpaid work. The post pandemic employment growth trajectory could be broadly said to have moved from a massive rise in 'informal work' in the first decade and half, to 'jobless growth' in the next decade or so, to a surge in rural employment in the most recent half a decade (a large part of which was marked by the pandemic) leading to the proposition of a transition to 'jobful growth' in certain quarters in the post pandemic era. An important feature of this trajectory throughout was the shifts in female labour force participation rates and work force participation rates (LFPR and WFPR), where unlike the experience of other emerging Asian economies, a large section of the female population continued to be counted as either 'self-employed' in informal primary and agrarian economic activities or as 'out of the labour force', even as the economy moved to a higher growth trajectory with an expansion in share of modern services and selected manufacturing sectors in overall gross domestic product (GDP) share. In order to unpack what being 'self-employed ' and being 'out of the labour force' has entailed for women in this context, the paper elaborates on the parallel shifts in female labour force participation rates, women's recognised work as 'unpaid family helpers' and 'domestic workers', and their unrecognised care work in the form of 'non-economic' activities that ensured household survival and consumption for many rural and agrarian households in the pre and post pandemic era. It uses the data provided by national sample surveys (NSS and more recently PLFS data), to bring out the broad macro trends and the shifts therein at the economy-wide level, over the past decade and a half, marking the transition from the pre pandemic to the post pandemic era. In the process, it explores the multiple implications of these broad macro trends in understanding, assessing and questioning the conventional economic understanding of employment, informality

and women's employment in the context of both periodic transformation and overall stagnation in the world of work for Indian women. In particular, it looks at how the understanding of economic categories such as 'jobless', 'jobful' and 'productive employment' growth itself loses significance once the shifts between 'recognised' and 'unrecognised', 'unpaid' and 'care work' by women is taken into consideration. Similarly, such shifts also interrogate the well know 'u shaped' hypothesis by economists on the relationship between female labour force participation rates and per capita income levels in understanding patterns of historical transformation in women's employment conditions. This ultimately highlights the need to redefine the 'informal' vis-à-vis women's unpaid and care work to arrive at a better understanding of the political economy of women's employment in the Indian context.

An Empirical Study on Occupational Segregation in India's Labour Market

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Occupation segregation in India has been a reality in our country. Female labour force participation rate has seen a continuous decline in our country from 1980 to 2012. In global sphere female participation rate has risen by over two percent to reach to 52 percent in 2012. On the other hand male participation reduced marginally and reached 77 percent in 2012 due to these trends the gap between female and male workforce participation rate has narrowed. But the trends have not been promising worldwide. This reduction in gender based work force participation rate has happened mainly in OECD countries. In G-20 countries, the data shows diverse trends and figures are so far scattered that finding comparability is difficult. In Canada, gender wise labour work force participation gap is only 7 percent whereas in countries like India and Saudi Arabia the gap has reached to 50 percent (2012). Females are mainly considered in agricultural activities or low paying informal sector jobs, as indicated by ILO Global Wage Report 2014-15. The primary objective of the study aims at analysing trends in occupational segregation over decades in our country. The effects of various exogenous variables like education, gender and location on work force participation rate of working age population in various occupations has been examined in detail in this paper. The present study is based on the National Sample Survey Office (NSSO) and Periodic Labour Force Survey (PLFS) unit level data (Employment and Unemployment situation in India) from various rounds. Appropriate bivariate analyses have been undertaken to estimate the effects of selected background variables on the labour force participation of female and male workers in different occupations. The study clearly indicates concentration of women in few occupations and widespread employment trends of male employment across sectors. Interestingly, educational attainment and spatial/locational differences

bring different results for employment of female and male workers in various occupations. The study shows that few occupations are emerging as women centric occupation and over time percentage of male workers/employers in these occupations has declined steadily. This study goes beyond the quantitative analysis of labour force participation rate for women and tries to study the quality of jobs, which are being preferred by female workers. It throws light on some of the serious issues like overconcentration of women in low paying jobs and feminisation of agriculture over decades. Qualitative tools like dissimilarity index has been calculated for analysing the severity of this trend which shows deterioration in situation over time. As per various studies the gender segregation is high in urban areas as compared to rural areas. There are various factors which can be used in explaining gender segregation in rural areas. Human capital becomes one of the important determinants of this phenomena along with occupational segregation. The impact of occupation and education on gender segregation is not dependent of each other. Such segregation of occupations over the decades brings permanent changes in the pattern of employment and educational attainment/aspirations in a country. If education sector becomes a female oriented sector than over the period of time the conditions through which these professions are governed also be modified to suit large female workforce. Kids / youngsters aspire for jobs in this sector will also take these factors into account while making their decisions regarding education profession, qualification and job hunt. More females will try to enrol themselves in those degrees and professional courses which are meant for catering to education sector as compared to man. If we as a society continue to ignore these signals is possible that women workforce participation may continue to follow this downward trend with occasional spurts of distress employment.

Husband's Migration and Wife's Empowerment and Financial Autonomy: Evidence from Rural West Bengal

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In low- and middle-income countries, migration for work from poorer regions to better-off regions often becomes an inevitable option for survival and improving the livelihood conditions of poor households. The migration of married males to big towns and cities for employment, leaving their families behind in their native villages is a predominant form of migration in many states of India. Since migration for work is adopted mainly as a survival strategy, the major impact is experienced and assessed in terms of receipt of remittances. Many studies have concluded that these remittances provide better housing, and raise the standard of living of migrant households. However, for many married women, the migration of their husbands leaving them alone with or without other family

members has long-term implications beyond receiving remittances. The migration of husbands brings profound changes to the lives of left behind wives, especially the younger ones who face higher workloads outside the home, family responsibilities and often managing the finances. These additional and unusual roles may alter their level of empowerment and financial autonomy which eventually affect the household's long-run well-being through resource allocations for nutrition, education, and health for the children. While improved economic circumstances after the husband's migration have been noted in a range of studies, the issues of autonomy and decision-making power of the left-behind wives, who take care of children including parents-in-laws in many cases with the remittance money they receive from their migrant husbands, have been often omitted from many studies on migration. The present study attempts to examine the changes in autonomy and empowerment concerning financial decision-making power that married women experience and encounter as a result of the out-migration of their husbands. The study also investigated how the changed autonomy and empowerment affect resource allocation for their children's health and education. This paper attempts to examine the changes in autonomy and empowerment to financial decision-making power that married women experience and encounter as a result of the out-migration of their husbands. It also investigates how the changed autonomy and empowerment affect resource allocation for their children's health and education. Both questions are addressed in the context of rural West Bengal where migration of married males for work outside the district or state leaving their families behind has become a survival strategy for many rural poor households. The paper uses data from a primary survey that covered 750 households spread across 20 villages in 5 districts. It has been found that husbands' out-migration has increased the burden on wives, but it promotes their freedom of movement, leisure activities, and media use. It is observed that those women, whose husbands have migrated for work, are engaged in some income-earning activities, though often home-based or part-time. The money that the women earn is used for buying things for themselves and for their children. Women with very young children are not able to work, particularly those belonging to current migrant households. Our study found that money received by women is mostly spent on food, repaying loans, health care, education, and buying clothes. This finding is in line with findings from other studies which found that cash controlled by women is more likely to be used on food and health care for children than cash controlled by men, and this results in a higher positive influence on household-level calorie availability and health outcomes. Like some other studies, we also found that women with greater control in deciding how household resources are used are more capable of maintaining and improving the nutrition and health of themselves and their children than are women with lower levels of autonomy, who must defer to the interests of their husbands or extended family members. Women of current migrant husbands are found more to take decisions alone than wives of non-migrant and returned migrant husbands. In other words, husband migration is found to have a positive effect on women's decision-making power and exposure to digital media. Importantly these findings are net of wives' background characteristics, household characteristics, and community context measures.

ICT Adoption and its Impact on Productivity and **Employment of Unorganised Trading Enterprises** in India: A Micro-Level Study using NSSO Data

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Information and communication technology (ICT) is a key factor for economic growth and development in the modern world. It helps enterprises improve their performance. The Indian market is transforming with the convergence of online and offline commerce. Many multinational enterprises have established their online presence to tap into the digital economy, but they also need to cater to the consumer preference for in-store shopping. However, this threatens the unorganised trading enterprises (UTEs), which are small and micro enterprises that operate informally. They make up 85 percent of the Indian retail sector and employ 220 million people. The COVID-19 pandemic has increased the number of Kirana stores, which are the backbone of the unorganised retail segment. However, they face challenges such as poor infrastructure, quality, standardisation, high transaction costs, low access to formal credit, weak bargaining power, and market access. ICT can help overcome these challenges by enhancing the productivity and competitiveness of UTEs. This paper aims to examine the impact of ICT usage on productivity of UTEs in India, using National Sample Survey Office (NSSO) unit level data from the 67th (2010-2011) and 73rd (2015-2016) rounds. The explores the following objectives: firstly, it estimates the ICT adoption index for each enterprise; secondly, measure the technical efficiency and productivity of the enterprises; thirdly, estimates the effect of ICT adoption on productivity and employment, controlling for other factors such as capital intensity, location etc. To conduct this study we have used the 67th (2010-11) and 73rd (2015-16) rounds of NSSO unit-level data. Labour productivity has been estimated by the partial factor productivity measure which is gross value added (GVA) per worker. The value of fixed assets and GVA are deflated using Consumer Price Index (CPI) at 2010-11 base prices. This paper outlines the research methodology employed in a concise manner as follows: 1) Constructing an ICT adoption index for each UTE applying principal component analysis (PCA). 2) Measuring the productivity of each unorganised trading enterprise by using the Malmquist Productivity Index (MPI) computed by Data Envelopment Analysis (DEA). 3) Applying Propensity Score Matching (PSM) to assess the impact of ICT on productivity and employment. The study finds that the adoption and usage of ICT by unorganised traders significantly increased during 2010-11 to 2015-16. Only 15 percent of UTEs used ICT for their operations in 2010-11 which increased to 59 percent in 2015-16. The share of ICT using ESTTE increased from 32 percent to 82 percent in the same period. In 2015-16, the share of ICT enable trading enterprises was more than 75 percent in the states Goa, Tamil Nadu, Gujarat and Punjab. Labour productivity and technical efficiency were higher among ICT-using enterprises than ICT non-using enterprises at the national and regional levels in both

years. Total factor productivity growth (TFPG) during 2010-11 to 2015-16 was positive for nine major states for the UTEs using ICT. Information and communication technology usage has a positive and significant impact on the productivity of unorganised traders, after controlling for other variables such as enterprise size, location and sector. The impact of ICT usage on productivity of UTEs is similar to that of unorganised manufacturing enterprises, suggesting that ICT can be a key driver of growth and competitiveness for both sectors. The study also reveals that there are significant differences in the ICT adoption and productivity levels across regions of India and activities of enterprises. The study concludes that ICT adoption has positive effects on productivity only above a certain threshold level of adoption. ICT adoption has also a negative effect on employment due to skill mismatch. The paper contributes to the literature by providing empirical evidence on the role of ICT in enhancing productivity of UTEs, which constitute a large and important segment of the Indian economy. The paper also offers policy implications for promoting ICT adoption and diffusion among UTEs, such as improving infrastructure, reducing costs, providing incentives, creating awareness, and facilitating access to markets and finance.

Mapping Gender and "Work": A Socio-Spatial Study Using Time-Use Diaries of Indian Heterosexual Couples

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Unpaid household work is routine, tedious, and often time-consuming. The individual performing the housework receives no monetary rewards, upward mobility, promotions, or the ability to amass savings or assets. Although unpaid work offers massive hidden subsidies to the workers in paid jobs, government, and businesses, such work limits the outside opportunities for persons performing it, who, more often than not, are women. This is not because women are inefficient in undertaking paid work or enjoy unpaid work but because gender roles command such an arrangement. Women's preponderance in such activities primarily defines the power relations between men and women. Research from developed countries suggests marked gender-based differences in the time spent on unpaid work and employment by husbands and wives. Although some micro-level studies in India have analysed the impact of gender norms on husbands' and wives' unpaid work. However, these studies do not account for the inter-state differences. Objective In this paper, we use the Indian Time Use Survey (TUS) 2019 and examine interconnectedness between individual, household, and state-level factors in accessing the dimensions of work for co-residing heterosexual married couples across 22 major Indian states. For generating couples, we used the rules suggested by Sobek and Kennedy (2009). We analyse work within the System of National Accounts (SNA) production boundary and the general production boundary specified by the 2008 SNA. We also analyse time husbands and wives spend in employment, unpaid domestic, and childcare activities. Methodology Our research uses Multilevel Tobit Models with the outcome variable being left censored as a significant proportion of husbands (wives) report zero hours in unpaid domestic and childcare work (employment). At level 1, we analyse the life-course stage and household-level variables.

Life-course stage variables include spousal characteristics: age and education gap between husband and wife, and couple's children – 1-year-old, 2-5 years old, girls aged 6-14 years, boys aged 6-14 years, girls aged 15-17 years and boys aged 15-17 years. The household-level variables include household structure (nuclear/non-nuclear), poverty status (poor/non-poor), female and male adults (18-64 years old, excluding the individuals themselves), female and male elderly (65+ years old), households' ownership of appliances (social reproductive infrastructure), and occupation of the household head. Control variables include sector, social group, and religion. At level 2 (state-level), we include family welfare expenditure (adjusted for mid-year population and inter-state price variability), physical infrastructure index (index measuring availability of roads, rails, electricity, tele density, and banks), proportion of population with higher education, and proportion of male-breadwinner households (as a proxy for gender norms). The family welfare expenditure in the Indian context includes the expenditure on Urban Family Welfare Services, Rural Family Welfare Services, Selected Area Programmes, Reproductive Child Health Programmes, and Maternity and Child Health. Our results suggest that the age gap, considered a proxy for bargaining, accords greater status to the husband as wives with older husbands engage less in the labour market and more in household production. Similarly, wives with more educated husbands and those living in non-poor households spent less time in SNA work and employment, crediting the income effect hypothesis. Further, the presence of children, particularly 1-year-old, significantly reduces women's employment and increases the time spent on childcare. At the state level, physical infrastructure negatively impacts women's time spent on SNA production but positively impacts the time spent on employment. The difference is primarily because SNA production includes the time spent fetching water, gathering firewood, etc. Thus, the results suggest that women spent less time on these activities in states with better infrastructure. However, the impact of infrastructure on the productive activities of men and women is not statistically significant. Correspondingly, family welfare expenditure reduces wives' time spent on domestic work, with no effect on childcare. Further, women living in states with a greater proportion of male breadwinner households significantly reduce the wives' time spent in employment and increase the same for unpaid housework.

From Angels to Fighters: Indian Nurses in Germany from the 1960s till today

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Since the 1960s, transnational care chains have been established as a labour regime in a post-colonial context to overcome crisis situations in social reproduction and a severe shortage of health care personnel in the Organization for Economic Co-operation and Development (OECD) world. Health care workers, majority being women, migrate from poor to more wealthy countries, from the Global South to the Global North. The conceptional part of this paper highlights the range of interests in migration of skilled nurses and the paradox that each care chain implies a care drain and a brain drain, and contributes to the shortage of health care staff in the sending countries. In the 1960s/1970s, 6000 young Keralese women migrated to Germany and were trained as nurses in Germany, facilitated by

catholic networks and subjected to the guest worker model, meaning: they got stay and work permits when they were needed, and were expected to go back when no more needed. Accordingly, in 1977 the Indian nurses were asked to return home; but many staid on. In 2010, the World Health Organization (WHO) published a code for the recruitment of health care workers with a list of countries which suffer from a critical shortage of health personnel and therefore should be spared from recruitment - including India. However, in the revised list of 2021 India disappeared. The German government officially stopped recruitment after 2010 before it entered end of 2021 into a bilateral agreement with Kerala about a 'Triple Win'-programme. Before 2022, however, due to the restrictive German policies of recognition of diploma, not many nurses migrated from India to Germany, using individual and informal channels. The methodology is to start with a theoretical framing of global care chains, proceed to a structural analysis of the migration processes from Kerala and then turn to an actorcentred empirical research, based on 10 qualitative interviews with the younger generation of Indian nurses in Germany which are throughout compared to statements by the first generation from 1960s onwards. The key research questions centre around the self-empowerment of migrant health care workers against all odds, and their extended notion of labour, including unpaid care work, struggles against racialised discrimination and administrative obstacles. The biographical interviews with the young generation of nurses refer to their motivation to migrate, their struggle for official recognition, labour relations in German hospitals, discrimination and racism, their transnational family life, gender roles and future perspectives. First of all, the biographical narratives of the young migrant nurses mirror a move towards the autonomy of migration as constituent of subjectivities and as empowerment. The agency of the nurses is articulated in their struggles to adjust to the peculiar labour conditions in German hospitals, to be recognised as professionals in the hospital hierarchy, to reconcile paid care work with their unpaid care work at home, and the care for their transnational family. The paper aims to find out about the individual agency built up in the process of migration and adaptation in Germany. It explores the ambivalence between structural and personal discrimination as migrant workers and low valuation of nursing on the one hand, and their relatively high degree of job and life satisfaction and their empowerment through permanent struggles for acknowledgement on the other hand.

Does Mother's Education Matter for Childcare? A Comparative Study of Nuclear and Multigenerational Households in India

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Parental allocation of time is a contributing factor in children's accumulation of human capital. However, this process is mediated by various economic and cultural factors that shape decisionmaking within the household. It results in bargaining within the household, generating tensions with regard to the sharing of time on paid and unpaid work between married couples. This is further complicated in the presence of multigenerational households where the grandparents of the child are part of the bargaining process. Women often occupy centre stage in the scholarships on bargaining within the household because of the social expectations that are built around motherhood. Therefore, it is important to accord primacy to child care vis-à-vis other unpaid domestic work when we consider women's decisions on labour force participation. Considerations of child care are expected to influence the pattern of choice on time allocation in both paid and unpaid work among married working women. The relative share of housework and child care varies depending on the socioeconomic resources, especially the educational attainment of women. Mother's education can positively impact her job prospects and income, which can, in turn, lead to a higher investment of time in caring for her children. However, it is not necessary that educational outcomes would get translated into labour market outcomes for women. In India, the increase in educational attainment has not increased women's labour force participation. But education is expected to improve bargaining power within the household, and therefore, non-working educated mothers' time allocation can become a benchmark for comparison with working mothers. Societal and cultural norms may impede the positive outcomes of education, such as married working women ending up spending more time in child care, depending on whether the household structure is nuclear or multigenerational. Besides, education can increase a mother's expectations for her children's education and development, leading to greater investment in child care. Despite the potential benefits, highly educated mothers may have limited time for child care due to work or other obligations. The presence of in-laws can influence the time allocation pattern of married working women by either increasing the time allocated for child care or by increasing the time allocated for paid work, which can further have an impact on women's labour market outcome and children's human capital. Against this backdrop, the paper examines the impact of mother's education on child care for both working and non-working mothers for different family structures, i.e., for nuclear and multigenerational households. This dimension of gender dynamics in time investment in child care has received less attention, especially in the context of developing countries. There is also a paucity of evidence on how educated married working women and non-working women negotiate on the domestic front within different family structures — nuclear and multigenerational households. This intrahousehold dynamics can be located within two thesis — Caldwell's thesis and Patriarchal bargaining theory. Caldwell's thesis suggests that the education of women increases bargaining power and hence increases labour force participation, whereas patriarchal bargaining theory suggests that social norms established by patriarchy tend to outweigh the benefits of education, which eventually leads to conflict within the household. Utilizing unit-level Indian time-use data from 2020 and regression models for working and non-working mothers in nuclear and multigenerational family structures, the study demonstrates that parents tend to allocate more time to child care as their education levels increase, with mothers taking the lead across all educational levels. Intriguingly, there is a positive correlation between education and time spent on child care, even for working and highly educated mothers. Within nuclear households, mothers increase their childcare time significantly as their education level exceeds higher secondary education. However, education does not appear to significantly impact childcare time for non-working mothers in multigenerational

households. These findings may provide valuable insights for policy-makers, education stakeholders, and child development experts. Understanding the relationship between parental engagement in child care and educational initiatives and support programs could lead to more effective policies and programs benefiting children and families alike.

How Care Responsibilities Influence Women's Workforce Participation and the Quality of their Employment: **Evidences from PLFS Rounds**

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The low female labour force participation rate (FLFPR) in India, stuck much below the global average, has always been a cause of concerns for policymakers. Studies often point towards many supply-side and demand-side barriers explaining the low FLFPR. Although, over the period of 2017-18 to 2022-23, the FLFPR has increased from 23.3 percent in 2017-18 to 37 percent in 2022-23, with the rural FLFPR increasing from 24.6 percent to 41.5 percent and the urban FLFPR increasing from 20.4 percent to 25.4 percent, the FLFPR is still stuck at a low-level even when compared to other South Asian countries. Along with this low FLFPR, another major concern is women's engagement in job opportunities of poor quality in terms of wages and other benefits. A major share women workforce is engaged as purely unpaid family workers. The Periodic Labour Force Survey (PLFS) 2022-23 indicates that more than 40 percent of total employed women are working as unpaid family workers and this percentage rises to even higher level in case of rural women. Unpaid family workers are those who work without any pay or profit in a household business. Although the unpaid family workers are considered to be part of the labour force and their contribution gets counted in the national income, their work doesn't get remunerated and the profit belongs to the owner of the family business. Thus, this form of engagement doesn't really lead to financial empowerment due to the absence of remuneration unlike the other mainstream labour market activities. The overload of family responsibilities shouldered by women is often cited as a factor behind the gender gap in social, economic and political life, and affecting women's employment and their income. There is ample evidence of childcare responsibilities negatively impacting women's economic participation and employment.

TECHNICAL SESSION 3.6

Walking Miles Together: Gender Roles, Shared Responsibilities, and Commuting Time

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The study investigates the relationship between gender, unpaid domestic work, and commute time in India, utilising data from India's first nationally representative Time Use Survey (TUS) conducted in 2019. With a growing literature on gender commuting gaps globally, the research aims to contribute insights into the intersectionality of gender roles and family commitments, specifically within the Indian context. Notably, it explores the impact of social norms, caregiving responsibilities, and unpaid domestic work on the commute times of employed individuals, focussing on the age group of 18 to 65 years. The primary objectives of the study are twofold. Firstly, it aims to understand how gender influences commute time for work within households, considering commuting as a household decision influenced by gender norms. Secondly, the study seeks to identify the sources of gender differentials in commute time by employing a nationally representative TUS from 2019. The dataset used in the study is India's TUS, 2019, conducted by the National Sample Survey Office (NSSO). This survey collected data on the time dispositions of household members, providing rich information on socioeconomic and demographic characteristics. The study focusses on individuals aged 18 to 65 years who are employed heads of households or spouses and who have spent non-zero time commuting for work The study uses the Ordinary Least Squares method and the Blinder-Oaxaca Decomposition Technique. The outcome variable is the time spent on the commute for work, regressed over gender, age, usual principal activity status, spouse's time spent in unpaid care work, and unpaid domestic work. All regression specifications would have household fixed effects, with sample weights included.: Following the seminar work of Oaxaca and Blinder, the decomposition method widely known as Blinder-Oaxaca (B-O) technique has been widely applied in investigating gender and racial wage disparities stemming from biases. Major highlights of the study are: 1) Gendered commute time gap: The study employs regression analysis, incorporating household fixed effects and controlling for various factors. Initially, the results suggest that, on average, females spend less time on their work commute compared to males. However, when additional control variables are introduced, the gender difference in commute time becomes more nuanced. Females are observed to spend more time commuting than males, indicating the influence of model specifications on commute time dynamics. 2) Spousal involvement in unpaid

work: The research sheds light on the relationship between spousal involvement in unpaid domestic and care work and individual commute times. Notably, individuals with spouses engaged in caregiving and domestic responsibilities tend to experience longer commutes, indicating potential trade-offs between family obligations and travel time. This emphasises the need to consider shared responsibilities in understanding commuting dynamics. 3) Blinder-Oaxaca decompositions: To understand the sources of the gender commute time gap, the study employs Blinder-Oaxaca decompositions. The findings suggest that neither endowment nor coefficient effects significantly explain the gendered gap. However, the interaction effect, capturing simultaneous differences in endowments and coefficients between males and females, significantly contributes to the gender commute time gap. To examine how is commute time for work influenced by gender, and to what extent one's commute time use is influenced by their spouse and what are the sources of gender differentials (if any) in the current study we exploit India's first nationally representative TUS, 2019. Contributing to yet underexplored literature on commute time for work in the Indian context the study finds that reversing the sex division of labour within the household increases the commute time for work. The time spent by a spouse on care and domestic work significantly contributes to variations in an individual's commute time. These findings provide insights into the intersectionality of gender roles and responsibilities, emphasising the need to consider both individual and household dynamics when studying commuting patterns. Moreover, using the decomposition technique, we find that the gender commute time gap is majorly on account of the simultaneous existence of endowment and coefficient effects i.e., due to the interaction effect. the regression results indicate that gender differences in commute time are nuanced and influenced by various factors.

Intra-Household Navigation of Work and Care: A Case of Women Leather Homeworkers at Ambur, Tamil Nadu

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Globally, 260 million people engage in Homebased Work (HBW) out of which 86 percent are living in developing and emerging countries. A sub-set of these homebased workers are wage-employed subcontracted workers, earning piece-rates, referred as 'homeworkers' in the literature. They are over-represented by women (at 57%), are located at the bottom end of Global Value Chains (GVC), producing and adding value to a large range of products and services. This article focusses on unorganised homeworkers at the heart of the leather industrial cluster in Ambur, Tamil Nadu, India. Called 'hand stitchers' in local parlance, these homeworkers are involved in stitching 'uppers' of leather footwear—shoes and chappals—by hand, contracted out to them by the manufacturing and/ or exporting units, through middlemen: contractors/agents. Focussing on the households and families of a women homeworker, this article closely examines the nature of economic and familial interaction

homeworking women have with other members of the household, especially other women. As the home doubles up as the workplace, the activity of homeworking treads the economic-physical-social boundaries of 'home' and 'work', where women are simultaneously navigating between paid work and unpaid care work. This article presents case studies, putting forward the 'arrangements' through which homeworkers navigate work and care at the household, which plays a crucial role in informing their decisions regarding the level engagement in the labour market. Rooted in feminist perspectives and in conversation with the literature on household economics and care, this article argues that these decisions are mediated, most importantly, by the familial-economic relations 'between' the women of the household. These 'arrangements' can range in a spectrum: altruistic cooperation, accommodative cooperation, ad hoc cooperation, reluctant cooperation and conflict. Each point on the spectrum depends on decisions women make with respect to how the income is earned and spent, who earns it, who goes to work outside the house and who does not (in the context of Ambur, to the leather factory), whether the income is pooled for the household or spent separately and what kind of care responsibilities are exchanged between the women. Mostly, these decisions are made in consultation with each other. When the arrangements are not mutual, conflict arises. In treading between work and care, this article further shows that women in Ambur receive little help from men either in household chores or in homework. Men perceive homeworking as a 'feminine' work done by women with 'nimble fingers' and want nothing to do with it. In the light of indifference from men regarding both their paid and unpaid work, homeworker women rely on other women for work and for care. The case studies presented in this article are based on in-depth interviews with 62 homeworker women, 51 of them full-time homeworkers and some of them are involved in a portfolio of work combining homework with factory work (4), sub-contracting (3), domestic work (2), owning and managing a petty shop (2) or MGNREGA work (1). Fifteen men, including husbands of homeworkers, contractors, owners of manufacturing units were also interviewed.

Time Poverty as a Measure of the Well-being of **Unpaid Care Workers: The Indian Context**

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Poverty can be thought of as the state of not having the basic things a person needs. Many methods exist for measuring how many people are poor or how widespread poverty is. However, it's crucial to consider why and how someone ends up in poverty and what makes it difficult for them to escape it. Women, in particular, face inequality that makes their experience of poverty even harder. They often have to juggle both household chores and paid work, and sometimes, they're compelled to work even when they'd rather not. Care work is one of the most important natures of work performed by individuals that sustains life through subsistence production and contributes to the economy's

productivity. It is already a known fact that among individuals who perform care work of both paid and unpaid nature, the larger proportion are women. Mostly because of the social responsibilities that have been inherently followed throughout generations. In many countries such as India, culture is an omnipresent variable that decides gender roles in society. Structural transformations in the economy and progress towards gender inclusivity have lessened the magnitude of gender inequality in many of the public spheres. This is evident in the active participation of women in the labour market, politics, access to finance, etc. compared to what has been observed throughout history. With women gaining opportunities to participate in more market-related activities, without a congruent decrease in their average time spent on social reproduction, it has mostly increased the burden of performing in both the public and private spheres. Despite the overburdened gender role of women, it becomes difficult to compromise on either market labour or household activities. Yet, there will be several instances when women will have to also compromise their participation in the labour force due to the excessive burden faced by them. By withdrawing their participation, it will eventually lead to the diminishing of their productive assets and their level of human capital enhancement. This ultimately leads to a gender inequality-led poverty trap or a gendered poverty trap. This study explores the concept of "time poverty" as a lens to understand the multidimensional aspect of poverty. Time poverty considers factors apart from income and consumption to assess why and how individuals become trapped in poverty. A particular concern is the unique and intensified experience of poverty for women. Women often bear a dual burden, balancing household chores and low paying paid work for the working women, sometimes out of necessity. This research seeks to employ the concept of time poverty, akin to income poverty, as a contemporary measure that extends beyond traditional economic evaluations. Evaluating time poverty at the national level in India offers insights into the challenges faced by unpaid care workers. Despite the significance of the issue, a comprehensive assessment of time poverty remains unexplored in India, and this study aims to address this gap. The objective is to comprehend the typical time allocation patterns of individuals. The data has been taken from a secondary source known as 'People of India', which forms a part of the Consumer Pyramid Household Survey provided by the Centre for Monitoring Indian Economy (CMIE) Pvt. Ltd. Deriving the methodology of the study by Bardasi and Wodon (2006), an upper and a lower threshold of time poverty lines have been developed to identify the percentage of time-poor people with a focus on unpaid care work. For further analysis, the study also employs a logistic regression to find the marginal fixed effects of the various socio-economic characteristics such as gender, age group, marital status, caste, work status and region type. The evidence from secondary data indicates that women tend to experience greater time poverty compared to men. This could be understood as women often have less time available for various activities due to their dual roles in household and market work. The government needs to focus on devising social policies that attempt to build a proper infrastructure for care work services and a proper infrastructure to account for the value that a care worker provides. The need becomes more prominent in developing countries where women are the poorest in terms of income and time poverty.

Temporal Division of Gender based Work Burden in Selected Districts of Rural Arunachal Pradesh

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The growing responsibility of household chores, caregiving, and other non-SNA work for women can be understood by examining the increase in women's engagement in domestic duties from 51.8 percent in 2005 to 59.7 percent in 2012 according to NSSO data from India. The recent Time Use Survey conducted in 2019 also reveals that women above six spent 16.9 percent of the time in unpaid domestic services while men spent only 1.7 percent in a similar category. Thus, women's time spent on domestic duties is increasing daily. However, minimum gender differences in workload in the countries with higher HDI rankings like Norway, Denmark, the US, Belgium, and Finland are observed. The states of North East India are characterized by agrarian society, low human development, long borderlands, and more than 400 sub-tribes having a mix of hilly and plain areas. Under such circumstances, the gender division of labour is very different from other mainland Indian states. In these states, women play a significant role in various activities such as agriculture, cooking, housekeeping, child care, fuel wood and water collection, livestock care, and grain storage. Rural Arunachal Pradesh is one of the largest states having all the stated characteristics. Women in rural Arunachal Pradesh actively participate in a range of forest-based activities, including the collection of non-timber forest products for sale and the gathering of fruits, tubers, and leafy vegetables for home consumption. Despite their significant participation in agriculture and forest-based activities, rural women in Arunachal Pradesh continue to face challenges related to unpaid work and the burden of work. One of the challenges faced by rural women in Arunachal Pradesh is the unequal distribution of unpaid work. This unequal distribution of unpaid work not only contributes to women's double burden but also limits their opportunities for economic empowerment and time for personal development. Moreover, the gender division of work in rural Arunachal Pradesh further exacerbates women's work burden. However, the work done by women often goes unnoticed or is only partially reflected in workforce participation data and other official statistics. Therefore, it becomes crucial to utilize time use statistics to comprehend their workload and responsibilities. The present study was conducted in four districts: Lohit, East Siang, Lower Subansiri, and West Kameng from January to June 2022. Data regarding food gathering and production activities, income generation activities, asset ownership patterns, collection of forest products, agricultural operations, etc., have been gathered at the household level. Individual members of the households were interviewed using a separate questionnaire to assess their allocation of time. Both the "yesterday approach" and activity-based approaches were utilized in the time-use survey. However, information on average daily time spent on different activities during agricultural seasons and lean periods was collected through recall methods. The study results indicate significant work burdens for women regarding non-SNA and extended SNA works in the study area; these two types

of activities displayed high prevalence among respondents according to their reported time patterns. Further, the study also tries to capture the values of unpaid work performed by women in the study area using opportunity cost and market replaced cost methods. JEL Classifications: J16, J22, J43, 146, J20 Keywords: Economics of Gender, Time Allocation and Labour Supply, Agricultural Labour Markets, Demand and Supply of Labour

Changing Structure of Female Self-employment and its Determinants: Empirical Evidence from Haryana

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The main aim of this study was to analyse the trends and changing structure of self-employment among females and its socio-economic determinants in the state of Haryana. The author identified the factors which played a significant role for a female to choose the particular type of self-employment, i.e. own account worker, employer, or unpaid family worker. A binary logistic regression model was used to identify the factors that determine whether a female would be joining as an own account worker or employer instead of an unpaid family worker. The author used secondary data on employment collected by National Sample Survey Office (NSSO) under Employment & Unemployment Survey (till 2011-12) and the Periodic Labour Force Survey (PLFS) (2017-18 onwards). The author decoded unit-level data to prepare this study covering time period 1993-94 to 2022-23. Trends revealed that the declining female workforce count stabilised a bit post 2018-19, but it is still at a very low level compared to males. Examining the composition structure of the employment among females in the state, the author found more than half of the women (57.67%) to be own-account workers, holding 'self-employment jobs' and not jobs in factories or the service sector. These self-employed women didn't engage any employees to work for them on a continuous basis, which was also a responsible factor for a high percentage (37.44%) of women being employed as unpaid family labour. A significant share (~20%) was employed as casual labour with intermittent and sporadic employment extending over a short period or continuing from one work to another, and 30.0 percent worked as regular wage employees. 4.90 percent of women were employers. A majority of the women in the state were employed in the agriculture sector where productivity and wages were lower. These trends indicated that jobs for women in the state have not translated into steady purchasing power, which is a very serious economic challenge for women in the state and also negatively impacts their decision-making and empowerment. The results of the binary logistic regression model conducted by the author revealed education, social structure, household size, and age to be important factors influencing the female's choice of type of self-employment. Age was observed to be having a positive and significant impact on own account workership/employer among females up till the age of 44, post which age had a negative and significant impact, implying transfer/loss of control over ownership from females to other family members. Determinants such as education, vocational training, belonginess to backward social groups such as scheduled caste (SC)/scheduled tribe (ST)/other backward class (OBC), widowed/divorced/

separated marital status, Islam/Sikhism religion had positive impact, whereas family size and rural areas had a negative impact on own account workership/employer. Policy measures such as increasing the number of schooling years for girls, stringent laws on limiting family size, extension of vocational training, and having course curriculums on gender sensitisation at the school level were directed to enhance women's role in decision making for themselves as well as in family matters, and improve their social and economic status in the state.

Role of Potato Contract Farming in the Agriculture and Rural Labour Market: A Case Study from West Bengal, India

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This paper aims to examine the current scenario of agriculture and the rural labour market in West Bengal, comparing it with the national status. We placed the role of contract farming in creating employment opportunities within the agriculture and rural labour market. Moreover, this paper examines what kind of labour arrangement is contract farming within the land grabbing and labour arrangement debates. This paper uses both primary and secondary information. We used secondary data from the National Sample Survey Office (NSSO) reports and the Periodic Labour Force Survey (PLFS) to examine the agriculture and rural labour status in West Bengal and India. For the primary information, following the sequential exploratory strategy of mixed methods research, we conducted two phases of fieldwork in high potato concentrate districts: Hooghly and Bankura. The first phase of fieldwork gathered data through focus group discussions (n=12) with contract farmers (n=90) and key informant interviews (n=31) with intermediaries under PepsiCo. A household survey in the second phase covering information from the contract (n=130) and non-contract (n=133) potato farmers was collected. From the secondary information, we found that the rural labour market is gradually shifting from the agriculture sector to the non-agriculture sector. The status of rural nonfarm employment in West Bengal is relatively higher for both male and female labourers compared to national status. The limited opportunities in the underdeveloped non-agriculture sector in the rural area could not provide decent employment opportunities, instead, labour relies on less paid, and unskilled construction work. We found a significant difference between the state and national level is that the number of women employed in the manufacturing sector in West Bengal was much higher than that at the national level and even higher than that of men at both levels. Contract farming has not created any significant employment opportunities for rural labour. Instead, contract farming predominantly relies on family labour. The prospect of employment for women is notably not seen in the context of potato cultivation in West Bengal under contractual arrangements. This farming practise introduced different intermediaries and provided a secure source of income by enabling the transfer of supervision risks and labour arrangements from agribusiness firms. This helps to indirectly control family labour and production processes by agribusiness firms in terms of access to quality raw materials. This appears an alternative for agribusiness firms to reduce transaction costs and labour risks

while indirectly controlling land, labour and production without having direct access to agricultural land or social ties with the farming community. This paper placed the case of contract farming from the smallholder dominant state of West Bengal within declining agriculture and rural labour markets. This paper suggests that contract farming has not significantly contributed to the employment opportunities for rural labour. Moreover, this farming practice enables a business environment for corporations to control the smallholder farmers' land, family labour and production indirectly through intermediaries. The intermediaries become commission agents in favour of corporate farms to provide quality raw materials on time.

How can care work be more demanding and leveraging for economic participation? Case of Females in India

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How can care work be more demanding and leveraging for economic participation? Case of Females in India ABSTRACT The LFPR of female registered 19.7 percent in India on the basis of usual principal and subsidiary status according to PLFS, 2018-19. The computation of WPR of females is done based on their usual principal and subsidiary status, but their specified activity participation in rural areas does not take into account. By this, those economic activities (As per NSSO prism) carried out by females from their household periphery becomes invisible. My study tries to seek attention of policy makers to generate more jobs for women particularly in the sectors where nature of work particularly as a care giver (schools and hospitals) is mere extension of household work, they perform at home. Quality of job in terms of social security, adequate salary and better facilities at work place is needed for better work culture in the society. Further, non-state actors also play in addressing care work by reducing the disproportionate amount of unpaid work borne by women at home. Care work (both paid and unpaid) plays a vital role for human and economic development of a Country. Functioning of economy depends on physical and mental health of nation comprising young and old people. Well-being of people is the foremost factor to measure the qualitative progress of the country OBJECTIVE: Firstly, to enquire the nature and type of activities carried out by female inside the household premises. Are they busy as an 'unpaid female worker' or in 'specific activities' listed or doing 'domestic duty including care work' only? Secondly, how the entry of women in the paid care work can be increased in commensuration with demand for work The study is based on the intensity of work of day/week of females that how they spend their time on multiple jobs in the given time and situation. Time use survey is of great help to capture all the discontinuous nature of home-based work. Investment in education and skilling in commensuration with the requirement of health sector (old, young and disabled) and education sector particularly of young and special need persons. Females are inherently more equipped with taking care of physical and mental need of people. The demand for care givers is expected to increase by 2030 because of number of factors. In low and middle-income

countries, the demographic transition will lead to a higher proportion of the elderly depending on the working-age population. The traditional joint family setup is rapidly transforming into more nuclear and single-parent households which distinctly separates them from extended family support bonds. All these changes are taking place due to urbanization process and resettlement to a new place in search of job. So, shifting of people in search of suitable job is creating another door of opportunities for care givers either in household or outside both in private and public sector. My study found that women are mainly busy in four essential unpaid work carried out within the four walls of household: a. Domestic Duties including Care Work b. Free Collection of goods of different types, c. Household Production for Self-Consumption, d. Maintenance of kitchen garden, and e. Unpaid Family work There are two reasons to push for sufficient investment and policy makers attention towards the care sector to enhance the female labour force participation globally. First, to reduce the disproportionate and double burden amount of unpaid work borne by women inherently so that they can have more time to participate in income generating activities. Second, to utilize the potential of new opportunities in care sector, women can be made more skilled to match the demand and can drive women's economic participation. Therefore, reducing female's unpaid work and leveraging the opportunity in care sector are the twin requirement for increasing female labour force participation in the country

Infrastructure and Social Care: A Gender Sensitive **Public Investment Plan For Employment Generation** and Inclusive Growth

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Infrastructure and Social Care: A Gender Sensitive Public Investment Plan for Employment Generation and Inclusive Growth Dr. Iti Vyas Ms. Alphy Antony Abstract Since 1990, India has witnessed robust economic growth. Despite this high economic growth, urbanization, declining fertility rates, and educational progress, a large part of Indian women are out of the workforce. There is a gross mismatch between economic growth and female participation in the labor force. Many socioeconomic factors like unpaid care and household work limit their access to education and decent work and are responsible for this low female labor force participation rate (FLFPR). According to the research done by the United Nations Office (2020), many women and girls miss educational and employment opportunities due to inadequate infrastructure like dark, unlit roads, unsafe and limited public transport, and unavailability of childcare facilities at the workplace, etc. The scarcity of infrastructure hit the marginalized sector very hard, leaving them with fewer opportunities to improve their standard of living. The study suggests that gender-sensitive design/plan has the power to resolve the problem of gender inequalities and empower women by responding to diverse needs in society. The International Trade Union Confederation (ITUC, 2016) Report also found similar opinions on

Investing in the Care Economy for seven OECD countries. The report shows that policies that are effective in promoting economic growth and employment are likely to include public investment in infrastructure. Social infrastructure such as health care, education, childcare, and adult long-term care are crucial to maintain and grow the productive capacity of an economy and the people's quality of life, especially in developing nations. Gender equality, employment, and inclusive growth are interrelated. Gender inequality directly impacts economic growth by reducing the quality of human capital in the country. Gender-sensitive macroeconomic policies and adequate social infrastructure help women to develop their potential and explore various opportunities. Better opportunities in the labor market and equal access to resources lead to increased productivity, which increases the country's potential growth. This study focuses on understanding the causes of persistent gender inequalities in India's household and labor market. By collecting the secondary data from the ILO Global Care Policy Portal and various rounds of NSS, PFLS, and NFHS-4, the study collects data on multiple aspects such as social infrastructure like availability of child care facilities at the workplace and elderly care centers, transport facility, distance of workplace from the house, maternity and paternity benefits, government schemes for child care, public expenditure to promote gender equality and employment generation, etc. The study will employ the limited dependent variable model. The study analyses that investment in social infrastructure (especially education and caring industries) instead of physical infrastructure and gender-sensitive macroeconomic policies benefits society in the form of educated, productive, and happy adults in the future. The study's findings show that investment in social infrastructure, especially in caring industry and education, generates more employment and reduces gender inequality in the labor market and domestic work. Likewise, gender-sensitive macroeconomic policies promote inclusive growth and development. Keywords: Gender equality, inclusive growth, social care, gender sensitive policy

TECHNICAL SESSION 3.7

The Care Economy in Varanasi in the Perspective of Unpaid Rural and Elderly Urban Women

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The care economy comprehends those activities that people perform daily, often in our homes, including chores or taking care of other persons, such as infants or the elderly. These chores, such as cleaning up a house or shopping for groceries, are typically not paid, and even less are considered productive. But, as a global society, we can still attain changes to this outdated perception. All economic activities that involve people require an element of care. Care is the base of development. But this base frequently remains invisible and is not granted the priority it deserves. That is why we say that care is the base of the iceberg. When referring to the 'care system' we refer to the invisible base. Care Economy represents a new vision of economics that recognises the importance of care work, empowerment and autonomy of women to the functioning of the economies, wellbeing of societies, and life sustainability. The main aim of this paper is to investigate women's role in the care economy and unpaid household, and quantify women's unpaid household work in the rural Varanasi and to attempt to assess an economic value for it. The specific objectives of this paper are to: a. Study about the care economy in urban Varanasi and status of the elderly women. b. Explain primary data of socio-economic status of the rural households the villages in Varanasi. c. Analyse the average daily time spent by these women and men on paid and unpaid work. d. Quantify and assign an approximate economic value to the unpaid work performed by rural women in the study area. This research is based on time-use survey (TUS) of about 125 rural households from three villages of Varanasi and 100 elderly women in five wards of Varanasi in Eastern Uttar Pradesh. The TUS provides information on how people spend their time in a given day or week through time diary instruments. We use a mixed-method study involving both quantitative as well as semi-structured interview methods. We suggest that adequate recognition should be made of the unpaid works of the rural women to increase their self-esteem and to improve their image in the family and society at large. Also, access to and control over production and market resources such as access to training, credit, employment, technical skills, entrepreneurship etc., by women should be increased while recognising that the goal is not to burden women with two full time jobs. We should also take all appropriate measures to ensure that care responsibilities are equally shared by men and women. In conclusion, the formalisation of the care economy involves job creation, a more significant total payroll, an increment in gross domestic product (GDP), and an improvement in women's rights. Thus,

it's not about paying homemakers: Formalising the care economy will help distribute chores among people who can do it for a wage. In other words, it means creating employment for all the population with a rallying call to take care of other people. The care economy should become a paid sector or it should be formalised. The formalised care economy could create jobs from currently unpaid activities. This study provides valuable insights into the challenges and opportunities for improving the lives of elderly women in Varanasi. While government schemes offer some support, addressing their physical and psychological needs requires a more holistic approach. The care economy in Varanasi needs to be strengthened through increased investment in formal care services, promoting active and healthy ageing, and empowering women through economic opportunities. Additionally, collaboration between government, private sector, and community organisations is crucial to ensure the well-being of elderly women and build a more inclusive care economy

Women workers in Informal Labour Market: **Subsidiary or Sufficient?**

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A woman works longer hours than men, contribute to more than half of the wealth of the nation but receive one-tenth of the world income and own less than one percent of the world property. Needless to say, women constitute the most vulnerable section of any workforce and remain the poorest of the poor. The status is even worse in case of informal sector. The women workers bear the double burden of work at workplace and at home. When she is supposed to get recognition for the same, the irony is that she ends up being considered as a secondary or subsidiary labourforce; unremunerated, underrecognized, under-utilized and above all suppressed under the pressure of the so-called patriarchal expectations and perceptions. The women workers choose to be in informal sector due to its flexibility yet they are not free from sector-specific and gender-specific challenges. In this context, the present piece of work is an attempt to study the challenges of women workers in informal labour market along with, it puts an effort to examine the variables determining income of workers in the informal labour market. The research work has applied multi-stage random sampling method to collect primary data from the women workers working in informal labour market of Paradip city, Odisha. Primary data were collected by administering a well-structured and pre-tested interview schedule and entered and analyzed using SPSS. For the purpose of secondary data, information from NSS 68th round data, IHDS 2011-12 data along with unpublished sources of municipality are gathered. For the present research work data were collected from 200 women workers and 50 male workers working in informal labour market of Paradip City. To collect information about challenges faced by the samples in the workplace direct questions were put by administering interview schedule. The present research work has used the basic Mincerian wage function (1974) to arrive at variables influencing wage of the workers in informal sector. For the purpose of a broader analysis, the Mincerian wage function (1974) model

is extended by adding the variable of skill, work-compulsion and area of house The study has found that gender based wage discrimination, occupational segregation, work-life balance and absence of basic facilities in the work place are some of the major challenges of women informal workers. While age, experience and work compulsion have turned out to be statistically significant in determining the income of the women workers; education and skill as independent variables does not determine the income of the women workers working in informal labour market. This result is in contrast with OLS findings of male informal workers. Unlike women workers, increase in education and skill are the major determinants of income for the male informal workers. This paper is divided into three parts. The first part carries an introduction of informal sector along with the objective and methodology of the study followed by a brief elucidation of challenges faced by women workers in informal labour market. In the last part, specific variables are examined that affect the income of women workers followed by few recommendations. Keywords: Women, Informal Labour Market, Challenges, Determinants of Income

Women's Unpaid Domestic Labour in India: Navigating Choices and Constraints

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Uncompensated labour, encompassing responsibilities such as childcare, elderly care, and household chores, constitutes a substantial portion of economic activities but remains unaccounted for in gross domestic product (GDP) calculations. Women bear a disproportionate burden of this unpaid work, dedicating more time to such tasks compared to their male counterparts. The decision to engage in unpaid work is often influenced by cultural norms, presenting a significant constraint. In recent years, there has been a surge in women's involvement in unpaid domestic work, posing a considerable threat to India's economic development. The statistics reveal a substantial increase in the percentage of women engaged in unpaid domestic work, rose from 32 percent in 2017-18 to 37 percent in 2022-23, while the women's labour force participation rate (15 and above years) increased 23.3 percent to 37.0 percent during the same time period. To comprehend the status of women in the labour market, understanding the nature of their unpaid work is crucial, as it significantly impacts their work participation rate. This paper shed light on the magnitude of the women unpaid domestic work by various socio-economic and geographic characteristics. A logistic regression model was applied to examine the determinants of involvement of women in unpaid domestic work by taking both demand and supply factors. The study used the NSS (2011-12) and PLFS (from 2017-18 to 2022-23) data. The findings from logistic regression revealed that women with lower education levels and belonging to the lower wealth quintile are more likely to be engaged in intense domestic work. Urban women's engagement in unpaid domestic work is observed to be twice as high as their rural counterparts in 2022-23, although these rural-urban differences have diminished over time. Examining age groups, women aged 15-24 years and 60 years+ exhibit a higher probability of being involved in unpaid domestic activities. Furthermore, women without technical education are three times more likely to be

involved in unpaid labour, while general education does not show significant changes. Socio-religious factors also play a role, with women from the general category having twice the likelihood of engaging in unpaid work compared to those from the ST category. The study highlights a mismatch between formal education skills and the skills required for decent job opportunities, leading women to perform unpaid domestic duties. Technical education emerges as a significant factor, with women lacking such education having a three times higher probability of engaging in unpaid domestic work. Examining social status, OBC and other categories exhibit a two times higher likelihood of engaging in unpaid domestic work, and Muslim women are 2.5 times more likely than women of other religions. Women from southern and eastern regions also display a higher than 2 times involvement compared to other regions. In conclusion, addressing socio-religious norms, particularly in rural areas, providing essential choices, and creating career opportunities can shift women from unpaid to paid roles. Gender-inclusive government programs focussed on empowerment and employment can contribute to women's participation in paid work.

Gender Discrimination at Workplace on Work-Life Balance and Care Economy: A Study of the Educational Sector in Odisha, India

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The present study examines the gender experience of workplace discrimination and its impact on work-life balance in the educational sector in Odisha, India. Understanding workplace discrimination will provide insight into the gender differential situated knowledge on care work, and work stress. While the intent in many of the organisational initiatives towards arresting workplace discrimination and its gendered relationships goals have been noble, irregularity between the intent and approaches, process and system, and techniques repeatedly make these initiatives unsustainable over time. The intrinsic irregularity and tensions thereupon in the system thinking and lack of synergy across different systems perpetuate lock-in effects and greater gendered control than sustaining the spirit of workplace happiness and well-being Based on the mixed research method of field enquiries the present paper addresses two research questions. Who does what care works both at home and workplace, who perceives its economic value and how the job stress, flexibility, and glass ceiling have an impact on work-life balance? The present study argues that the lack of research on the local condition from gender perspectives requires insight through situated knowledge. Key informants' perspectives of gender construction of the workplace both descriptive and prescriptive through the narrative method of inquiries facilitated quality insight to address the how and why questions of the research questions and complemented the critical reflected the result of the quantitative findings for decision making. The study is limited to discussing the flexibility at the organisation concerning family responsibilities, feminist narrative inquiry on workplace gender discrimination, the variety of tasks assigned by gender position and the

glass ceiling that exists at the workplace. The four key factors examined in this study are: 1) flexibility at the organisation concerning family responsibilities, 2) feminist narrative inquiry on workplace gender discrimination, 3) variety of tasks assigned by gender position, and 4) the existence of the glass ceiling at the workplace. To understand and bring insights into the data collection and fourteen variables like: 1) HR policy and practice; 2) gender inequality (workplace consequences of prescriptive and decretive gender stereotypes); 3) workplace stress & fear; 4) work-life balance; 5) workplace harassment and discrimination; 6) sexual harassment and safety; 7) wage/remuneration; 8) promotion; 9) administrative position and leadership; 10) motivation; 11) access to workplace; 12) participation; 13) job performance; and 14) happiness and well-being have been examined. Key informants' perspectives of gender construction of the workplace both descriptive and prescriptive through the narrative method of inquiries facilitated quality insight to address the how and why questions of the research questions and complemented the critical reflected the result of the quantitative findings for decision making. Study shows that senior male faculty members have acquired a higher level of work-life balance and lower job stress than their female counterparts. Married females with small children and fewer years of work experience are more likely to be affected by the stress of work and personal life enhancement. The study illustrates the differential attitudinal and gender stereotypes practices associated with the male and female faculty's work-life balance. Recommendations are put forward to strategize care economy policies and services for work-life balance, and their terms and conditions to reduce gender workplace discrimination and promote a more transparent and inclusive workplace culture.

Social Security for Widows: Evidence from Periodic Labour Force Survey

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Widows in India have always been the most vulnerable group for centuries. From sati to witch hunting, widows have experienced the worst level of ill-treatment and abuse from society. Unfortunately, there is a lack of specific data regarding social security for widows; however, the Periodic Labour Force Survey 2020-21 data talks about widows and social security benefits. This paper attempts to analyse the factors that affect access to social security benefits for widows. After analysing the data, it is clear that among widows, there is a high degree of exclusion error in getting access to social security benefits. Social Security status is analysed with the socioeconomic, demographic, and migration status of the widows using logistic regression. The results suggest that for socioeconomic particulars, the widows residing in rural areas and the widows working as regular salaried/wage employees have a higher probability of getting social security. For demographic details, relatively older, more educated, and widows who live

within large families are more likely to get social security. Widows who have migrated from rural areas to urban areas of other districts or states and widows who have migrated for work have the highest probability of getting social security. The ANOVA results show a significant difference in household expenditure among widows who get social security, widows who are not eligible, and widows who are unaware of availing of social security benefits. Further, the Blinder - Oaxaca decomposition suggests that two groups of widows- eligible and not eligible for social security have high inequity in expenditure, a proxy of income. The paper concludes that while framing a policy for the social benefit of the widow, the three aspects- socioeconomic, demographic, and especially the migration status should be taken care of. Keywords: Widows, Social Security, PLFS data, Inequality, Blinder-Oaxaca Decomposition JEL classification: J12, J26, J 65, J 83, O15

Wage Discrimination of Regular Salary Worker in the Indian Labour Market: A Study on Gender and Social Groups

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The access to non-discriminatory labour market in a developing country like India is a significant issue due to the age-old social hierarchy. Different studies on the Indian labour market discrimination focussed on the wage gap among caste and gender groups in the casual works. However, very little focus has been done on a comparative study to examine the wage gap in regular wage earners. The objectives of this study focussed on identifying the differential nature of the wage gap in regular wage earners among gender and social group in India. It enabled in examining the factors leading to the wage gap across states of India among males and females as well as scheduled castes (SCs), scheduled castes (STs), other backward classes (OBCs), and open categories (OCs). The study also uses Oaxaca and Blinder decomposition methods and Mincer's estimation of the simplified schooling model to evaluate gender and social group variations in earnings. The Blinder-Oaxaca decomposition method helps in identifying the causes of wage inequalities, including whether discrimination or variations in individual characteristics are responsible. The first component is the part of the gap that can be attributed to the differences in mean human capital characteristics of the two groups and this component is called differences in characteristics. In addition to analysing the caste and gender wage gaps in the Indian labour market, this research study will look into the potential causes of these gaps. The data used in the analysis is obtained from Periodic Labour Force Survey (PLFS) 2020-20, which was collected by National Sample Survey Office (NSSO) in cooperation with Ministry of Statistics and Programme Implementation. Individual variables including parental history, educational background, work status, job characteristics, and earnings are all covered in detail in the PLFS data. The analysis focusses on determining the mean wage gap among various castes and gender groups and investigates the extent to which this disparity may be accounted for by variations in employees' endowments across castes or genders. To gain a thorough understanding of the Indian labour market, the study looks at samples of

regular wage earners whose ages vary from 15 to 59. This paper shows that the wage gap discrimination is consistent across regions for gender and for social groups both endowment and discrimination explain the wage gap. The findings of this paper help provide a fresh perspective and deepen the understanding of the wage gap. According to the study, discrimination in the labour market is the main cause of the gender wage gap. This difference is apparent among both males and females. In contrast, the difference in wages between social groups is probably brought about by variations in the available resources. According to this research, discrimination contributes significantly to the wage gap between men and women and prevents women from reaching their full human capital potential. Occupational segregation can be partly accountable for the gender wage gap in India. Men are more likely to work in higher-paying fields like engineering and management, whereas women are more likely to work in lowerpaying fields like education and healthcare. When it comes to recruiting, compensation, and promotion decisions, employers may have conscious or unconscious biases that favour men over women. The recruiting and compensation practises of many organisations in India may lack transparency and accountability, which makes it simpler for gender-based discrimination to occur.

Internalising Social Reproduction in Site of Production: The Conundrum of Stigmatised Labour and Empowerment

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Women's participation in the labour force is considered to be a principal and decisive step in empowerment. However, the choices that women have to make, the agency that they enjoy, and the options they have to choose from are often neglected in this idea of empowerment. Kabeer (2020) conceptualises empowerment and agency using capability and explores these aspects. Though the disutility of being unemployed is not much of a debate, employment does not manifest the same in everyone. One's social position significantly impacts the labour that one engages in and the rewards reaped from it. Social institutions such as gender, caste, race, etc., considerably affect a person's opportunities and conditions of labour. The study aims to understand the reproduction of social relationships, particularly "man-woman" relationships in the informal sector. This paper uses Social Reproduction Theory (SRT) as a methodology to understand the relations of capitalist production and social reproduction within the economic site of production. It was found that women's labour in the informal sector is dependent on the social position that they enjoy within the hegemonic system of patriarchy and that the nature of work that they engage in is predetermined by gendered stigma. The paper also argues that the sphere of reproductive care work is not external to the economic site of production, but rather women tend to carry their reproductive responsibilities to their sites of production. This contradicts the general assumption that reproductive activities and economic activities are spatially and temporally differentiated. An analysis of secondary observations on Mahatma Gandhi National Rural Employment Guarantee Act 2005 (MGNREGA) was conducted to

substantiate this argument and to explain the interaction between reproductive and productive labour at the site of production, and how the former is institutionally internalised in economic activity. The introduction sets the premise and the motivation for the paper. The second section of the paper looks into the relation between labour and empowerment. Using the conceptualisation of empowerment by feminist economists, it is laid down that being part of the labour force need not be an absolute state of empowerment, but rather could have been a choice of relative freedom and agency among the limited choices available. The third section explores the overlapping of reproductive and productive activities in sites of production. The various methods through which women are constantly engaged in reproductive activity simultaneously to their involvement in labour explains how the two do not always happen in two distinct realms. The fourth section discusses the idea of stigma and its place in the labour market. It explains the concept of stigma and how women's labour is determined by the stigma of being a woman and the societal expectations thereof. Finally, the theoretical framework discussed has been analysed with respect to MGNREGA to understand whether the reproduction of social relations happens in rural informal work settings. It was found that while MGNREGA appears to be a pro-women programme, it institutionalises care and reproductive activity in the site of production and reproduces the dominant gendered social relations. The paper is an attempt to understand how intricately related social reproduction is in the lives of women, even when they are engaged in the labour market. It shows that women, by virtue of being women, carry the burden of reproduction even to their paid labour, thereby refuting the concept of 'double burden' since reproductive work is carried out incessantly.

Unveiling Gender Disparities in Indian Urban Informal Labor Markets: An In-depth Analysis of Wage Inequality

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The wage differential in labor markets has become a prominent issue, experiencing a significant surge over the past few decades, attributed to various factors. In the Indian labor market, the unequal distribution of wages stands out as a major contributor to overall income inequality, posing a substantial challenge to the economy at large. In the quest to unveil gender disparities within Indian urban informal labor markets, this study scrutinizes the wage differentials between male and female workers in the Indian urban labor market. Utilizing secondary data, specifically data from the employment and unemployment surveys conducted by the National Sample Survey Office (NSSO) under the Ministry of Statistics and Programme Implementation (MOSPI), this study delves into two quinquennial rounds—namely the 61st round conducted during 2004-05, the 68th round conducted during 2011-12, and a round of the Periodic Labour Force Survey (PLFS) conducted during 2019-20. To estimate employment and unemployment figure, this study has used both usual principal activity status and usual subsidiary status of worker. Similarly, to examine the sectoral distribution of employment status of male and female worker, National Industrial Classification Code (NIC) has been used namely NIC 2004 and NIC

2008. Furthermore, National Classification of Occupation (NCO) code has been used to define the occupation of both male and female worker. The findings of this study indicate that gender inequality not only manifests during the process of securing employment but also persists post-employment in the form of wage differentials. Employing the Blinder-Oaxaca (BO) decomposition method for empirical testing, the study reveals that gender wage inequality in the labor market is predominantly influenced by labor market discrimination, specifically attributable to unexplained components. This insight into the root causes of gender wage inequality can serve as a valuable resource for researchers, policy makers, and the government in devising strategies to address these issues within the Indian labor market. The study underscores the importance of focusing on initiatives that not only alleviate gender disparities in employment but also tackle the persisting wage differentials. One key recommendation stemming from the study is the imperative need to enhance the skill levels of women workers. By investing in skill development programs, policy makers can empower women to bridge the gender wage gap and contribute more substantially to the labor market. Additionally, the study advocates for the adoption of suitable and sustainable policies aimed at providing minimum social security benefits to informal workers. This proposed policy approach aligns with the broader goal of promoting economic growth through increased women's labor force participation. By ensuring social security benefits for informal workers, the government can foster an environment conducive to greater economic participation, ultimately contributing to a more equitable and thriving labor market. In conclusion, this study sheds light on the persistence of gender wage differentials in the Indian urban labor market and provides actionable insights for addressing this issue. The empirical evidence presented, along with the policy recommendations, emphasizes the importance of targeted interventions to create a more inclusive and fair labor market for both male and female workers. Keywords: Gender, Informal employees, Urban, Oxaca Blinder Decomposition

Care work and the Careers of Educated Women: Role of the Care Diamond in India: Issues and Challenges

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The data on women's education and labour force participation in India suggests that though the gender gap in education (particularly higher education) has almost disappeared, the gender gap in employment remains significant. The paper links the burden of double responsibility (paid work plus unpaid 'care work') with the low labour force participation rates among the highly educated women in urban India. Based on primary and secondary sources, the paper analyses the lived experiences of women who had to either leave their careers or who continued by managing to balance the two sets of responsibilities. Interrogating the care diamond in India, the essay examines two recent provisions of the Government of India for working mothers – an increase in maternity leave and the provision of childcare leave. It finds that though these provisions seem to be in the right direction as they bring recognition to the care burden of employees, given the prevailing social norms on gender roles, they are insufficient (in their

present form) to bring gender parity in the labour market. This paper made an attempt to understand the role played by the care responsibilities of educated middle-class urban Indian women in their career decisions. It analyses the literature on the disturbing phenomenon of rising education but declining Labour Force Participation Rates in India in recent years and the possible reasons for it. The study finds that the gendered social norms relating to domestic work and childcare and the practice of patrilocality negatively affect the career trajectories of middle class educated women. Many try to balance the two sets of responsibilities while the careers of quite a few are disrupted. Many women feel the double burden left them with almost no time for self-care and/or sufficient rest. Previous studies show that direct and indirect care work remains the responsibility of the woman whether she is working outside the home for wages/salaries or is involved in home-based production or expenditure-saving activities. Besides the gendered social norms that are present in India as in most other countries, the widespread patrilocal social norms require women in India to live with the parents (and many times siblings) of their husbands. Drawing on the lived experiences of educated women in Nagpur, Bhagyashree (2021) shows that many women had experienced career disruptions due to the lack of support from their husbands and parents-in-law. The paper also looked at the role played by the family, market, state and community in the provision of care work in India. It finds that the state and market have left the majority of the burden of providing care to individual families. The study interrogated the policies of increasing maternity leave and provision of childcare leave for women employees. It finds that both have a positive impact on the women toiling under the double burden society has put them under and bring recognition to the care work performed by women employees. However, given the prevailing social norms on gender roles, they are insufficient (in their present form) to bring gender parity in families and in the labour market. It is, therefore, suggested that parental rather than maternal leave will help by creating awareness about changing the gendered norm of childcare. Public provisioning of care work, as well as changes in social norms on gender roles and employment policies, are needed for redistributing the care burden among the state, market, civil society and families.

Role of ASHA Workers in Care Economy: A Unit Based Study of Some Villages of Rapar Taluka.

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Care economy refers to the sector of economic activities, both paid and unpaid, related to the provisions of social and material care, which contribute to nurturing and supporting the present and future populations. Broadly, it includes direct and indirect care of children, the elderly and the disabled, health care, education, and as well, financial and other personal and domestic services aimed at supporting and enhancing individual well-being. It also encompasses a range of sectors such as education, health, and social work involving teachers, nurses, community health workers, social workers, and domestic workers. Focus to more on care economy also helps to improve human development index and sustainable development goals. As per International Labour Organization (ILO), India spends less

than 1 percent of gross domestic product (GDP) on the care economy. Health sector is an important sector in the care economy and ASHA workers associated with grassroots work in the health sector are working in women's health sector in rural areas at low wages. Thus, the role of ASHA workers in the care economy is fundamental and very important. Care work, both paid and unpaid, is crucial to the future of decent work. Care work consists of two overlapping activities: direct, personal and relational care activities, such as feeding a baby or nursing an ill partner; and indirect care activities, such as cooking and cleaning. Unpaid care work is care work provided without a monetary reward by unpaid carers. Unpaid care is considered as work and is thus a crucial dimension of the world of work. Paid care work is performed for pay or profit by care workers. They comprise a wide range of personal service workers, such as nurses, teachers, doctors and personal care workers. Domestic workers, who provide both direct and indirect care in households, are also part of the care workforce. The majority of the care work worldwide is undertaken by unpaid carers, mostly women and girls from socially disadvantaged groups. Unpaid care work is a key factor in determining both whether women enter into and stay in employment and the quality of jobs they perform. Health sector is an important sector in the care economy and ASHA workers associated with grassroots work in the health sector are working in women's health sector in rural areas at low wages. Thus, the role of ASHA workers in the care economy is fundamental and very important. ASHA works to create awareness and provide information to the community about the determinants of health such as nutrition, basic hygiene and hygienic practices, healthy lifestyle and working conditions, information about existing health services and the need for timely access to health and family. ASHA advises women on preparation for birth, importance of safe delivery, breastfeeding and complementary feeding, vaccination, contraception and prevention of common infections including reproductive tract infections/sexually transmitted infections (RTIs/STIs) and care of young children. In this paper an attempt has been made to find out about their performance, job satisfaction and salary from 20 ASHA workers of Rapar taluka. Also, to check the effectiveness of ASHA workers in rural areas, a preliminary survey has been conducted among 80 respondent beneficiary women in four villages in the hinterland of the taluka.

Reproducing Women Workers: Migration and Nursing Profession Among Marginalised Women in India

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In India, there is a steady stream of women migrating to cities for employment including nursing. Nursing in India has been intrinsically tied to caste, though in the last few decades, with better career prospects, there is a widening of caste composition within nursing. The expansion of private sector hospitals and emergence of the home care industry has also contributed to newer forms of jobs in nursing and thus migration to cities. We argue that this phenomenon of women's migration to the big Indian cities feeds into the needs of social reproduction of low wage workers and yet these women from marginalised communities are making use of these opportunities to change their course of social

reproduction. This paper is based on fieldwork done on two cohorts of nurses in Hyderabad — nurses working in a hospital set-up and nurses working in home based care services, conducted during 2016-17 and 2021 respectively.

Factors Affecting Gendered Distribution of Unpaid Care and Domestic Work Among 6-11 and 12-17 Years Old Children in India

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Globally, girls spend more hours every day on unpaid care and domestic work than boys of the same age. Their tasks might include washing clothes and dishes, cooking meals, caring for younger siblings or elderly or sick family members. As children move into adolescence, this gender gap between girls and boys tends to intensify. This is simply indicative of the gender norms that impose the burden of household responsibilities on the shoulder of girls as young as five years old. The girls are also expected to take over these duties in the absence of the mother. Girls from large families or those living in rural communities or from poor families are particularly affected by such norms. Given this background, the paper examines the overall time-use and daily activities of children in the age-group of 6 to 11 years and compares it with the unpaid activities performed by the adolescents in the agegroup of 12 to 17 years. The paper is based on unit level data from the Time-Use Survey (TUS) was conducted by the National Statistical Organisation (NSO) between January and December 2019. It also examines the individual and household level factors which might provide an explanation to the agelinked differences in the distribution of unpaid care and domestic work between girls and boys in India.

TECHNICAL SESSION 3.8

Labour Laws under Five Year Plans and NITI Aayog: A Critical Appraisal

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The paper examines the evolution of labour laws and policies in historical as well as structural context under the planning period 1950 to 2017 and beyond which is divided into four phases. The first phase of the (post-independence) generally corresponds to the first three Five-Year Plans (1951-1956, 1956-1961, 1961-1966), a period of "national capitalism". The second phase (mid-1960s to 1979) more or less corresponds with the Annual Plans for 1967-1969, the Fourth (1969-1974) and Fifth (1974-1979) Five-Year Plans. The third phase (1980-1991) corresponds to the Sixth (1980-1985) and the Seventh (1985-1990) Five-Year Plans, as well as the two Annual Plans (1990-1992). The fourth phase (1992 and onwards) corresponds to the Eighth plan to Twelfth plan. As the first three phases (from 1950 to 1991) focus on pre-liberalisation era that reflect the state-led labour policies slowly began to withdraw legitimacy and the fourth phase (1992 and onwards) is post-liberalisation period which considers labour market flexibility, fragmentation of labour union and reduction in public expenditure. To know about socio-economic conditions of labour, it is very important to know about the legislations and amendments regarding labour, social securities and labour policies in India under the Five Year Plan and NITI Aayog. Most of the labour laws have been ratified to deal with labour relations and social security in the organised sector. While more than 90 percent of India's informal labour market has been inadequate laws in the de jure sense and almost a picture of lawlessness emerged in the de jure sense. The paper explores the dual face of Indian labour legislation who ignored the dignity of labour under the umbrella of labour reforms, while progression of informalisation and casualisation in the working world has been increased especially last two decades. As the planning commission talked about 'inclusive growth' and the increase of the share of self-employment has also not been an empowering trend but rather like disguised wage labour under contemporary capitalism. Additionally, it has moderately apparent that the casualisation and contractual employment process has been the part and parcel of the organised sectors. Although during the Tenth as well as Eleventh Five-Year Plan periods, the growth rate of economy touched at extraordinary rates, but it has been characterised by jobless growth and informalisation of jobs in the organised sector between 2004-05 and 2009-10. There has been minuscule improvement with regard to the unemployment challenge in the postreforms era. The main focus of this study is to explore the gradual extend of market doctrines which stimulate wide inter-regional and inter-sectoral variations in the levels of economic activity that lead to substantial differences in the nature of labour-management relations. It has also figured out that the inabilities of transition from primary sector to secondary sector and existed which identified failure of the development process to resolve the unemployment question. Thus, a challenge which need to tackle by policy makers in India is to intend and execute a floor of labour rights, with the vision of a national labour market keep in mind; such a vision, that undoubtedly predicts a set of core labour standards as well as a national minimum wage, ought to be on the front burner of the policy outline.

Unveiling the Unseen Labour: Challenges to Calculate Women's Participation in 'Preparatory' Activities

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In the agricultural labour market in India, women do a large share of the work, but from a subaltern position – without fair access to income, land rights, or even decision-making authority – that reflects structural issues of society. Studies show that women's participation in agricultural labour is higher (higher than male workers), and their economic status and overall quality of life have improved, but that has not improved their capacity to bargain or make farm management decisions. This is a feminisation of agricultural 'labour', rather than feminisation of the agricultural management. In India, though women play a pivotal yet often invisible role in farming, contributing significantly to agricultural production through their labour-intensive tasks such as seeding, weeding, and harvesting. However, quantifying their contributions poses methodological challenges due to traditional measures often overlooking their unpaid labour within households and farms. The complexity arises from the multifaceted nature of their work, which spans across various domains like caregiving, household chores, and farm-related activities, making it challenging to accurately assess their true impact on agricultural productivity. Identifying, recognising and considering the preparatory, pre-production or helping activities are the essential condition to understand the intensity of labour contribution. In this context the present study highlights the extent of labour contribution by women in farm sector. The study also tries to analyse the methodological issues that exist in calculating the multi-layered activities that women perform at farm. The study uses both the secondary data and primary data for the analysis. The time use report 2019 and primary data collected from Gujarat and West Bengal are used for the analysis. The survey was conducted across eight districts in the two state which comprises 800 households. An important concept that the study finds is the need to redefine activities. There is ample discussion in of the unpaid labour of women in the literature, but 'women as helper' is a concept that needs to be considered carefully while reporting sex-wise activity status on the field. A particular work or activity has various sub-activities or sub-components, performed mainly by women. Women perform most farm and non-farm tasks, but this is completely overlooked. One particular activity on the field or in non-farm activities has many layers; if these are not considered carefully, the coding of 'activity status'

is gendered. The conventional coding of 'activity status' tends to overlook these layered contributions, thereby failing to capture the intricacies of women's roles as helpers. These methodological limitations result in a gendered portrayal, inadvertently underestimating the extent and significance of women's contributions within the agricultural landscape. Efforts to recalibrate methodologies, considering the intricate layers and sub-components of women's labour, are crucial to accurately quantify and recognise the substantial yet underreported role of women as helpers in agricultural activities. There is not enough attention given by the policymakers to take the account of women's participation in various farm activities. Their involvement in these preliminary but indispensable tasks not only supports the efficacy of farm operations but also underscores the interconnectedness of their labour with the overall productivity of agricultural endeavours. This concept of 'preparatory work' elucidates the often unacknowledged yet foundational role that women play in farming communities. While conventional surveys might attribute specific tasks to male members, they often miss capturing the extensive preparatory work undertaken by women, which lays the groundwork for successful farm operations. Women's contributions transcend the delineated tasks, encompassing essential activities that set the stage for agricultural work, be it organising resources, managing logistics, or ensuring the smooth functioning of ancillary activities crucial to farming. Recognising and valuing this preparatory work is fundamental to comprehending the holistic scope of women's contributions to farming in its entirety.

Distribution of Unpaid Work in India: A Gender Perspective Analysis based on Time-Use Survey

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The paper analyses the distribution of unpaid work between women and men in rural and urban India. Since India is a diversified nation in culture and geography, the unpaid work distribution is distinct in different regions of India. The geographical and social divergences differentiate the breadth of unpaid work across the country. Therefore, the study selected the most developed and least developed states of India: Kerala and Bihar. These states are selected based on the NITI Aayog Sustainable Development Goals (SDG) index, where Kerala occupy the top position and Bihar stands at the bottom. Thus, comparing the prevalence of unpaid activities in these states is able to understand the depth of unpaid work in two different economic and social circumstances. The study is based on India's time use survey carried out by NSSO (National Sample Survey of Office) in 2019. It is a full-fledged time-use survey conducted for the first time in India. The time-use survey is a valid source for exploring the implications of unpaid activities. It provides detailed information on the time allocation of individuals in a day for various activities. Therefore, Time-use Surveys can be used as a better tool for unveiling the hidden contribution of unpaid work to the economy. The present study used the average time allocation of unpaid activities to compare the vastness of unpaid work. The average time allocated in a day for unpaid activities is estimated by considering major activities performed during the time slot. In addition, the Tobit regression model is used for analysing the effect of different factors of unpaid work specifically unpaid care and domestic work. The prime motive is to provide some insights into how

unpaid works vary by different factors in the least and most developed areas. The analysis identified the prevalence of gender discrepancy in unpaid work in India and selected states. Women spend a significant quantum of unpaid work than men in all regions. The study reveals that Bihar women spent more time on unpaid work compared to the national average. On the contrary, the time allocated for unpaid work by Kerala women is lower than in India. Thus, development plays a substantial role in reducing the time for unpaid work. However, the gender disparity does not vary between states, women are performing significantly more time for unpaid work than men in all regions. The comparison of different education levels reveals that an increased education level does not reduce the burden of unpaid care and domestic work. It is evident that graduated and above women spent more time on these activities than illiterate women in India and Kerala. However, it is identified that working women have to undertake the overburden of both paid and unpaid. Similarly, their participation in the labour market does not reduce unpaid work. Social groups wise comparison reveals that it has little role in the distribution of unpaid work in Kerala and Bihar. However, Tobit estimates of India reveal a statistically significant result. Aggregate India data affirm social group influences unpaid work, but state wise comparison reveals little relevance of social group, since all categories of women distribute almost same amount of time for unpaid activities. Thus, the study reveals that the distribution of unpaid work varies between regions, work status, education level and social groups. However, the density differs among India, Kerala and Bihar.

At the Crossroads of a Burdensome Care Economy and a Stagnant Labour Market: The Bleak Reality of Women Sanitation Workers in India

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Women sanitation workers in India are the most ubiquitous yet inconspicuous section of the society. They seep into the society as critical elements of maintenance of order but are often ignored and seldom mistreated. The functions undertaken by these workers are numerous, spread across the domains of domestic work, public toilet cleaning, drain cleaning, road sweeping, railway track cleaning and even encompassing the janitorial staff at the formal organisations. It would be safe to remark that society would suffer miserably if these sanitation workers fail to show up at work. Yet the conditions of the sanitation workers, primarily employed in the informal or contractual sector is abysmal. Their life is fraught with exploitation, caste discrimination and pathetic living and working conditions. These challenges are burgeoned multi-fold for women sanitation workers as they face a society mired in patriarchy bearing twin burden of household chores with the bleak sanitation occupation. Most of the women sanitation workers join this occupation to supplement or replace the spousal income and are faced with an overwhelmingly stagnant labour market. This study undertakes a comprehensive analysis of the most indispensable but neglected workforce in India, with a focus on urban areas. This analysis is balanced at the intersection of a stagnant labour market and a burdensome care economy which

characterise the women sanitation workers. The stagnancy in labour market is enabled by-informal employment marked by economic exploitation and lack of social security; the inherently unskilled nature of work with pessimistic prospects of promotion or advancement; coupled with inhumane working conditions that take a severe toll on mental health. These factors perpetuate a vicious cycle of poverty and the consequent inability to build a better future. Further, a notion of self-esteem and selfactualisation, discussed in detail by Maslow, which form a foundation of every meaningful employment and vocation are severely undermined in this occupation. Along with the aforementioned conditions, there is a sphere of care economy which follows women from all walks of life wherever they venture. The women sanitation workers bear the disproportional burden of household chores and patriarchy. Their depressed socio-economic conditions make patriarchy a veritably pervasive reality of their lives which manifests in form of appropriation of income by male member of the family, domestic violence and even workplace harassment. Additionally, women employed as domestic workers may undertake the unpaid care work of elderly and young members of the employer family because of emotional attachment. This discussion is concomitantly supplemented by data and evidences from National Sample Survey reports of Indian government, reports by International Labour Organization (ILO), World Bank and quality independent research. This study dives into novel horizons which explore the conditions of the most oppressed workforce in India. A survey on the labour market and the care economy burden would offer a unique perspective into their issues. The study is culminated by robust suggestions which would ameliorate their conditions and improve the labour market. The upcoming general elections serve an opportune moment for India to take cognisance of their most vulnerable workforce which cannot assert itself unless empowered.

Unveiling Gender-based Trends and Patterns in Paid and Unpaid Work in India

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A comprehensive concept of gender perspective economic empowerment includes their engagement in the not only labour market but also sustaining and nurturing the household economy. Gender biases remain deeply entrenched in the socio-cultural structures, economic processes, and labour market institutions of the society. Women's integration into the labour market is not an exception, but it is influenced by the various socio-cultural and economic factors such as perceptions of gender roles, the division of work between men and women, access to specific occupations, the prevalence of traditional customs etc. The division of work is associated with a partial trade-off between paid and unpaid work as the longer the span for paid work leads to the shorter available span of unpaid work and vice versa. However, this trade-off is only partial, and there is no complete substitution of activities. The primary objective of this study is to examine the latest trends and patterns of paid and unpaid workers by incorporating the gender roles. The gender role changes when it associates with different

socio-economic characteristics, such as caste, age, educational qualification, marital status as well as rural-urban divide. Therefore, at secondary level, this study includes aforementioned socio-economic variables along with gender. In order to fulfil the underlined objectives, whole study is based on the unit level data taken from different rounds of Periodic Labour Force Survey (PLFS). The finding of this study reveals that the participation rate of women in unpaid activities is more than 50 times higher as compared to men. Overall percentage share of women's participation in unpaid activities has insignificantly declined in the period of last six years. It is concluded that women in Indian society are facing a vicious circle of economic deprivation because women are not going out for work, they are doing more work at home and due to it, they are not able to participate in the labour market. Where will this vicious circle discontinue? It poses a serious question mark on the paradigm of inclusive economic growth strategies in India. How we can achieve Sustainable Development Goals (SDG 5.4), without, improving skills, education and women empowerment? Thus women's burden of unpaid domestic work, limited access to education and skill development, constrained upward mobility, and restricted job choices, all stemming from an unequal division of domestic work as well as socio-cultural norms, contribute to their inferior status in the labour market. Therefore, unpaid work, characterised by its repetitive and tedious nature with limited opportunities for advancement, hinders individuals from reaching their full potential in terms of productivity and earnings. It is important to mention here that by recognising unpaid labour as genuine work, country will not only benefit in terms of its gross domestic product (GDP) figures but also empower its women to a great extent which would be helpful in achieving inclusive growth and SDGs.

Work, Employment and Time Poverty in India: Unfolding the **Experience of Married Employed Men and Women**

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The study is an attempt to enquire about the extent to which married employed men and women, belonging to economically active age groups (15-59 years), bear the burden of market work, nonmarket work, and experience time pressure in India. As our findings reveal, the situation of married employed men and women is worse, in this respect, both in terms of participation and time allocation, than all men and women in the country. The institution of marriage implicitly carries social obligations and thrusts upon men and women in their post-marital life. Consequently, both married men and women remain to be left with no choice but to live with such obligations. When they are employed in the labour market, with the responsibilities bestowed, they juggle working overtime. As evident from the findings, both men and women remain vulnerable due to such interactions between the institution of marriage and labour market, with women experiencing spectacularly higher time pressure. In simple parlance, the interaction of marital status and employment status results in the asymmetric allocation of time in such a way that women take a lion's share of total working time. Further, as a result of which they are left with a markedly lower amount of free time relative to their men counterparts. Our findings, further, show that urban married employed men spend markedly more time, on average, a

day on total work relative to rural married employed men. Resultantly, the former is left with a lower amount of free time than the latter. On the other hand, rural married employed women spend more time, on average, a day on total work relative to the urban married employed women; the difference in vulnerability between them is quite clear when observed at the mean free time left — the rural married employed women are left with a markedly lesser amount of free time then the urban married employed women. It is worth noting here that married employed men's total work burden is mostly emanating from the time spent on paid work; and, this is visibly higher in urban areas than the rural ones. However, the rural-urban nexus, in this respect, is different for married employed women: in rural areas, the burden of total work is arising mostly out of time spent on unpaid work, whereas, in urban areas, it is arising mostly out of time spent on paid work. In rural India, the rigidity of prevailing social norms forces married employed women to take up a higher share of time spent on unpaid work, especially unpaid activities: Non-SNA (System of National Accounts) production, than that in paid work, and hence, are put under the trap of men's control. Such controls also prevail in urban areas, but a bit differently - the married employed women are asked to devote more time to paid work than the unpaid ones. The married employed women belonging to the economically active age cohort, as our findings reveal, are forced to work longer durations, and hence, are put under the trap of acute time poverty. The economic compulsions to work, in the market sphere, for sustaining the livelihoods of the family, and also, along with it, the need to meet the demands of home production, that fall in the domain of non-market spheres, make married employed women bear a severe double burden. Often, such activities overlap thereby pushing up the work intensity and making the situation worse. It is worth noting down one of the key findings obtained at the aggregate level or for all men and women: in rural areas, women are more likely to be time-poor than men; whereas, in urban areas, men are more likely to be time-poor than women. However, this is not so in the case of married employed men and women, all the married employed women are vulnerable to experience a higher likelihood of time poverty compared to their men counterparts both in the rural and urban areas. As our econometric findings reveal, married employed women confront a spectacularly higher probability of being time-poor relative to their men counterparts. Along with it, the estimated result shows several individual, household-level, and structural factors influence significantly the likelihood of experiencing time poverty of married employed men and women in India.

Female Labour Force Participation Through the Lens of Paid and Unpaid Work in District Faridkot

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This research paper is a preliminary insight into the dynamics of female labour force participation in Faridkot. The analysis is based on a sample of 192 women who are either home makers or earning in some or the other form part time or full time employment. The objective of this research is to identify the amount of time that women give to paid and unpaid work in the domestic sphere or in employment

related activities. To undertake this study, a questionnaire for a Time-use Survey (TUS) was designed based on the United Nations (UN) system of classification of daily activities. Considering a 24-hour day, number of hours spent by women on each activity was recorded. The method of data collection used was Computer-Assisted Personal Interviews (CAPI) where a data collector filled the online form face-to-face using a mobile phone to record the responses. The method of research was exploratory in nature and the questions asked were both close and open-ended. For the purpose of this paper, data analysis has been done for close-ended questions whereas some key observations have been drawn based on the responses given to certain open-ended questions asked in the survey. Random sampling was used to record responses from the 3 blocks of Faridkot namely, Jaito, Kotkapura and Faridkot. Given that the district is itself rural, the population in each block may be considered homogenous. This research is a part of a study of 384 samples based on the female population of Faridkot, out of which 192 samples have been assessed at the current stage to drawn certain preliminary insights. The results show that women in Faridkot district are largely homemakers and spend most of their time in unpaid domestic and care work for their family members. It has been observed that women spend a negligible amount of time on production of goods for self- consumption, learning, culture or leisure. However, they seem to be well-rested as most of the women responded to getting a decent amount of time for self-care and maintenance. An interesting finding of the study has been that many women who are homemakers may also be considered part-time self-employed, as they often take up orders from their social networks for skill-based work like stitching or embroidery and such other work based on their unique skillsets. However, most women earning income in some or the form are making less than ₹5000 per month. This shows why, majority of them responded to primary bread-winner of the family being the male in their house, with husband being the most common. This research opens many avenues for further study on the topic considering the unique skillsets they possess. Measurement of unpaid care work to determine total working hours of women unaccounted for in the formal system is also a subject for further exploration based on this study. A policy implication can be to strengthen the implementation of projects under the National Rural Livelihoods Mission (NRLM) and PM Vishwakarma Scheme to integrate women with various skills into the formal avenues of employment.

Navigating through the Day: Time Poverty in Indian Households

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Though income (consumption) poverty is the most common measure of poverty, in the past few decades alternative measures of the poverty such as Human Development Index (HDI) and Multidimensional Poverty Indices (MDPI) have been adopted. These multidimensional poverty measures include all necessary resources to maintain "a decent life". Despite material affluence, there is growing concern about 'time poverty' across the world. However, due to lack of reliable time use data evidence on time poverty from developing nations like India are scant. The concept of time poverty although relatively new has

important bearing on the individual, organisational and policy decisions. There has been ample literature on and work labour-leisure trade-offs, the time poverty brings in the important parameter of discretion to understand these relations. From individual perspective, studies of lack of leisure and exercise time have negative impact of the physical and mental health of the individuals. Furthermore, studies have emphasised the importance of the time pressure on the workers productivity as well. Also, the feminist scholars have used the time use surveys to address the issues of gender inequality and underrepresentation of women efforts to maintain household. It is in this context that the current study examines time poverty in India. Following Harvey and Mukhopadhyay (2007), we use nationally representative data from Time Use Survey (TUS) 2019 in India to measure the incidence of time poverty in India. Using unit level data from the first nationally representative TUS 2019, we examine time poverty in India. We find that single parent households with at least one child are time poor. Taking employment status of adult household members into account, time poverty is evident in single parent as well households where both parents are employed. There is strong evidence of gender segregation of work as in dual parent households where both parents are employed, women face the double burden of carrying out "unpaid domestic" as well as "paid employment" activities. Furthermore, we find that incidence of time poverty is higher than that of income poverty, and rural households are less likely to be time poor. Also, the access to cleaner and time saving cooking fuel and time saving methods for washing clothes reduce time but it happens mostly in urban areas. The study emphasises methodological challenges in measuring time poverty and identifies policy implications for addressing time poverty. India forms a special case for understanding the time poverty. We explore the role of employment, presence of children and gender in to measure the incidence of time poverty. The results of the study firstly contribute to the understanding of time poverty. To the best of our knowledge, there is no quantitative evidence on time poverty in India and our study presents the novel estimates of time poverty in India. In India, transnationally women have been designated to carry out domestic chores and the activities do not form part of nation income accounting domes the consideration for women's time in household has not been acknowledged, the results bring out the importance of the women's role in household well-being.

Unveiling the Price Tag on Unpaid Labour: Understanding Gender Disparities in Time Allocation among married women and men in Kollam district, Kerala.

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In today's dynamic and competitive world, women's participation in the workforce will not only result in economic development, but also help in bringing financial independence to them. Investing in better education for women has helped them to break the glass ceiling of many social, economic and political barriers. However, education in itself cannot bring them into the workforce. According to International Labour Organization (ILO), employability gender gap in India is 50.9 percent. Also, it was found that, in India only 19.2 percent of women are in the labour force compared to 70.1 percent of men. Gender Gap Report 2023, published by World Economic Forum (WEF), has ranked India in the 127th position,

way below its other South Asian neighbours like Sri Lanka, Bhutan, Nepal, and Maldives. The various reasons for this gender gap are vulnerable employment, gender pay gap, non-availability of suitable employment opportunities for women, safety concerns and lack of women centric labour laws in the country. Apart from the above-mentioned factors, India's low female labour force participation is mainly due to strict and rigid societal norms that require women to be obligated to undertake unpaid care work at home, over and above their interests and passions. Further, due to India's patriarchal mindset, men are generally discouraged to partake in unpaid domestic work and unpaid care work from their childhood which make them poorly skilled to handle household chores. Women's empowerment should encompass not only economic gains but also include social transformation, dignity of labour and equal rights. The United Nations (UN) annual report (2013-14) has stated that unequal distribution of unpaid care work between men and women is a contravention of women's right and decelerates their economic empowerment. Women's voice should be heard by civil society and Government and it should be further propagated through their wholistic socio-economic empowerment. The moment a country recognises this and take proactive steps to tackle it, that nation tends to move up the development ladder. The state of Kerala is often celebrated for its high literacy rate and progressive stance on gender equality. According to the 2011 census, 80.72 percent of women in Kollam district are categorised as non-workers and in the periodic labour force survey (2021-22), female workforce participation rate of the state was only 32 percent. It was found that factors like religion, presence of children aged 6 years and below, family size, number of children in the family, employment status, age group between 31-35 years and 36-40 years significantly impact the time use pattern of married women in Kollam. The study also found that the value of unpaid work done by married women in Kollam district is two and half times the value of unpaid work done by married men in a day. The daily time allocation patterns of married individuals, whether employed or unemployed, reveal notable gender disparities. A married employed woman, on average, dedicates 6.5 hours to sleep and 3.2 hours to leisure per day, while her male counterpart enjoys 7.5 hours of sleep and 4.9 hours of leisure. For married unemployed women, the figures are 7.1 hours of sleep and 4.4 hours of leisure, compared to married unemployed men who allocate 9.2 hours to sleep and 7.9 hours to leisure daily. Notably, the average minimum value of unpaid work performed by married women in a day in Kollam district is ₹250.77, which is more than two and a half times the value of unpaid work done by married men (₹101.40). These findings highlight the substantial time married women invest in unpaid care work, emphasising the need to recognise and value this productive contribution on par with other forms of work.

Women and Unpaid Work in India

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Poverty is measured largely in terms of income threshold levels required to sustain a household or a person. It is not just income or money that is required to maintain a household above the income poverty line but also time is also an equally important input. Time input includes both the time allotted for paid and unpaid work. The concept of time use in paid activities are captured by the wages or

income whereas the unpaid work is often ignored. The concept of time poverty emphasis on the need to consider the contribution of unpaid work by the people in a household while considering the poverty threshold levels. This helps to capture the contributions of time and money in the calculation of the poverty measurements. The contributions of both time and money as poverty measurement is less explored in the context of India. Literature shows that gender plays a crucial role in the division of work in the household. Therefore, the study intends to understand the differences in the average time spend for different types of activities across gender to bring out the contributions by different gender for paid and unpaid work. The study then measures the time poverty across the gender. In order to understand the gender disparity Time use survey for the year 2019 is used for the analysis. It provides the data for six states in India with a sample of 1,38,799 households. It provides the data for the time spent for different activities in 24 hours in a day. Information on time use data for each member of age 18 years and above of the selected households are only considered for the study. Activities can be broadly classified into paid work, unpaid work and extension activities. Significant difference on the average time spent for paid, unpaid and extension activities are found across gender. The time poverty is calculated using the Foster-Greer-Thorbecke methodology. Head count and poverty gap are measured to identify the number and intensity of time poverty gap. Time use data for different activities clearly show the inequality in terms of tie spent for paid, unpaid and personal care activities for males and females. Literature has shown time poverty is one of the causes of women's poverty. Time poverty is positively associated with the income poverty levels. Women are highly vulnerable to time poverty and intensifies with low-income levels. Time spent for personal care is highly compromised to meet the money needs in a household. Women are more likely bear the burden of the same compared to the male counterparts.

Wage Disparities and Occupational Segregation by Gender in India: An Empirical Analysis using PLFS Survey Data 2017-18 to 2021-22

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This paper explores the magnitude and evolution of gender based occupational segregation in India for the period 2017 to 2022, and the gender wage gap corresponding to different groups of occupation. A disproportionately large percentage of the working age group women are engaged in the unpaid nurturing, caregiving works, domestic chores or other support giving based services. The Periodic Labour Force Survey (PLFS) data sets (2017-18 to 2021-22) has been used for the analysis. The national and international definition of the work and employment differs. Focussing on the marketed economic activities only undermine women's work to a great extent. But again, not all marketed economic activities are also not recognised for the accounting labour statistics. The first objective of the paper is to examine whether women's work force participation rate significantly differs from men if those unrecognised works get their recognition. Further skill based occupational groups has been constructed in line with International Standard of Occupations and it has been reflected that how women's' work

highly concentrated in low and unskilled and low paying occupations in the care giving, sales, teaching, teaching supports and labourers kind of works. Considering the daily real wages for the regular and casual workers, the study unveils the existence of gender wage gap too. It has been found that it is the Diploma and Certificate level of education and age give women the edge to fight against the pay disparity. A mapping exercise reveals that contrary to our perception, it's the southern part of India is the underperformer in terms of pay equity, despite them having higher social development indicators. The econometric analysis of wage disparity, followed three levels of linear regression approach and the Multinomial Logit Model. The result finds the existence of gender pay disparity and which can't be explained by the differences of productive capacities among men and women. Also, the gender pay gap get worse for regular jobs in the non-agricultural sector as one move from the high skilled occupations to low skilled occupations. According to a report by the International Labour Organization (ILO), the gender pay gap in India stands at 27 percent as of 2023 implying that women earn 73 percent of what men earn for doing the same job. The reason behind this pay disparity can be differences in the job market, human capital characteristics, elements of discrimination and demand supply dynamics of the labour market as well as policy induced. In this term paper my effort was limited only to explore the existing gender pay gap through the lens of occupational patterns of men and women. Through further research in this area, it can be investigated the determinants of the gender pay gap in the Indian context and the changing pattern of those determinants over the time. Since 1990, India has gone through a considerable change in its macroeconomic structure. It would be part of the quest of the analysis whether this pay disparity has any power to change the macroeconomic stability of the economy which often interspersed with the turmoil of the external economic and policy environment.

TECHNICAL SESSION 3.9

Transforming the Care Economy for Gender Equality – Recognizing Women's Contribution and Creating better Gender Balance in the Economy as well as within the Household

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India is primarily a rural nation, where over 60 percent of the population lives in over 6 lakh villages. About 60.8 percent of its workforce resides in these rural areas, contributing significantly to the nation's economy, accounting for approximately 46 percent of its Gross Domestic Product. Within this context, it is essential to acknowledge the notable presence of 48 percent women population (as per Census 2011) and women's Labour Force Participation Rate in rural areas of 41.5 % during 2022-23. This demography is significant, not just in terms of numbers but also because of the vital roles that women play across various aspects of development. International Monetary Fund Chief Christine Lagarde and Norway's Prime Minister Erna Solberg in a joint paper published by the World Economic Forum have highlighted the importance of raising women's participation in labour force equivalent to men which could boost India's GDP by 27 per cent. Women's empowerment is a critical global imperative, serving as a fundamental element in the pursuit of sustainable development. As a committed signatory to the United Nations' 2030 Agenda for Sustainable Development, India has also embraced the objectives of achieving Sustainable Development Goals (SDGs) number 5 and 16 relating to gender equality and fostering robust institutions, respectively. Within this context, rural local governance bodies termed as Panchayati Raj Institutions (PRIs) in India, have emerged as pivotal agents of change in advancing women's empowerment and facilitating the realization of SDGs. Ensuring 33 percent women's representation as elected officials in PRIs ensures that their perspectives shape the local and national policies as mandated through Article 243D(3) of 73rd Amendment Act, 1992 of the Constitution of India. This is also in conformity to Article 21 of the Universal Declaration of Human Rights which asserts universal right for all individuals to participate in their country's governance, either directly or through elected representatives of their choice. While it may be seen from various reports that the status of marginalized section of women ,or otherwise termed as Dalit women, in developmental parameters is slightly more critical but the larger picture remains that gender equality under SDG 5

may be achieved only when a caste-blind approach to women's development is taken which aligns with principles of equality, human rights, and social cohesion, fostering an environment where every woman can thrive and contribute to the progress of society without facing discrimination based on her caste background. It is important that the progress of women is measured in a multi-dimensional context based on evidence rather than perceptions which helps policy makers in evidence-based planning, deployment of resources appropriately. This paper analyses the progress in women' development across six vital domains of economic empowerment, digital empowerment, health, education, decisionmaking and political representation sub-divided into and nineteen indicators. This may also enlighten the intra-country specific status of women as compared to country's status in international report of Global Gender Gap Report 2023. The data reference has been taken from the National Family Health Surveys (NFHS) 4 and 5 across the period of 2015-16 and 2019-21, respectively of Ministry of Health and Family Welfare and Ministry of Panchayati Raj. NFHS a multi-round questionnairebased survey conducted on sample households for data on various health, demographic and economic indicators particularly relating to women. This analysis has been corroborated through NITI Aayog's SDG India Index 2020 score. The analysis has found that although there has been a progress in key indicators relating to women but there is a room for accelerated progress for which PRIs can play a crucial role. Further, the Self-Help Groups (SHGs) can catalyse the progress of women's development especially economic development. Additionally, special focus on women's education, health facilities, skill development, trainings, safety at workplaces, easy mobility etc. can help in improving women's labour force participation. While highlighting how changes in one sector can have cascading impacts across other areas of women's empowerment, this Paper also emphasizes the need to adopt a datadriven and cross-sectional analytical approach for better-informed and effective policy decisions for women's empowerment.

Employment Discrimination among Labour in India: An Empirical Study

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Over the past decades, inequality has become one of the most complex and vexing challenges in the global economy. While economic inequality is the prime focus in the literature of inequality, differences in education and employment may be the major factors in economic inequality. The literature, however, does not focus adequately on inequality in a qualitative variable like employment, education and health may be because of inherent difficulties in measuring inequality in qualitative or ordinal variables. Measuring inequality of a quantitative variable like income is well developed in the literature, inequality measurement of a qualitative variable like employment is a challenging job. This study measures and analyses employment inequality in Indian labour market using periodic labour force data, an ordinal variable, employment. This study is an attempt to look into employment inequality in Indian labour market by considering the difficulties in measuring inequality in a qualitative variable using information

on job characteristics as available in the Periodic Labour Force Survey (PLFS) in India for 2018-19 and 2022-23. We define employment inequality as differences in job quality in terms of job tenure, skill level and social security benefits among wage workers. Job category is a qualitative variable and we express it in two separate categories according job characteristics. Perhaps the most common approach used in the past few decades to identify and quantify these causes is the technique of decomposing intergroup differences in mean levels of an outcome into those due to different observable characteristics or "endowments" across groups and those due to different effects of characteristics or "coefficients" of groups. The technique is commonly attributed to Blinder (1973) and Oaxaca (1973). The Blinder-Oaxaca decomposition technique is especially useful for identifying and quantifying the separate contributions of group differences in measurable characteristics. However, if the outcome is binary, such as employment quality, the coefficients are from a logit or probit model. These coefficient estimates cannot be used directly in the standard Blinder-Oaxaca decomposition equations as the later requires estimates from linear regression model. A relatively lucid method of performing a decomposition that uses estimates from a logit or probit model was first described in Fairlie's (1999) analysis of the causes of the black/white gap in self-employment rates. In Fairlie's (2006), he provides a more through discussion of how to apply the technique an analysis of the sensitivity of the decomposition estimates to different parameters, and the calculation of standard errors. The non-linear decomposition technique described may be useful for identifying the causes of circumstances or other categorical differences in a binary outcome in which a logit or probit model is used. The present study proposes an alternative method in measuring inequality of a qualitative variable like employment. In our study, inequality in employment is considered as a situation where all workers even in a particular employment group are not enjoying equal job benefits like regular pay etc. in their existing jobs. We differentiate between good jobs and bad jobs in terms of nature of pay, written job contract, social security benefit and job skill. The study confirms pre-existing inequality among female workforce more than male counterparts. It shows inequality increases in the post-covid scenario where significant percentage share of women is observed to be employed in job categories with no security benefits in urban areas highlighting lesser job available with better job conditions.

Care Economy and Labour Market in India: A Comprehensive Analysis

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This paper delves into the 'care economy' in India, focussing on its intersection with the labour market. The care economy refers to activities and services that involve caregiving — both paid and unpaid including child care, elderly care, and healthcare services. In India, this sector has grown significantly, reflecting societal changes and economic evolution. The study aims to explore the dynamics of the care economy, its impact on the labour market, and the challenges and opportunities it presents, with a particular emphasis on gender dynamics. Introduction India's care economy is a critical yet often

undervalued sector. It encompasses a range of services, from healthcare to domestic work, significantly contributing to the country's economic and social well-being. This sector is predominantly female-driven, highlighting significant gender implications in terms of employment, wages, and social recognition. The study examines these aspects, providing insights into the challenges faced by care workers and the policy interventions required to support and sustain this vital sector. Between 1975 and 1995, 65 percent of advanced countries and 51 percent of developing countries experienced an increase in women's labour force participation and a decrease in men's employment. Many scholars believe that this is an indication of a positive effect on the equitable division of power and resources in the household, but other scholars posit that the gender rooted functioning of the societies will nullify any of these effects. Still, the differential between men and women's wages in general are considerably higher The study adopts quantitative research method. Utilising data from sources such as the National Sample Survey Office (NSSO) and the Periodic Labour Force Survey (PLFS), the study conducts statistical analysis to understand employment trends, wage disparities, and demographic characteristics of the care workforce in India. The preliminary findings indicate a substantial gender gap in the care economy, with women disproportionately represented and often under-compensated. The sector is marked by informal employment arrangements, lacking in social security benefits and job security. The COVID-19 pandemic has further highlighted the vulnerabilities of care workers, emphasising the need for robust support systems and policy interventions. There has been no single framework in economics which did not have a limitation in capturing the fallacy of existing policies and work done in the area of women's paid and unpaid work, the most idealised being the care work. These frameworks do not root themselves in the critique of highly conservative ideologies through which our everyday lives are informed. Now the State recognises the invisibility of women from the economy and also seek dramatic improvements in the policy-making. But the road to success is still very long and very hard to walk on, we, the women, must struggle and fight in our everyday lives so that it shakes the economy's blindfolded perspective on women and come to the realisation that we contribute a very substantial part to it and it would have been impossible for it to function without our 'unvalued' and 'unseen' work. The care economy in India plays a crucial role in the country's social and economic fabric, yet it faces several challenges that need immediate attention. Addressing these requires comprehensive policy frameworks that recognise the value of care work, ensure fair wages, and provide social security benefits to care workers.

Trend of Female Labour Force Participation Rate in India and Bihar: A Comparative Analysis

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A low female labour force participation rate (FLFPR) is one of the obstacles to the development of an economy. Therefore the objective of this study was to analyse the trend of FLFPR in Bihar and compare it with the trend in India. We found that FLFPR in India is 24.8 percent and it is 6.7 percent in Bihar which is significantly low in comparison to other states. Secondly, the causes for not participating in the

labour force and also to investigate the empirical test of the U-hypothesis, whether it is a U-shaped link between FLFPR and education level persists in Bihar or not. To fulfil the purpose of the study we used the National Sample Survey Office (NSSO_ 61st and 68th rounds (Employment and Unemployment) and Periodic Labour Force Survey (PLFS) reports of different years from 2017-18, 2018-19, 2019-20, 2020-21 to 2021-22. After comparing Bihar with the Indian trend, we found that the FLFPR in Bihar was lower than the total female participation in India over time. This implies the problematic labour market situation for females in Bihar. Thus, there is a need to open new employment opportunities for females. But the FLFPR is at the rising step after 2018-19 in India and Bihar. The continuous government interventions are one of the major reasons for this progress. After comparing the region-wise i.e. rural and urban areas, it is observed that the FLFPR is lower than male labour force participation in both areas in Bihar. And the disparity can be seen mainly in the rural region of Bihar. This shows the gender discrimination in the labour market of Bihar. While within the status of employment of female workers, we analysed that there is a decrease of casual labour in India but in Bihar it increased which shows that there is casualisation of female labour in Bihar. The reason behind this gender gap is that women less participate in the labour market because they are mainly involved in childcare responsibilities, lack of skills and training and other social reasons etc. Female labour force participation rate in Bihar can also be increased through a holistic plan that takes into consideration additional factors including, a part-time facility, a female-friendly workplace, and should also provide training and skills etc. which can also help reduce gender gaps in employment in Bihar. As many literatures stated there is a U-shaped relationship between level of education and FLFPR. Therefore, we tested this hypothesis in the context of Bihar and observed that the level of education in Bihar and FLFPR have an approximately U-shaped relationship. Which concluded that there is a positive association between FLFPR and level of education. It is depicted that FLFPR were significantly higher than the average for all females with postgraduate degrees, and graduates as well as for illiterate females. Thus, the government should promote education for women which helps in promoting employment opportunities for females, proper and decent working conditions and also reduce gender disparity in society to encourage more women to participate in the labour market and enjoy equal benefits in society. Adopting a comprehensive approach could increase the percentage of women in Bihar's labour force participation.

Tempo of Equality: A Melody of Gender and Non-Market **Household Production in India**

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The economic production process is a pivotal force which is shaping societal welfare, reaching beyond the confines of market-oriented activities to encompass the often-overlooked realm of non-market production within households. Though, it is the known fact that the women contribution in the household is always neglected by the society. In numerous societies, women stand as the primary

contributors to this non-market production; however, their substantial role often remains obscured within the conventional framework of the System of National Accounts (SNA). This oversight results in the invaluable contributions of women to societal welfare is going unaccounted for the calculations of gross domestic product (GDP). This study sets out to meticulously examine the temporal dimension inherent in non-market household production, aiming to unravel the intricate gender differentials that underlie this multifaceted temporal investment. By delving into the intricacies of time allocation within households, our objective is to explore the often invisible yet indispensable role played by women in shaping societal welfare. The analysis extends its focus to include a comparative examination of the time devoted to non-market household production, considering various socioeconomic backgrounds. Through this study, we seek to elucidate the disparities in the temporal investments made by different genders and across diverse socioeconomic strata in non-market household production. By shedding light on these nuanced variations, our study contributes to a more comprehensive understanding of how time allocations impact societal welfare, urging for a more inclusive assessment that acknowledges the entirety of contributions, particularly those arising from the less visible domain of household activities. To achieve these objectives, we leverage data from the Time Use Survey (TUS) conducted by the National Sample Survey Office (NSSO) in India throughout January to December 2019. The initial phase of analysis focusses on estimating the average time spent (in minutes) on diverse economic and non-economic activities, categorised by gender and habitation. Moreover, the study findings highlight a pronounced exacerbation of the time spent by women in unpaid work, particularly in domestic and caregiving services. This burden is particularly acute for women with lower educational attainment, those marginalised within society, and those belonging to underprivileged households. Despite its substantial contribution to societal welfare, non-market household production remains excluded from GDP considerations. Recognising the vital role of women in a country's economy, some nations have already incorporated non-market household production into their extended SNA. Furthermore, the findings of the study highlight the critical role that the often-overlooked aspect of the burden of unpaid activities within a household—an area not thoroughly investigated in previous studies. Through these insights, we aim to contribute to the ongoing discourse on the intricate dynamics of gender, time allocation, and the economic well-being of societies. Hence, in order to foster a more equitable economic environment for women, comprehensive initiatives must be undertaken within the broader framework of households, the state, the market, and society.

Uncovering the Hidden Reality: Addressing the Gender Disparity among workers in Home-Based Textile Industries of Panipat, Haryana

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The economic growth of India has been a topic of significant discussion and analysis, yet a critical dampener to this narrative is the declining participation of women in the labour force. This issue becomes even more pronounced when viewed through the lens of the informal sector, which constitutes

a substantial portion of the workforce. According to the National Sample Survey Organisation (NSSO) Survey on Employment and Unemployment (55th round, 1999-2000), a staggering 92 percent of the total workforce in the country was employed in the informal sector. This sector's growth rate was particularly notable in Haryana, with a 7.21 percent increase in informal workers between 1999-2000 and 2004-05, closely followed by the North Eastern states. Within Haryana, an intriguing aspect emerges: 52.43 percent of total female workers are engaged in home-based activities, especially in the thriving textile manufacturing hub of Panipat city. This particular industry has acted as a significant magnet for women workers not just from Haryana but also from neighbouring states. Despite this substantial presence, there remains a palpable dearth of substantial and widely accepted research focussing on home-based female workers, especially in the context of Panipat and Haryana. To address this gap, the current paper delves into analysing the main and marginal workers of Haryana and specifically focuses on Panipat using data from the census of India in 2011. This census provided crucial insights into workers in the textile manufacturing sector. The findings highlight a concerning trend within the home-based industry: the participation of females is significantly lower compared to males. Additionally, the proportion of females categorised as marginal workers surpasses that of main workers. These observations shed light on the disparities and challenges faced by female workers within the home-based textile manufacturing sector in Panipat and Haryana. The situation in Panipat is no different from Haryana with the exception of employed main female workers. The gender inclusivity of female employment in Haryana's household textile industry is a concern, and the same pattern is observed in Panipat as well. Women are primarily employed as marginal workers, which mean they have less job security and are more likely to experience periods of unemployment. Female workers could be exposed to hazardous environments or exploitative practices. Creating mechanisms for monitoring and ensuring workplace safety and fair labour practices becomes crucial to safeguard the well-being of these workers. This study serves as an important initial step in drawing attention to the underexplored domain of female home-based textile workers. It lays the groundwork for future policymaking by highlighting the disparities in participation and employment status among women in this sector. It underscores the need for targeted interventions and policy frameworks aimed at empowering and enhancing the participation of female workers in home-based industries, particularly in Panipat and across Haryana. In conclusion, the analysis underscores the significance of understanding and addressing the challenges faced by female workers in the informal sector, particularly within homebased industries, to foster more inclusive and equitable economic growth in the region. This study sets the stage for further research and policy initiatives that aim to empower female workers and leverage their potential contribution to the economic landscape of Haryana. By addressing these disparities and challenges, there's a prospect to unlock the full potential of women as active contributors to the economic growth and development of the region. Recognizing the pivotal role of female workers in home-based industries is crucial for not just economic growth but also for fostering societal inclusivity and progress. Efforts to empower and support these women will not only enhance economic outcomes but also lead to a more equitable and thriving community in Haryana.

Caste, Migration and the Labour Market: **Evidence from Odisha**

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Budhadev Mahanta, PhD Scholar, Jawaharlal Nehru University, New Delhi In the sprawling landscape of Odisha, India, this research study intricately dissects the interplay between caste dynamics, migration patterns, and their profound impact on the region's labour market. The primary objective of the study is to unravel the nuanced relationships between caste affiliations, migration trends, and economic participation. Employing a multi-method approach that includes qualitative interviews, surveys, and statistical analyses, the research aims to offer a comprehensive understanding of how caste influences migration decisions and subsequently moulds individuals' experiences in the labour market. The study initiates its exploration by delving into the historical context of caste structures in Odisha, tracing their evolution over time. Understanding the intricacies of caste dynamics is crucial to deciphering how these historical frameworks intersect with contemporary migration patterns. Caste, a deeply embedded social structure, plays a pivotal role in shaping the choices individuals make regarding migration, influencing their access to education, employment opportunities, and overall socio-economic mobility. By scrutinising the push and pull factors associated with migration, the research seeks to untangle the complex web of influences that drive individuals from different castes to move. The examination extends beyond mere demographic shifts, aiming to shed light on how caste considerations impact the decision-making processes of migrants. Education, a key determinant in socio-economic mobility, is scrutinised to discern how caste affiliations influence access to learning opportunities and subsequently shape career paths in the destination regions. Moreover, the study ventures into the heart of the labour market in Odisha to gauge the repercussions of migration. A critical exploration of whether migrants from diverse castes encounter varying challenges and opportunities upon entering the workforce becomes paramount. This analysis delves into aspects such as wage differentials, occupational segregation, and the overall socio-economic well-being of migrants. By doing so, the study aims to unravel potential disparities that may exist based on caste identities, providing a comprehensive snapshot of the socio-economic landscape. In the pursuit of understanding the nuanced dimensions of migration, the research underscores the need to scrutinise the socio-economic impact on migrants from different castes. Wage differentials, a reflection of economic disparities, are assessed to discern whether certain castes face disproportionate challenges or enjoy enhanced opportunities in the labour market. The study further investigates the occupational landscape, exploring whether there is a tendency for migrants from specific castes to be concentrated in particular professions, thereby unravelling potential instances of occupational segregation. Occupational segregation, when certain castes are disproportionately represented in specific job sectors, can contribute to a perpetuation of economic inequalities. Understanding these patterns is crucial for crafting targeted interventions and policy measures aimed at fostering a more inclusive and equitable labour market. In conclusion, this research study endeavours to unravel the intricate dynamics between caste, migration, and the labour market in Odisha. By adopting a multi-method approach, the study seeks to provide a nuanced understanding of how historical caste structures intersect with contemporary migration patterns and influence socioeconomic outcomes for migrants. As Odisha grapples with the challenges and opportunities presented by migration, this research aims to contribute valuable insights that can inform policies and initiatives geared towards fostering a more inclusive and equitable labour market for individuals of diverse caste backgrounds.

Measurement and Determinants of Economic Inequality for Migrant and Non-migrant People: Evidence from Regional Decomposition Analysis of Uttar Pradesh, India

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Migration and income inequality share a reciprocal relationship, driven by factors such as relative status and absolute income. While migration can alleviate poverty, it also contributes to increased inequality. The dual economy model and the Harris-Todaro model explain this phenomenon. The New Economics of Labour Migration emphasises inequality within sending communities as a migration driver. In India, internal migration has increased significantly, with Uttar Pradesh being a major migrant-sending state. Regional inequality, poverty, and high unemployment characterise Uttar Pradesh, impacting migration trends. This study offers a valuable contribution to the existing literature as it addresses a gap in research by examining economic inequality through consumption expenditure between migrants and non-migrants at regional level, which is less explored. Although there are distinct bodies of literature dedicated to each of these phenomena, their interconnection has been relatively neglected. This study highlights the economic inequality between migrants and non-migrants using Gini inequality index and provides visual representations through Lorenz curve. This study is based on the Periodic Labour Force Survey (PLFS) of National Sample Survey Office (NSSO), 2020-21, and is a comprehensive national representative survey, which includes individual and household characteristics. Additionally, the Oaxaca-Blinder mean decomposition method along with simple Ordinary Least Squares method has been used to delineate the economic inequality gap between migrants and non-migrants, emphasising the role of their socio-demographic variables. Furthermore, the study examines determinants of migration and the patterns of migration in Uttar Pradesh. The analysis uses consumption expenditure deviation as a proxy of economic inequality outcome. We identify the factors that determine economic inequality as well as economic inequality gap between migrants and non-migrants across the NSS regions of Uttar Pradesh. The findings indicate a significant gap in economic inequality between migrants and non-migrants across the state. Notably, there exists a 14.8 percent difference in the Gini Inequality index between migrants and non-migrants in the full sample. Also, there exists variation in economic inequality between migrants and non-migrants across NSS regions. Such as 2.0 percent in Northern

Upper Ganga Plain, 19.2 percent in Central, 18.03 percent in Eastern, 10.59 percent in Bundelkhand, and 22.98 percent in Southern Upper Ganga Plain difference in the Gini Inequality Index between migrants and non-migrants. The gap indicates that migrants have more economic inequality than nonmigrants across NSS regions except Norther Upper Ganga Plain, where non-migrants have more economic inequality than migrants. The Lorenz and contrast graph also confirms the inequality gap between migrants and non-migrants, as the Lorenz contrast graph shows an inverted U-shape pattern for difference in economic inequality between migrants and non-migrants. The OB decomposition also confirms the economic inequality gap between migrants and non-migrants. The factors that are significantly affecting the economic inequality between these two groups (migrants and non-migrants) are socio-demographic characteristics of an individuals in different regions of Uttar Pradesh. Based on the empirical findings, this study suggests potential policy measures to address effective delivery of social protection policies. Also, intra-government and inter-government cooperation on mechanisms of integration, and portability of these policies.

Women's Participation in Migration and Decision-making **Processes in the Context of Slum Dwellers**

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As the trend of women's migration is changing primarily due to economic reasons, several studies have emerged to observe the positive impacts of migration on their lives. Most studies are not focussed on a specific group of women but generally centre around women. This study is unique in this regard as it specifically focusses on those residing in slums and shantytowns. In situations where the living conditions pose a significant challenge for them, this study explores how migration interacts with their lives. Firstly, it measures the degree of participation in household and economic decisions. An index has been constructed for this purpose. Various variables have been considered within each category of decisions (household and economic). Secondly, it evaluates the relationship between index values and socioeconomic characteristics of women. The study involves creating an index to quantify the level of participation. Separate variables are considered for both household and economic decisions. This suggests a comprehensive approach, acknowledging that participation can vary across different aspects of life. Once the index values are obtained, the study intends to analyse how these values relate to the socioeconomic characteristics of women. Socioeconomic characteristics may include factors such as education, income, occupation, marital status, or other relevant indicators. By pursuing these objectives, the study aims to shed light on the extent of women's participation in household and economic decisions and understand the factors that may influence or be associated with their level of involvement. The index becomes a tool to quantitatively assess and compare these degrees of participation. This research design allows for a nuanced exploration of women's roles in decision-making and how these roles may be influenced by broader socioeconomic factors. For this study, the city of Cuttack in the state of Odisha has been chosen, where 300 women have been randomly selected from five slum settlements. All these women are involved in some form of economic activity after migration, and they mostly come

from districts around the state. They are mostly at a lower level of education, and their income levels are also quite low. The study reveals that factors such as the age of women, their income levels, and the duration of stay due to migration are the primary determinants of their involvement in household and economic decisions. Specifically, in domestic decisions, the caste, the age of women, and at the time of marriage emerge as a significant factor in determining their participation. Therefore, this study suggests that there are factors within our control that, by managing them, can make migration more favourable for women. For example, connecting women to higher-paying jobs rather than low-wage jobs, and taking steps to delay their immature age at marriage, can be instrumental in this regard. Therefore, we can conclude that to ensure the participation of women in decision-making processes, firstly, we need to empower them economically. Secondly, it is also crucial to ensure when they get married. We need to ensure that their marriage does not happen at an immature age. Since the duration of stay is an important factor that indicates if women are exposed to the outside world, they can develop aspirations and position themselves competitively. But it depends on us how we can open doors for them with ease rather than subjecting them to more difficulties from the outside world.

The Impact of Trade Liberalisation on Child Labour in **Developing Countries: Income Versus Substitution Effect**

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Child labour persists as a pressing global issue, affecting around 160 million children worldwide, jeopardising their well-being and hindering progress towards Sustainable Development Goal (SDG) 8.7, which aims to eradicate child labour by 2025. The recent increase of 8.4 million child labourers in the last four years, compounded by the impact of COVID-19 pandemic, underscores the urgency of addressing this critical concern. This study delves into the nuanced impact of trade policies on child labour across 39 developing countries during the first two decades of the 21st century. Unlike previous predominantly theoretical research, our empirical analysis draws on a comprehensive dataset, examining the direct and indirect effects of trade liberalisation on child labour. Critics of globalisation argue that increased market integration may escalate child labour rates by creating more earning opportunities for children. Initiatives like the Doha Round of 2001, focussing on improving agricultural trade accessibility for economically disadvantaged nations, have sparked debates at the World Trade Organization (WTO). Some propose trade sanctions against countries with high child labour rates, but concerns arise about unintended economic consequences leading to increased poverty and, subsequently, more child labour. Proponents, on the other hand, suggest that the income benefits from free trade could discourage child labour if it becomes undesirable in parental preferences. Our study carefully considers the impact of trade policies on child labour at both the direct and indirect levels. Direct impacts are assessed using tariffs, the KOF globalisation index, and foreign direct investment

(FDI) inflow, while the unique approach of capturing the indirect impact involves analysing the price effect through purchasing power parity (PPP) and inflation-adjusted price levels. Distinguishing between small and large countries, net importers, and exporter countries, we employ appropriate dummy variables to explore the diverse impacts of trade liberalisation. A significant contribution of our work is the identification of child labour-intensive products for 29 developing countries. Notably, all but three economies fall under the criteria of net exporters of child labour-intensive products and large countries. These goods predominantly belong to primary and low manufacturing sectors, where the demand for low-skilled labour is high, allowing for substitution between adult and child labourers due to poor financial conditions. Utilising the instrumental variable method to address endogeneity concerns, we find intriguing results. Over the two decades studied, trade policies played a pivotal role in reducing child labour. During 2002-2011, developing countries with a higher share of child labourintensive exports experienced a substitution effect, increasing child labour rates due to heightened demand for cheaper labour. In contrast, during 2010-2019, larger economies witnessed a substitution effect leading to reduced child labour as higher wages and increased employment opportunities improved household incomes. The study highlights the intricate interplay between economic growth, inequality, government spending, and globalisation in influencing child labour. It emphasises the need for targeted policy interventions to mitigate unintended consequences. Our findings carry significant policy implications for developing countries striving to eliminate child labour, suggesting that social security policies alone may not be sufficient. Structural changes altering income distribution patterns could yield more sustainable results. As the world grapples with the aftermath of the COVID-19 pandemic, our study underscores the importance of addressing the impact on unorganised sectors and the potential exacerbation of child labour. In conclusion, the findings call for concerted efforts towards creating comprehensive and effective policies to eradicate child labour and foster sustainable development.

Unveiling Layers of Struggle: Caste, Gender, and Precarity Among Indian Street Vendors

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The article sheds light on the challenges faced by street vendors in India. Street vendors constitute the most significant and deprived segment of the country's unorganised sector. The authors argue that street vending is not only a source of self-employment for the poor but also vital to provide convenient, affordable services to the urban populace. The article explores the vulnerability, fragility, and marginalisation of street vendors under faulty urban governance and development practices by tracking their lives, pains, and plight as vendors. The authors argue that the current laws, schemes, and policies are awfully unsympathetic, hostile, and unreceptive towards the ordeals of this section of the urban population. The article provides examples of the challenges faced by street vendors, including harassment by police and other authorities, extortion by local goons, and lack of access to credit and

financial assistance. The authors also highlight the specific challenges faced by Dalits, women, and child vendors, who are the most vulnerable and deprived. The article discusses the history of street vending in India and the legal framework governing it. The authors argue that the current laws and policies are inadequate and fail to address the needs of street vendors. They suggest that a comprehensive national policy for street vendors is needed, which recognises street vending as a legitimate occupation and provides access to credit and financial assistance to street vendors. The authors conducted a case study in Ghaziabad district, Uttar Pradesh, to explore street vendor problems on the basis of caste, age, and gender. The study surveyed around 600 street vendors in weekly markets in Ghaziabad, primarily in Indirapuram, Vasundhara, and Vaishali for over three months. The study primarily concerns the issues and challenges faced by street vendors in general, and women, child, and Dalit vendors, in particular. The study found that many street vendors initially refused to answer questions owing to a fear of harassment by the local police and goons who extort money from them on a daily basis. The study also found that many street vendors are not aware of government rules and legislations regarding street vendor and hawker's rights. The study found that 10 percent of the total respondents were children, 15 percent were women, and 55 percent of total respondents were Dalits. Jatavs constituted around 80 percent of the total Dalit vendors in the survey, and 60 percent pf Yadavs were among the Other Backward Classes (OBCs). In the survey, anyone below the age of 18 years was considered a child. The study found that 10 percent of the total respondents were uneducated, 60 percent completed their primary education in a public school, and none of them were graduates. The authors argue that addressing the challenges faced by street vendors is not only a matter of social justice but also crucial for the economic development of the country. Street vending provides a source of self-employment for the poor and is vital to provide convenient, affordable services to the urban populace. The authors suggest that a comprehensive national policy for street vendors is needed, which recognises street vending as a legitimate occupation and provides access to credit and financial assistance to street vendors. The authors also suggest that there is a need to change the Sections 283 and 431 of the Indian Penal Code (IPC) and municipal acts, which work completely against the vendors, as the police can use these to extract money from the vendors and mess with them. In conclusion, the article sheds light on the challenges faced by street vendors in India and the need for a comprehensive national policy for street vendors. The authors argue that addressing the challenges faced by street vendors is not only a matter of social justice but also crucial for the economic development of the country.

Social Reproduction in Petty Commodity Producing Households: The Case of Animal Husbandry in Southern Haryana

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Contemporary class analyses of Indian agricultural households typically identify landlords/capitalist farmers/dominant classes and landless labouring classes/classes of labour as the two poles of the class hierarchy, with a differentiated peasantry or petty commodity producers in between. While the processes

of differentiation and proletarianization of the peasantry have received much scholarly attention, there is little theoretical engagement with the form of contemporary agrarian petty commodity production. Agrarian petty commodity producing (PCP) are households that engage in cultivation based primarily on family labour, and/or which do not systematically produce a surplus. The PCP households are characterised by the embodiment of both capital and labour (in gendered and generational roles) and the corresponding circuits of production and reproduction. The circuits and processes of production and reproduction aid and enable each other while also being in contestation and contradiction. While capitalist firms are able to 'export' the costs and labours of social reproduction on to gendered households and the state, PCP households cannot do such exporting and must meet the bulk of both production and reproduction needs internally. Gender relations and kinship structures shape the division of the PCP household's labour power between productive and (social) reproductive activities. The paper explores how petty commodity producing households employ regional social and patriarchal norms to exert control over women's labour-power and deploy it for the reproduction of household labour-power. This is done through an examination of the place of animal husbandry in the ensemble of livelihood activities undertaken by rural PCP households. We do so using primary field evidence from Sangli (name of village changed) in southern Haryana. The goal is to understand how households across caste-classes themselves view animal husbandry work in relation to other livelihood activities, and to unpack the economic and social factors that motivate this work. The paper will delve into the practice of animal husbandry in agrarian households i.e., households that maintain some association with land and/or agricultural labouring. I look at the labour process of husbandry, the ways in which households procure resources, the extent of marketisation versus internal consumption of husbandry output, and the socio-cultural norms around husbandry work across differentiated agrarian households. We find that animal husbandry perfectly encapsulates the overlap and contestation between production and reproduction processes in PCP households, which contributes to its undercounting in national income and employment statistics. Animal husbandry (AH)work, while it may create exchange values, is essentially an activity of biological and social reproduction. Like capital, PCP households also undervalue biological and social reproductive work, and employ regional patriarchal norms and sociocultural hierarchies in the devaluation of such work. The devaluation of AH work lies in its conflation with the domestic duties of dominant caste women. Animal husbandry work is therefore not seen as value creating, nor does the market typically reward as such. Instead it is naturalised as the duty of women. Moreover, in the case of southern Haryana, livestock rearing is integral to dominant caste/ Ahir sociality, such that AH work (on the part of women) and the consumption of its product (by men) is linked to status production for dominant caste households. The performance of AH work by dominant caste married women not only rests on but regenerates caste-based social norms and values.

TECHNICAL SESSION 3.10

Impact of Remittances on Socio-Economic Wellbeing of Gulf Migrants Family: A Study on Dalit Women Domestic Workers from Andhra Pradesh to Gulf Countries.

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This study examines the impact of remittances on the socio-economic well-being of Dalit women domestic workers migrating from Andhra Pradesh to Gulf countries. The literature review reveals a shift in the socio-economic dynamics of communities affected by Gulf migration, focussing on unskilled and uneducated female migrant households. Notably, the income disparity between local and Gulf employment has significantly improved, altering traditional power structures in villages. Upper caste women, who once acted as patrons for Dalit women in agriculture, have seen changes in social dynamics due to Gulf migration. Scheduled caste (SC) individuals now secure jobs without wage discrimination, reducing social domination in village societies. Remittances play a crucial role in the economic and social development of migrant households, particularly for SC households investing in education and acquiring assets. The study highlights variations in remittance utilisation across different castes, with upper castes favouring bank transfers while SCs often rely on brokers. The findings underscore the societal stigma attached to women's migration for domestic work in Gulf countries, with a more pronounced negative attitude toward SC women in certain (YSR Kadapa and East Godavari) districts. Despite prevailing societal challenges, Gulf women migrants, especially SCs, have utilised remittances for economic and social progress. The construction of new houses is a visible indicator of improved social status in rural societies. The study classifies Gulf women domestic workers into four social communities—SCs, Scheduled Tribes (STs), Backward Classes (BCs), and Open Category (OC)—revealing fundamental differences in occupation, asset position, educational attainment, and social capital, shaping their distinct socio-economic trajectories. Across the communities, the purpose, pattern of migration, etc., are almost the same. The female migrant housemaids are unskilled and uneducated. The income they earn through the Gulf work is much higher than what they earn locally. Upper caste women acted as patrons for women agricultural labourers (Dalits/SCs) in the village. It is changed due to Gulf migration. The SC people get secured jobs. Now, there is no discrimination

in terms of wages and treatment in the labour market. Thus, social domination has come down in the village society due to Gulf migration. Remittances are playing an important role in the economic and social development of the migrant households. The SC migrant households have realised that their development rests on investing in children's education or acquiring household assets through remittances. They have sent remittances through co-workers, upper caste migrants, bank transfers and by themselves in both the districts. But the upper caste migrants have transferred money through banks. It is different in the case of SCs who have done it through brokers. It is noticed that BCs and OCs, as mentioned above, have utilised their remittances more for asset creation and SCs have spent on education of their children followed by purchasing of assets. The study finds that the social stigma of society toward women migration to Gulf countries for household work is still prevalent, and many people have a negative attitude towards these women. This attitude is found to be high towards SC women migrants in the YSR Kadapa district. The major finding of the study is that Gulf women migrants have spent their remittances to achieve economic and social progress in the villages. Scheduled castes (Dalits) have particularly secured higher social standing when compared to their social conditions before migration, which indicates pronounced better (changed) social relations and lifestyles at the village level. However, constructing a new house is also a visible indicator to show their social status in the rural society. Gulf women domestic workers are classified into four social communities -SC, ST, BC and OC — which are fundamentally different in social and production relations of society. Thus, they differed in terms of occupation, asset position, educational attainment, social capital and deprivation/discrimination. The nature of employment opportunities or choices is differing across the social communities. This legacy has acted as a disadvantage for SCs.

The Effect of Childcare on Occupational Mobility: Narratives of Stay-at-home Mothers in Urban India

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In the urban landscape of India, the role of women, particularly as stay-at-home mothers, constitutes a dynamic intersection of tradition, evolving societal norms, and personal agency. This study investigates the intricate relationship between childcare responsibilities and the pursuit of occupational mobility among urban stay-at-home mothers. Through a qualitative exploration of their narratives, this research seeks to elucidate the underlying complexities that influence their choices and opportunities within this context. Urban environments, characterised by a spectrum of opportunities and challenges, provide a unique backdrop for the experiences of stay-at-home mothers. While urban settings afford diverse educational, economic, and social possibilities, they concurrently impose constraints on those who commit primarily to childcare. This study thus scrutinises how these dual dynamics shape the occupational mobility trajectories of urban stay-at-home mothers. The decision to assume the role

of a stay-at-home mother demands a nuanced understanding that recognises the complex interplay of societal expectations, familial dynamics, and individual agency. Through an analysis of their narratives, we aim to discern the motivations, challenges, and aspirations that underlie this choice and its intersection with the pursuit of occupational mobility. In this study, we incorporate the narratives of 20 stay-at-home mothers from New Delhi, the capital of India. Our focus centres on young mothers aged 25-35 years with at least one child aged five or below, thereby capturing a pivotal life transition into motherhood and exploring how these mothers navigate this significant life event. Data were collected through in-depth, semi-structured interviews with the participants, and the interview transcripts were analysed using thematic analysis, a method for identifying, analysing, and reporting patterns (themes) within data. The study revealed that the mobility of young mothers is intricately tied to the strength of the support systems available to them. Mothers with access to reliable and comprehensive support networks, including extended family, community resources, and organised childcare facilities, reported greater freedom of movement. These support systems played a pivotal role in alleviating the constraints imposed by childcare responsibilities, enabling these mothers to engage in a broader range of activities beyond their homes. Participants with access to robust support networks, encompassing extended family, community resources, and organised childcare facilities, reported greater freedom of movement. A notable finding was the considerable challenge posed by the existing childcare infrastructure. Participants frequently cited limited availability, high costs, and concerns about the quality of childcare services as significant barriers to their mobility. The dearth of accessible and affordable childcare options in urban areas disproportionately impacted stay-at-home mothers, leading to a sense of confinement within their homes. The failing public childcare infrastructure and overpriced private facilities pigeonhole young mothers into their homes, forcing them to choose between their careers and family. Through this paper, we hope to shed light on the complex dynamics that shape the occupational mobility of stay-at-home mothers in urban India. Understanding these dynamics is crucial for developing policies and interventions that support the aspirations and needs of these mothers. Ultimately, we hope that our research contributes to a more nuanced understanding of the role of stay-at-home mothers in urban India and the factors that influence their occupational mobility.

Understanding Women's Unpaid Care Work Using Time Use Statistics: A Comparative Analysis of International Trends and India in particular

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In addition to being vital to human well-being, care work is also necessary for a growing, sustainable economy with a skilled labour force. The intricate and life sustaining that is essential to our basic existence is maintained by care work. Women bear a disproportionate amount of gender disparities in the distribution of caregiving responsibilities and percentage of unpaid labour performed globally by women are major contributors to their economic and social marginalisation. To identify the policy and key tools and programmatic entry points is the main objectives of this paper involved in the

transforming care economy for promoting the inclusive and sustainable growth for gender equality and human development. The framework for this paper is basically to target the recognition of unpaid care work that is to go beyond data and valuation of unpaid work at national level for proper coordination of care economy. This paper provides a comprehensive framework for evaluating the predicted benefits and costs of investments in time-saving physical infrastructure and social care. Interventions aimed at labour market regulation for work-life balance and non-discrimination to support a shift of the care burden from women to men in the home are complementary to infrastructure investments. The suggested actions support several development goals, including Sustainable Development Goal (SDG) 1 (ending all poverty), SDG 3 (healthy lives and promotion of well-being for all at all ages), SDG 4 (inclusive and quality education for all), SDG 8 (creation of decent employment for all and promotion of inclusive growth), and SDG 10 (reduction of inequalities). These goals go beyond SDG 5 (gender equality). The creation and consumption of goods and services required for the physical, social, mental, and emotional well-being of care-dependent populations, including young people, the elderly, the sick, and individuals with disabilities, as well as healthy, prime working-age adults, is referred to as the "care economy." A wide range of economic activities, including the production of goods and direct and indirect services, are involved in the care industry. One-on-one relational duties between the caregiver and the care recipient, such as nursing a newborn, assisting a youngster with homework, ministering to an old person who is bedridden, or providing emotional support to someone who has been diagnosed with a terminal illness, are all considered direct care provisioning. Indirect care activities, which do not require interpersonal interaction but are nevertheless essential parts of care provisioning, enable this type of direct provisioning. This paper is based on the report, The Unpaid Care Work and the Labour Market. An Analysis of Time Use Data based on the latest World Compilation of Time-use Surveys, released by International Labour Organization (ILO) in 2019. For study of India Time Use India-2019 report have been used released by Ministry of Statistics and Programme Implementation and National Statistical Office. In both rural and urban settings, women predominate in informal jobs and subsistence production. They often work in irregular, non-diversified, and dispersed shifts, putting in long hours on unpaid System of National Accounts (SNA) and non-SNA labour. We suggest particular policy adjustments to help women overcome these barriers and benefit from equal chances with men in the labour market. The Time Use Survey indicates that, in terms of women's employment, the average amount of time spent on SNA work by women is nearly half that of men. Government technology policies must also be improved to reduce the drudgery of household work and bring unpaid domestic work under the purview of government technology policy. Finally, egalitarian values that support equal sharing of unpaid work between men and women must be promoted. These actions will help reduce and redistribute unpaid work. Creating job programs for women without taking into account the unpaid labour they perform will just add to their workload, which can be detrimental to their well-being and human capital. Special initiatives must be created to help women improve their skills because they lag significantly behind men in terms of productivity and skills. This will allow them to take advantage of better opportunities in the labour market.

Differentiated Work Burden in Rural India: Evidence from ITUS 2019 across Social Groups and Employment Categories

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Often invisible to the policy lens, unpaid work performed by women extends its implications to the sphere of paid employment. The dominant involvement of women in the unpaid sphere of work shapes their ability to work, the duration that would be available to them, and the type of paid work that they would undertake. In fact, given the fact that unpaid work performed by women goes unremunerated, this gets reflected in the low-pays of certain paid work assigned to women. Further, the labour market outcomes in terms of 'who participates in what employment activity' are hugely determined by their identity. Applying the gender-caste-class intersection to the Time-use survey (TUS) data enables us to identify where the maximum burden of 'work' lies and what is its relevance in the context of the way structural transformation has occurred in India. The key objective of the paper is to analyse the time-use pattern across various social groups for various age groups and across the employment status of the working-age population. The evidence can further be substantiated from the literature to bring out the differentiated work burden in the context of rural India. The estimates have been made from the unit level TUS data conducted by National Sample Survey Office (NSSO) in 2019. It has collected time-use data of individuals of 6 years and above age group and allows to compute the time-use estimates for the youth population (15-29 years) as well as the workingage population (15-59 years). The estimates only consider the major activity categories in a time-slot implying only the major activity was performed in the entire half-an-hour time slot. Further, NSSO TUS data captures the individual employment status of all the members in the household, enabling identification of the class of the household. Household class implies the category of employment/ occupation which generates the maximum income and this usually correlates with the oldest-earning men's occupation in the classification. This notion has been utilised to identify the household class as self-employment in agriculture or non-agriculture (petty commodity producers), casual wage workers in agriculture or non-agriculture and regular salaried households. Further, the employment categories of individual have been identified as self-employed, regular and casual workers, for which average time (minutes) spent per activity for working age population across gender and social group has been computed. In general, women perform greater minutes of unpaid work as compared to men by 67 percent. And in terms of work burden (which is inclusive of all the paid and unpaid categories) women in the working age population perform greater minutes of 'work' than men by around 3 percent. When the time-use estimates for women are computed for social groups, the work burden is higher for the women in marginalised categories (STs & SCs) as compared to the other two social groups in terms of average minute spent. The monthly consumption expenditure, reveals that regular salaried households are comparatively well-off than non-agricultural self-employed & casual wage households. The average time women spend in unpaid activities in non-agricultural self-employment and casual wage households is higher than the rest of the class categories. Average time spent on unpaid activities in terms of minutes is higher for women employed in the self-employment category as compared to

that of women employed in the regular/salaried or casual wage work category. These results can be linked to the kind of structural transformation or the rural agrarian transition that has taken place in India. The most dominant form of employment is self-employment. Self-employed women are predominantly engaged as unpaid helpers. As have been theorised in the literature, self-employment entities have blurred boundaries between production unit and household unit. As evident from the TUS estimates, it's likely that the average time spent on unpaid activities among self-employed woman would be higher. Also, through the literature it can be shown that in the case of marginal caste & class, the work burden in terms of average unpaid time would be higher.

Exploring the Nexus among Time Poverty, **Employment Status and Gender in India**

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Time use and allocation of time across different activities are considered as important indicators of human well-being. Time poverty is a state of deprivation, occur due to extensive working hours (including within households) which reduces the time available for rest or leisure. Long working hours cause physical, social and psychological strain among individuals. The time poverty is a major concern for economies where large gender inequalities are present in allocation of time in different activities within and outside the household. The unpaid care work such as cooking, cleaning, washing, taking care of children, old, sick and disabled family members is considered as women's job in majority of developing economies. Despite a growing number of studies on burden of unpaid work among women in India, extent of time poverty has remained unexplored. The objective of the present study is to estimate the magnitude of time poverty among working individuals of age 15-59 years as well as examining socio-economic and demographic determinants of the same. To this end, the study has utilised latest Time Use Survey (TUS) 2019 data available in India. In measuring the time poverty this study, adopts Uni-dimensional (Dimensions of Poverty) → Individual (Units of Observation) → Paid Work/Unpaid Work/Leisure (Category of Time Use) → Relative Threshold (Definition of Threshold) → Head Count Ratio (Construction of Indicator) approach. Further, to examine the socio-economic and demographic factors influencing time poverty among individuals, the logistic regression analysis has been employed. The dependent variable is a binary which depicts presence and absence of time poverty for an individual. The explanatory variables consist of individual and household characteristics such as gender, age, residence, religion, social status, marital status, education level, household income, employment type and number of children. The study finds that higher proportion of female workers are time poor as compared to male workers, depicting the double burden of paid and unpaid care work on female workers in India. Moreover, this time poverty further aggravated for women who are young (in the age group of 15-29 years), living in nuclear households, urban areas, marginalised (Scheduled Caste), married, possessing low education, belonging to higher income households, regular salaried and having more children at homes. The results obtained have strong implications for recognizing disproportionate burden on women which needs to be addressed while generating employment policies for women as well as mitigating work-life imbalances among workers in India. Triple 'R' framework of recognising, reducing and redistributing unpaid care work needs to be adopted along with strengthening physical and care infrastructure in an economy. The workplace practices such as flexible working hours, work from home, provision of parental leaves, childcare facilities can help workers to combat challenges emerging from dual responsibilities of paid work and unpaid care work. The present study contributes to adding knowledge of time poverty in Indian context by quantifying time poor individuals as well as examining factors responsible for time poverty among Indian workers using the latest available time-use data in India.

Labour Market and Disabled Persons among Dalits in India: Insights from the NSSO Reports

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The paper presents an analysis of the state of disabled persons belonging to Scheduled Castes and Scheduled Tribes in India. The study sheds light on the challenges faced by these individuals in accessing the labour market. It draws insights from the National Sample Survey conducted by the Ministry of Statistics and Programme Implementation. The study uses the Logit Regression Model to examine the impact of disability on labour force participation among SCs and STs. The study found that disabled SC individuals with primary, secondary and graduate education have a lower workforce participation rate compared to uneducated SC counterparts in the age group of 15 to 59 years. On the other hand, disabled STs with primary, secondary and graduate education have a slightly higher workforce participation rate compared to uneducated STs in the same age group. The study observes similar trends across all age groups for both SCs and STs. Further, the study also found that Gender, sector, and technical education also seem to have a significant impact on workforce participation rate among these groups during the same period the labour force participation rate is substantially lower among SC-disabled individuals living in urban areas as compared to those living in rural areas, particularly among those aged between 15 to 59 years. Lower labour force participation among SC – disabled individuals aged 15 to 59 in India stems from urbanization challenges, limited opprotunities in labour market, discriminations in accessing education and social stigma. The situation seems to be even worse for the entire community across all age groups in the same community. On the other hand, disabled persons among STs have a higher labour force participation rate in urban areas as compared to rural areas among the same age groups. It is essential to note that a similar situation is observed in all age groups between the age group of 15 to 59 years. The data shows that amongst SCs, Muslims have a much lower work participation rate as compared to SC-Hindus in the age group of 15 to 59 years. This trend is also observed in the case of others in the same age group. Interestingly, the work participation rate of ST Muslims is much higher as compared to SCs-Hindus. The data indicates that there is a lower

workforce participation rate among disabled SC individuals who have attained primary, secondary and graduate education compared to uneducated SC individuals between the ages of 15 to 59 years. Surprisingly, those with primary, secondary and higher education show lower participation rates might be limited opportunities for educated disabled persons, skill mismatch, inadequate accessibility and accommodations, and discriminations. This paper is divided into four parts. The first part includes an introduction, a review of the literature, and a methodology for the study. The second part examines the status of disabled persons among SCs and STs in India. The third part uses the Logit Regression Model to examine the factors that determine the labour force participation among SCs and STs in India. Finally, the fourth part presents a summary and conclusion of the study.

Exploring the Burden of Catastrophic Health Expenditure and Impoverishment among the Elderly in India: An Analysis of Incidence and Intensity

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Health is one of the most essential basic needs of human development. The third target of Sustainable Development Goal (SDG 3.8) stands for ensuring a healthy life and promoting well-being for all ages which is a basic agenda for universal health coverage (UHC). The world health statistics reports that about 1.4 billion population has incurred catastrophic health expenditure (CHE) and half of its population pushed into extreme poverty due to healthcare payments. The cost of healthcare services is so high it financially burdens the households which result in catastrophic health expenditure. Elderly population are one of the most vulnerable groups without the proper financial support along with vision their quality of life will be severely compromised. And the elderly population faces a higher risk of ill-health and seeking treatment is reflected in a high out-of-pocket spending that results in CHE and further impoverishment. The aim of this study is to highlight the incidence and intensity of outof-pocket spending, CHE, and impoverishment among elderly in India. Data is used from the 75th round of National Sample Survey (NSS) based on household social consumption: health (schedule 25.0), 2018. A total of 42,762 elderly individuals have taken this study. In which, 18,901 individuals for inpatient, 11,084 individuals for outpatient and 22,452 individuals for both (either inpatient or outpatient or combined) were analysed. The incidence and intensity of CHE, concentration index and curve, poverty headcount, poverty gap, and normalised poverty gap have been estimated using standard definitions. The elderly population spends about 17 percent of the household consumption expenditure on healthcare services. The poorest elderly is spending the highest share of consumption expenditure on healthcare. Similarly, the elderly belonging from rural, male, schedule castes (SC), and Christianity show a larger share of consumption on healthcare. The incidence of CHE declines as the threshold levels rises. The proportion of elderly population faces the risk of incurring CHE is high for the non-subsistence expenditure method. About 14.2 percent (Tendulkar committee) and 22.2 percent

(Rangarajan committee) of elderly population are being pushed below the poverty line due to healthcare payments. The weighted catastrophic headcount of elderly population is greater than unweighted and show the similar trends like unweighted. The normalised poverty gap shows that the intensity of being pushed into extreme poverty is quite high. The incidence of poverty headcount of elderly population before accounting the healthcare payments is 4.3 percent (10.6%) by Tendulkar (Rangarajan) approach, and after considering healthcare payments, the poverty headcount increases to 14.2 percent (22.2%) respectively. According to Tendulkar (Rangarajan) committee, 12.4 percent (13.8%) and 5.3 percent (7.3%) of elderly population are falling into poverty due to healthcare payments in rural and urban areas respectively. The elderly population are facing financial burden due to out-of-pocket spending and being pushed into poverty. Financial protection is very much needed for the elderly population due to high out-of-pocket spending on healthcare services and with ageing it is unavoidable to not seek healthcare facilities for elderly population. The protection of elderly population is required from CHE and impoverishment due to healthcare payments. An alternative healthcare financing mechanisms such as effective health insurance policy, investment in physical infrastructure and healthcare professionals (new and existing), and equally accessible healthcare resources at affordable price to all are much needed.

Old and Risk Averse? Age and Portfolio Choices in India

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Despite high returns, stock market participation has been quite low among the general public and this pattern holds across countries irrespective of the maturity of their stock market culture. In advanced market economies such as Germany, France, Italy, the United Kingdom (UK), the United States of America (US), and others, the fraction of household holding stocks is quite low and shows wide variation across countries. While there are abundant studies on this issue in the context of developing countries, we have not come across any study on this issue in the Indian context. In this paper, we examine the effect of age on portfolio decisions in India. More specifically, we have two main objectives to test. Our first objective was to validate the slope of the relationship between portfolio allocation and age. Secondly, to find out the age threshold for which the risk-taking behaviour reaches its maximum. To understand how an individual's portfolio risk exposure varies over the lifetime, the study considers the investor survey conducted by the Securities and Exchange Board of India (SEBI) in 2015. This cross-sectional survey contains information about the allocation of wealth for individual households covering 35 states/Union Territories (UTs) of India. The individual's risk exposure is our main variable of interest. The risk exposure is measured by the percentage of wealth invested in risky assets. The survey enquires about two hypothetical questions on the individual's investment decisions towards the distribution of ₹1 million and ₹100,000 across different financial instruments if they have that. Investments in risky assets, precious metals and real estate comprise a major portion of the portfolio

along with some safe assets like bank deposits, life insurance, pension etc. Stocks, shares, derivatives, futures etc. are considered to be risky assets. We assumed that the relationship between the financial instruments and age varies in a non-linear way. It is expected that people will increase their investments in risky assets as they move towards their prime working age (35 to 49 years) and decrease after that. The converse is true for safe assets like precious metals, fixed deposits and real estate. The cross-sectional evidence indicates that the relationship between ageing and risk exposure is non-linear. Our analysis suggests a tendency towards a hump-shaped pattern for the level of investment in risky assets. The young and the retired prefer less risky assets than the prime working-age individuals. As people approach towards their retirement phase their focus shifts from asset accumulation to asset prevention. The main objective for them is to mitigate the potential loss of assets needed to secure future consumption as income decreases. Conversely, the young have longer time horizons but limited access to money. The same pattern is visible for investment in real estate as well. However, the relationship between age and investment in precious metals shows a U-shaped pattern. The implications for age-dependent portfolio selection are many fold, especially for a developing country like India. While most of the first world countries are dealing with the problem of population ageing, India has the largest share of young age population moving towards the prime age group. Study reveals that the individual's tendency to invest in risky assets reaches its peak during 36 to 45 years of age interval. At present the median age of Indians is 28 years. Therefore, the next decade is very crucial for the Indian financial market. It is expected that investment in risky assets will increase further. Ensuring adequate credit growth and capital market stability are of utmost importance. In India, most of the population is associated with the unorganised sector. Increasing life expectancy, declining public pension schemes and public support systems, and the replacement of defined-benefit pension plans with defined-contribution pension plans for new entrants have implied a widespread transfer of risk from governments and employers to individuals. Thus, the present generation needs to bear more financial responsibility and face directly the financial risks associated with out-of-pocket healthcare expenses and saving for retirement. At the same time, the cognitive abilities of the elderly population decline over time. It is necessary for the government to increase transparency of information and reduce the time and cost of acquiring financial information to alleviate the phenomenon of 'limited participation'.

Distribution of Unpaid Domestics Services and Care Services: Implications in Households' Economic Conditions

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The neo-classical economics indicates the combination of three driving forces, labour, capital and technology; for maintaining steady economic growth. The major driver of occupational pay differences is differences in the level of human capital that individuals need to possess in order to enter a particular occupation. Individuals with higher level of human capital are usually paid with higher remuneration either in the form of salary or wages. However, there are some occupations where neither human capital nor any other factors decide its wages. These works are basically unpaid works and usually done

by women. Most of these unpaid works are related to care works which could be paid and unpaid, however, the majority of the care work worldwide is undertaken by unpaid carers. Several explanations were given for this low labour force participation for female workers - one category focusses on issue of measurement and other category focusses on economic literature of demand and supply side explanations. The third category of explanation is based on sociological literature which is mostly based on social norms, religious groups and other social as well as cultural restrictions that force women to be confined within the home. Against this backdrop, the present study attempts to understand the trends and patterns of duration of care work among male and female and how this unequal distribution leads to economic status of households. The paper has examined the implications of different unpaid services on the economic conditions of the households in India. Using the latest time use survey data (2018-19) of National Sample Survey Organisation (NSSO), the paper analyses whether the unpaid work contributes to households' economic status or not. To understand the economic status, all individuals are put in one of the three categories - employed, unemployed and out of labour force. To understand this, the paper uses both descriptive and inferential statistics. The results on distribution of different unpaid services, shows that maximum percentage of persons are engaged in domestic services followed by care services. Compared to domestic and care services, the percentage of persons engaged in unpaid volunteer and trainee services is less. The percentage of female members engaged in unpaid domestic services and care services is higher than their male counterpart. However, when it comes to unpaid volunteer and trainee or any other unpaid work, the percentage of male is higher compared to female. The rural-urban break up shows that people employed in unpaid domestic work was higher in rural area compared to urban area. To understand the implication of unpaid work in households' economic conditions, the paper uses multi-nominal regression analysis. We found that people who are giving more time in domestic services and care services, the probability of not getting engaged in labour force is higher. Female are usually out of labour force because of their multiple domestic services. The study also found that the percentage of employed goes up with the educational level. For male members, the percentage of employed is higher with the educational level, however, we just got the opposite result for female members. We found that highly educated female is also not participating in economic activities.

A Snapshot View of the Changing Expenditure Pattern of Education and Health in the Post COVID Period in Kolkata District of Wes Bengal

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This study made an attempt to analyse how the pandemic affected several economic indicators at the household level. We have mainly considered the following indicators, namely, the households' per capita food consumption expenditure, household savings, educational expenditure on children,

and expenditure on health. For this, we have conducted primary survey in random areas of Kolkata district in West Bengal. A report by Ashoka University shows that household expenditures declined by up to 35 percent in April 2020, the month following the nationwide lockdown. Most major industries faced large drops in the number of business owners with the only exception being agriculture. Construction, restaurants, hotels, and transportation all faced large declines in the number of business owners due to COVID-19. This study aims to find out: i) whether the per capita health expenditure of households after the COVID period has increased or decreased, and ii) the household's changing pattern of expenditure on education and identify the different parameters that determines the household's decision-making process in this regard. A primary survey has been conducted from Kolkata with a purposive sampling method for the pre- and post-COVID period. The total numbers of 110 households were surveyed and that has been done with an accepted questionnaire already valid in govt. sponsored research works. Data on expenditure on protein intake, education, and health have been collected. Information has also been collected on household savings and investment patterns. The study has tried to analyse the changing pattern of household expenditure on food, health, education, savings pattern, and investment with the help of graphical analysis. For that, we have applied simple OLS technique. Most of the households denied disclosing their exact income. That is why per capita household expenditure has been taken as an income dummy in the regression analysis by using Stata-14 software package to estimate the following hypotheses H0: Household income, type of occupation, family size, and family members' education level have no significant impact on household's educational expenditure on children and on the family's health expenditure. H1: Household income, occupation, family size, and family members' education level have a significant impact on the household's educational expenditure on children and on the family's health expenditure in the post-COVID period. The econometric model used is: $\log \Delta E = \alpha 1 + \beta 0 D1i + \beta 1 \log X2i +$ β 2 log X3i + β 4 log X4i+ β 5 D2i Δ HE: α 1 + β 0 D1i + β 1 log X2i + β 2 log X3i + β 4 log X4i+ β 5 D2i Where X2ito X4i are the parameters. X2i: family Income, X3i: Family Size, X4i: parental Education. D1i= 1 if formal sector, zero for informal. D2i = 1 for urban, zero for semi-urban/rural. ΔE = Expenditure on Education (2022) minus Expenditure on Education (2021). ΔHE = Expenditure on Health (2022) minus Expenditure on Health (2021). Expenditure on health includes both medical expenditure and expenditure on medical insurance. Our study reveals that the changing pattern of households' expenditure on children's education has been changed significantly in informal sector and Informal Jobs holder's expenditure has increased significantly in post COVID period. Significant changes happened in formal savings in banks, whereas, investments in financial markets have little changes during these two periods. The health insurance expenditure is low for informal jobs holder in post COVID period and they are not conscious to invest in health schemes. The findings of our econometric model also validate the robustness of the current model. For the first model family income, sector and parental education have significant effect on change in educational expenditure in the pre- and post-COVID period. For the second model, however only family income has significant impact in health expenditure.

Charting Institutional Reforms in the Tea Industry: **A Labour-Centric Perspective**

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This paper identifies how the exploitative practises in the tea Industry of India have itself become labour market institution resulting in the homogenisation and degradation of labour. The tea plantation was among the first industry established in India which was owned and managed by colonial planters for international consumption. Traditionally, tea plantation is an extremely labour-intensive work for which an indentured labour system was adopted by the British to heavily maximise profits as the labour had no voice or bargaining power. This led to a process of labour exclusion and marginalisation of tribal groups brought from eastern and central India as the labour was brought and held captive by luring, deceiving, and kidnapping them. The structure of colonial plantation has caused systemic disruption in the tea industry where social norms of workers are very difficult to break it. The presence of labour lines, command, control systems etc. in their social relations keep the workers in a marginal position. As the industry was based on exploitation, the change in ownerships have no major impact in their lives. Rather, post-1990s due to the decline in export and high domestic consumption of tea in India, it has become worse with the abandonment of tea estates in many cases making the labour vulnerable, without any other employment opportunities in those isolated areas and wages which are one of the lowest in formal sector work in Eastern India (Assam and West Bengal). Labour market institutions like trade unions which are supposed to fix wages through collective bargaining are failing to provide minimum wages to the workers. This alongside wage theft through non-payment of wage, underpayment and methods of wage cut puts the workers in a vulnerable state. The workers are trapped in a vicious cycle where we can observe that exploitative practices have themselves become institutions. This study draws from primary data of tea workers from two Indian states of Assam and Tripura. It reflects on the failure of labour market institutions to safeguard workers from exploitation. It focusses on the scope and causes of such failures looking at the workplace and beyond, as tea plantation workers are not just economic production units but social institutions in themselves which control the lives of their resident workforce. The captivity within the tea industry for a long time has managed to help the firm exploit the workers. It observes that firms' practices overpower the pre-existing labour market institutions and are responsible for creating a new exploitative institution of their own.

Child Labour and Unpaid Domestic Work in India: **An Assessment of Existing Policies**

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Child labour has been legally banned in India since 1986. While this may have had some effect on reducing child labour, it is possible that children have been shifted to work spaces inside home premises. Another likely consequence is that child labour is under-reported in traditional employment surveys. In this context, this study has two objectives. Firstly, an attempt is made to estimate child labour in India using the Time Use Survey (TUS) of 2019 and to identify the determinants of child labour. This study uses the latest TUS of 2019 to estimate child labour in India. The traditional use of the census datasets to measure the working population among children is likely to miss out children who are occupied in domestic chores or home-based activities. This also leads to erroneous estimation of gender distribution of child workers, as girls are more likely to be engaged in domestic chores. The TUS captures activities of members of the household without engaging in the conceptual issues of what activity constitutes work. This method is likely to reduce underreporting of children's activities that may be construed as illegal activity. Time Use Surveys have a long history of being an effective tool for understanding unpaid household work by women, but this study is, to the best of my knowledge, the first paper to use time use data to assess unpaid household work by children in India. We find that a huge proportion of child labour exists in the domestic activities and girls are more likely to be involved in child labour. Second objective of this paper is to assess the efficacy of the existing policies pertaining to child labour. These policies include a legal ban on child labour, access to free education, access to mid-day meals (MDMs) at schools, and the National Child Labour Policy. Legislations that ban child labour try to address the issue from the demand side by imposing penalties on the employers of children. This study analyses data on reported crime of employing child workers and finds that it has a negative impact on child labour in economic activity, but only when the large number of crimes have been reported in a district over a span of 5 years. In contrast, policies of access to free education and MDMs in schools, incentivise households to reduce the supply of child labour in the market and simultaneously invest in human capital for the future. This study finds that increased access to free education and MDMs in particular districts can reduce the probability of children working in unpaid domestic chores. However, access to free education seems to have a more broad-based impact by reducing child labour in economic activity as well. In alignment with the literature described above, this study concludes that collaborative measures that focus on provisioning free education are the most effective. Hence, there is a need to expand and strengthen public provisioning of education in order to enable children to lead a normal childhood. However, there are some benefits from MDM scheme and reporting of crime of child labour for specific types of activities. Hence, there are grounds for developing multi-pronged strategies to reduce child labour in India.



WORKSHOP SESSION

WORKSHOP SISSION I

Rural Workers in Crisis: A Village-Level Study in the Bhadrak District of Odisha in the Context of COVID-19

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The COVID-19 pandemic has been one of the most severe social, economic, and medical threats to the world. The lockdown and travel restrictions imposed by the governments of various countries to prevent the pandemic resulted in social and economic disruptions, especially for people working in the informal sector and already living in poverty. Especially, in the case of rural people dependent on agriculture or who migrate to distant places. In such uncertain circumstances, with sudden job loss and income, such people had to reduce their consumption to the greatest extent. Some had to dig into their savings, borrow, or sell their assets to maintain their livelihood. It also analyses the effectiveness of public health services among rural people through a case study during the COVID-19 pandemic. It discusses the access to health care of rural families and how they manage their healthcare expenditure with no job during the lockdown period. We proposed this study based on questions such as which medical facilities did, they go to when they suffered from other diseases during the pandemic, and how they meet their health expenses. The study mainly used primary data collected from a Chilapada village in Bhadrak district of Odisha. The survey covered 80 households selected through simple random sampling. This study found that the wage income of male agricultural workers fell more than that of female agricultural workers. The income of male workers engaged in non-agricultural activities fell even more by 60 percent due to the lockdown. Households engaged in petty businesses have seen a decline of about 50 percent in their income. In response to this income decline, 95 percent of rural workers borrowed money and 39 percent sold their assets to meet their daily expenses and increased health expenditure. Even the government's top social security schemes failed to reach a large number of vulnerable households. There was a huge gap between the number of eligible households and the households who got benefits under the schemes. For example, although 87 percent of households in the village had NREGA job cards, only 46 percent found any employment in this scheme between April 2020 and May 2021. No household received 100 days of employment as per the entitlement in the scheme. About 23 percent of people had COVID-19 symptoms, 28 percent were suffering from other mild illnesses, and 8 percent were suffering from chronic diseases. Some COVID-19 symptoms patients went to both public and private health services and some of them did not go anywhere for treatment. The most cited reasons like fear of being COVID-positive, high cost of healthcare services,

and lack of transport facilities, etc. The average healthcare expenditure of COVID-19 patients was found to be higher than the average healthcare expenses of other patients. Due to sudden job loss and no alternative source of income, these people had to borrow money and sell their assets. Even government health schemes failed to reach a large number of needy households. Only 6 percent of the households got benefits under the Biju Krishak Kalyan Yojana scheme. Whereas only 6 percent of them had Rashtriya Swasthya Bima Yojana health cards but none got benefits.

How Fair is the Care Economy

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The study delves into the complexities of the care economy, particularly within the Indian context, emphasising the need for recognition, value, and equitable distribution of care work. It highlights the gendered dynamics inherent in care work and the impact of unpaid care work on gender inequality. the study provides insights into the challenges and complexities in the care economy, offering policy recommendations, theoretical frameworks, and areas for further research to address these issues. Furthermore, it underscores the importance of investing in the care economy to foster gender equality, economic empowerment, and sustainable development. Overall, the study contributes significant insights into the care economy, illuminating the interplay of care work with gender inequality, economic viability, and holistic well-being. The measurement of domestic work encounters numerous challenges and complexities owing to the informal and diverse nature of the tasks involved. The absence of regulations makes it difficult to "quantify" the work, leading to an underestimation of the time devoted to domestic work. Measuring care work poses challenges due to its informal, task-oriented nature in contrast to structured paid employment. The variability in time and frequency involved in the care work makes quantification challenging. Unlike formal jobs with specific instructions, domestic work lacks regulation, leading to subjective and varying tasks each time they are performed. The absence of employer standards may cause individuals to underestimate the time spent on these activities and overlook certain tasks as work. This lack of regulation makes it challenging to measure accurately, often resulting in the underestimation of time dedicated to domestic labour. The study suggests that care work can be measured by improving survey methods to capture multiple activities simultaneously. Another method is using a time diary in which respondents have to track their activities over 24 hours to understand greater variation in care work. However, the study highlights that although time-saving diaries and surveys are commonly used to measure unpaid work, the main limitation is that it is unable to capture the complexity and demanding nature of care work. This is because care work involves multiple simultaneous activities and emotional work that cannot be fully counted or captured by measuring the time spent on it. Another limitation of tie-use studies is that they cannot

accurately reflect the workload because some of the tasks are not considered work. The study explored the gendered dynamics of care work, underscoring the unequal distribution of unpaid care work, predominantly shouldered by women, reinforcing traditional gender roles and impeding their active participation in the job market. Women's views on caregiving responsibilities could be considered essentialist, attributing their caregiving tendencies to an intrinsic and inherent aspect of their character. The study also discusses the impact of the COVID-19 pandemic on gender equality and women's workforce participation, accentuating the disproportionate burden of unpaid care work on women and the imperative for recognising and redistributing this workload to alleviate the responsibilities on women. The study offers policy recommendations, such as investing in social infrastructure like water and electricity supply to reduce the time spent by women and providing family-friendly policies to enhance women's employment. It also stresses the need for collaboration between the public and private sectors to promote gender equality and address the challenges in the care economy. The study also scrutinises the care economy through the lens of sociological theories. In conclusion, the study provides a comprehensive analysis of the care economy, highlighting the interrelation of care work with gender inequality, economic viability and overall well-being. It imparts valuable insights into the challenges and complexities in measuring and valuing care work and emphasises the need for recognition, value and equitable distribution of care work to foster gender equality and sustainable development.

What Causes the Surge in Gig Jobs in India: Worsening Labor **Market Condition or Rising Preference Towards It?**

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What Causes the Surge in Gig Jobs in India: Worsening Labor Market Conditions or Rising Preference towards it? Anubhuti Sharma and Jajati K. Parida As the world progresses with advancements in technology and changing societal preferences, we see a rise in the gig work phenomenon across the globe. Gig is a word used to describe work that is independent and task based. The increased mobility and digitalization of the workforce have led to an increasing trend. The main point that differentiates gig work from traditional employment is the absence of employer-employee relations. Besides this, the employer and employee in the gig platform are provided with ample choices that could make their life easier and better. Given the backdrop, this paper attempts to understand the composition of the gig workforce in India and explores the reasons behind the surge of gig workforce in India. This paper is based on both secondary and primary data. We have used Employment and Unemployment Survey (EUS 2011-12) and the Periodic Labour Force Surveys (PLFS-2018 to 2023) of the National Sample Survey. Moreover, the secondary data is supplemented by a few Individual case studies. We adopted

the method employed by NITI Ayog in their report on gig economy. It includes estimating the total workforce from the population and then filtering the gig workers using certain characteristics which are - belonging to the top 100 cities, age group (18-45 years), education level that ranges from secondary school to graduation, possession of mobile phones, bank accounts and belonging to bottom 75th percentile of Monthly Per Capita Consumption expenditure (MPCE). After this, we apply the industry and occupation filters using NCO and NIC classification. We now have the proportion of workers to the total workforce engaged in select occupations across selected industries. The sum total of this workforce in selected industries and occupations is the estimated gig workforce. We found that there is a steady increase in the gig workforce. It is largely concentrated in the unorganized sector. However, we also see an increase in the share of gig workers in the organized sector. It is largely informal, making the informalization of the organized sector quiet evident. We concluded that the increasing preference is due to the autonomy and flexibility that gig work provides besides timely payment once the task is performed. These overrides the other non-wage benefits and inconveniences related to gig work. Some of the platforms pay even higher than what could have been received in a traditional setting. India with the demographic dividend and increased digitalization, has huge potential to benefit from gig economy. However, the use of algorithms in assigning tasks and payments and the lack of social security benefits are a concern. These can be addressed with better algorithmic designs that are inclusive and nondiscriminatory. The lack of social security benefits can be addressed by the government by amending the existing wage and employment laws. In such light, the new code on Social Security 2020 that recognizes gig and platform workers is a step in the right direction.

Globalization's Impact on the Indian Leather Industry: Assessing Local Businesses, Government Policies, and the Well-being of Low-Caste Workers

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Globalization's Impact on the Indian Leather Industry: Assessing Local Businesses, Government Policies, and the Well-being of Low-Caste Workers Kashish and Jajati K. Parida The globalization of value chains is profoundly shaping the landscape of the Indian leather industry, prompting a critical examination of its impact on local businesses and socio-economic dynamics. This dissertation employs a comprehensive research methodology that draws insights from various sources, including Employment and Unemployment Surveys, Periodic Labour Force Surveys (PLFS) spanning from 2018 to 2023, and National Sample Survey (NSS) data. Through case studies and empirical analysis, it seeks to unravel the intricate challenges faced by local enterprises, including heightened competition, supply chain complexities, and evolving consumer preferences. As global forces and international players permeate the industry, this research delves into their influence on the domestic market, altering the competitive landscape and shaping consumer behavior. Key economic events, such as demonetization, and unforeseen disruptions like the COVID-19 pandemic, further exacerbate challenges, leading to

closures and economic strain within the Indian leather industry. The dissertation meticulously evaluates the sustainability of domestic producers in the evolving global production network. It delves into the challenges and opportunities faced by local businesses in adapting to these evolving global value chains. The study places emphasis on the potential consequences for the Indian economy if these businesses fail to navigate this dynamic environment successfully. Additionally, it investigates the impact of government support for outside brands, analyzing policy interventions and their repercussions on local businesses. In examining government policies, special attention is given to their effects on low-caste workers within the Indian leather industry. The research explores how policies shape the employment landscape, working conditions, and socio-economic well-being of this vulnerable group. Furthermore, it sheds light on the extraction of profit surpluses from the labor of low-caste workers by big merchants, contributing to economic disparities within the industry. The dissertation contributes a nuanced understanding of the interplay between global value chains, domestic market dynamics, government policies, the local business environment, and the exploitation of low-caste workers. By unraveling connections between economic globalization, key events, business closures, employment dynamics, the sustainability of domestic producers, government support, and labor exploitation, this research offers valuable insights for policymakers, industry stakeholders, and scholars grappling with the challenges posed by the evolving global economic landscape. This study does not merely stop at identifying problems but endeavors to propose informed solutions. By understanding the mechanisms at play, policymakers and industry stakeholders can better navigate the challenges posed by the evolving global economic landscape. In a broader context, this research contributes to academic discourse on the complex relationship between globalization, local economies, and social dynamics, fostering a more comprehensive understanding of the implications of economic globalization on vulnerable communities and industries in developing countries. In conclusion, the dissertation titled "Globalization's Impact on the Indian Leather Industry: Assessing Local Businesses, Government Policies, and the Well-being of Low-Caste Workers" aims to be a holistic examination of the multifaceted challenges and opportunities arising from the changing dynamics within the Indian leather industry. It is poised to provide valuable insights for academics, policymakers, and industry practitioners seeking a deeper understanding of the implications of globalization on local economies and marginalized communities.

The Working Conditions of Care Workers for the Elderly: A Study

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For the first time in human history, we are facing an aging world. Having had a degree of success in adding years to our lives, the challenge is now to add life to our years. Longevity should provide more time for people to realise their aspirations, develop their interests, and be with their loved ones. However, recent studies have shown that elderly people are not always as happy as the measures of life satisfaction would suggest. In the coming decades, an increasing number of elderly people are

likely to be single, divorced, or separated, which will have an impact on their social health. In this context, it is argued that social workers have a very important responsibility to help make the world a compassionate one for elderly people. Social care workers give practical and emotional support to a wide range of different people. Working with individuals, families, and communities, they often help protect and promote older people's well-being to enjoy a better quality of life. Care workers also look after their learning difficulties, mental health conditions, and physical difficulties. With the aging of the global population, the well-being of older people in different parts of the world merits special attention. The increase in longevity is largely due to advancements in medical technology and environmental hygiene. The growing number of elderly is something to celebrate, but certain psychosocial issues require special attention. The elderly are experiencing a significant decrease in their support network, and caregivers play a crucial role in bridging this gap. However, Care workers for the elderly encounter various challenges in their working conditions. These include high workload due to the demanding nature of caregiving, emotional stress from witnessing the frailty and health issues of the elderly, and potential burnout. Limited resources, both financial and human, often constrain their ability to provide optimal care. Furthermore, inadequate training and insufficient support systems can exacerbate these challenges. In the most generic terms, working conditions cover a broad horizon of issues from working time, including hours of work, rest periods and work schedules, salary scales, and the physical and mental pressures that are also a considerable part of the workplace environment. Addressing these issues is crucial to ensure the well-being of care workers and, consequently, improve the quality of care provided to the elderly. This conceptual study delves into the working conditions of care workers for the elderly, examining factors such as workload, emotional stress, and support systems. It aims to analyse the challenges caregivers face and propose strategies to improve their wellbeing, ultimately enhancing the quality of care provided to the elderly. This paper examines the role of social workers in creating a conducive environment for elder people through intersections of formal and informal care in the relationships that develop between elderly care receivers and their families and domestic care workers. It is argued that volunteers' internal and external motivations can drive the provision of continuous voluntary care services for the elderly. The article suggests that social workers have a pivotal role in aiding elderly individuals to age gracefully in a compassionate society through various forms of intervention. These interventions comprise direct assistance to individual elderly folks, collaborating with their families or support systems, working at the community level, and contributing at the international level.

Networks of Care: Work, Labour and Love in Dhaka

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Known as the second largest exporter of garments in the world, the 'readymade manufacturing garments' industry in Bangladesh runs on the labour of around 2 million women workers. The large-scale employment of women in the manufacturing sector was possible largely due to two main reasons. One, relocation of manufacturing from the now developed economies to developing countries to explore

cheap labour markets for manufacturing commodities. Two, the gendered perception that women could be recruited in this sector since stitching was seen to be a woman's job and required "nimble fingers". Interestingly, these were not mutually exclusive and seemed to reinforce each other. As a consequence, manufacturing industries in the developing countries flourished through the cheap labour of women, as did the garment industry in Bangladesh. These processes were simultaneously complemented by managerial strategies which gave shape to shopfloor subjectivities based on gendered meanings of work and labour. The distinction between what constitutes as women's work and what men are meant to do becomes visible within garment manufacturing factories where men are recruited in knitting, dyeing and cutting sections which are run on large complex machines while women are recruited for the stitching and quality check jobs. However, the gendered understanding that women should also be responsible for the care of dependents (children and old parents) witnesses a shift due to long hours of work that range from somewhere between 12 to 14 hours. Due to this, the responsibilities of care are often shared between both parents. Since workers often share accommodation in the same buildings, these responsibilities are also shared by relatives or their parents. Some also consider dropping their children in the nearby masjid due to lack of access to affordable schools. At the same time, there is a lack of health services for a workforce that battles with health ailments due to long hours of work in the same posture with threads and dyes and hardly any break. In such a context, it becomes imperative to look at care as a condition of and integrally connected to value: what is this work worth. Social Reproduction Theorists and Marxist feminists have argued that value becomes an important marker of how work is understood and seen. Additionally, they argue that capitalist processes extract value from this process through labour power but fail to ensure the sustenance of those who provide that care. Drawing from the social reproduction theory framework, this paper looks at the multiple layered networks of care that function in the industrial areas in the north of the capital city, Dhaka. This paper will explore the multi-actor network where care becomes visible as a necessary condition for survival while re-shaping the meanings surrounding gendered work and labour based on the fieldwork data conducted during 2017-2019. As part of a qualitative study, this paper drawn its arguments from fieldwork notes and interviews, discussions and protest speeches, and policy documents collected from the field. Lastly, this paper not only looks at who does the care and who receives it, but poses the larger question of how to enable the care through policies and practices.

A Study on Female Employment and its Condition in India Using NSS Data

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Female employment is requisite for a nation as women employment implies women empowerment. Women employment also makes them economically independent, and self-contained. In the past 50 years, female labour force participation rate (FLFPR) has shown a great progress in most of the countries across the globe. But the situation is just opposite in India. Recently, the FLFPR in India is

around 20 percent, which has put India among the bottom 10 countries in the world in terms of female workforce participation. Moreover, 2020 unlocked plenty of unprecedented challenges, outbreak of COVID-19 pandemic, subsequent lockdowns and unlocking have affected people from all walks of life socially and economically. It is obvious that women were more adversely affected than men by the social and economic impacts of this pandemic outbreaks. Gradually, this pandemic transformed into economic crisis which has the potential to push women out of the labour force through several mechanism. This paper tries to analyse the trend of female employment after liberalisation in some aspects such as the FLFPR trend in rural and urban areas, the status of female employment and the quality of employment. This paper also tries to analyse the impacts of the pandemic on women's labour market and addresses some reasons behind this substantial decline in FLFPR. For this analysis different rounds of National Sample Survey Office (NSSO) data and different Periodic Labour Force Survey (PLFS) data, NSS have been used in this paper. Estimated value of unit level has been used for analysis some aspects. From the past decades the fact is continuing that the male labour force participation rate is much higher than Female labour force participation rate in India. According to PLFS data, 2022-23, the FLFPR is about 31 percent in rural areas and in urban geographic the FLFPR rate is 20.2 percent. Data shows the diminishing trend of FLFPR year after years. In rural areas higher percentage of females are engaged in self-employed activities and most of them are working as unpaid household labours. In urban areas, the women are more attracted to regular salaried jobs and absorbed in this jobs. But, in Regular salaried jobs we can observe the rise in "incidence of informalisation" where both rural and urban females are employed in the regular wage job without any written contracts, paid leaves and social benefits/securities. In 2022-23, 61 percent of rural females and 54 percent of urban females are engaged in regular wage jobs without any social security/benefits such as, provident fund, maternity leaves, pension. Furthermore, 53 percent of rural regular workers and almost 58 percent of urban female regular workers are working without any written contracts. Casualisation of female workers are diminishing in both rural and urban geographics. Only 21 percent rural females are working as casual labour in 2022-23 compared to 35 percent in 2011-12. The percentage of urban casual workers are always lower from the inception. We can see the only equal work with equal salary in formal regular salaried jobs for males and females. In India, apart from this in every sector there is a rigid wage gaps between male and female workers wages. In Rural areas the wage gap is more prominent than urban areas. In fact, women with same qualification as men were getting less wages at the time of COVID-19 and the entrepreneurs took the very good advantage of that unavoidable situations. A field study reported that the beauty parlour workers and domestic workers returned to work with a substantial pay cut of almost 50 percent. Small businesses run by women experienced temporary closure or permanent closure. In India women bear an unfair burden of unpaid care activities in their households, such as, managing the house, childcare, elderly care, sick care etc. This hinders their ability for looking out different opportunities for paid jobs. 92 percent of the females in the age group of 15-59 years participate in unpaid daily domestic activities compare to only 29 percent men. This paper also discusses the demand side factors and supply side factors due to which the female labour force participation rate is diminishing continuously from the early 1990s. This paper concludes with some policy prescriptions.

Examining the Disclosure of Occupational Health and Safety Practices on the Corporate Websites of Large Indian Companies

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The Occupational Safety, Health and Working Conditions Code, 2020 (OSHWC) introduced by the Government of India (GoI) and the Ministry of Labour consolidates 634 sections from 13 labour laws into 143 sections, emphasising critical safety issues. The scope of Indian occupational health extends beyond mere health concerns, encompassing diverse aspects such as child labour, discrimination, industry legislation, gender equality and decent work, aligning with the 2030 goals of the United Nations (UN) Agenda for Sustainable Development. Corporate organisations are pivotal in achieving these Sustainable Development Goals (SDGs), contributing to the nation's sustainable growth. However, sustainability efforts often focus on economic and environmental aspects, neglecting the crucial dimension of social development. Academics are now emphasising the importance of incorporating social aspects into sustainability reporting, which evaluates the sharing of environmental, economic, and social information with internal and external stakeholders. Occupational health and safety (OHS) are integral to corporate sustainability strategies, particularly concerning employees, the primary internal stakeholder group. Non-financial reporting related to human resources includes gender equality, social dialogue, employee engagement, OHS, and community programmes. Occupational health and safety disclosure has gained attention in the corporate social responsibility (CSR)/sustainability reporting framework, linking it closely with a company's reputation and decision-making processes. Firms demonstrating a commitment to OHS in their voluntary reports enhance their social legitimacy, whereas inadequate OHS practises may indicate a failure to create healthier and safer job environments. India's workforce has increased to 63 million people. South Asia's workforce accounts for over 20 percent of the global population. According to the International Labour Organization (ILO), there are more than 1 million work-related deaths every year. Providing a safe and healthier working environment is a significant challenge for corporations operating in the world's largest democratic country. The UN has set 70 SDGs for the 2030 agenda. Good health and well-being are some goals that can be attained through CSR activities. Hence, occupational health and safety disclosure (OHSD) is voluntary, and the quality and quantity of information and presentation differ by industry and nation. This study considers non-financial firms listed on the National Stock Exchange (NSE) of India. The study adopted content analysis to gather information from 77 corporate websites. All hyperlinks, PDFs, and pop messages were used for the analysis, and the index used to measure OHSD was adopted from a previous research article. The findings show a lack of disclosure of OHS on corporate websites. The OHSD score varies significantly according to company age and ownership, and worker involvement in OHS programmes is the least disclosed component in the index score. The chemical, metal, and construction industries are attempting to reveal more relevant information, and the use of Global

Reporting Initiative (GRI) reporting in annual reports impacts the presentation of OHS information on corporate websites. Furthermore, businesses lack internal assurance for OHS practises and require external auditing of occupational health in the supply chain. Few organisations reveal fatal and lifestyle diseases in the workplace. This research study presents an assessment approach for examining OHS disclosure information on company websites by analysing subjective and objective data particular to organisations.

Extent of Poverty and Socio-economic Status of the Tea Garden Labours of Upper Assam

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The tea garden labourers contribute towards a significant portion of the plantation industry's overall workforce. The state of Assam is the leading tea grower among the Indian states. The state enjoys a unique position in India, producing more than half of the country's tea. The tea industry of Assam not only contributes considerably to the state's foreign exchange earnings but also to the creation of jobs. But the tea garden labourers have faced major issues such as low earnings, inadequate housing, illiteracy, and extreme poverty from the industry's start in Assam in the early 19th century. Although the quality of the tea garden estates improved significantly after independence, it was at a snail's pace, which was insufficient to serve the community's large population. The majority of them are restricted to the tea gardens and have no idea what life is like outside of the gardens. Tea garden labourers, while being a major contributor in the tea industry, are falling behind in terms of socioeconomic development. Various labour welfare regulations and legislation have been enacted from time to time to protect the rights of tea garden labourers. The Tea Plantation Labour Act of 1951 compels tea garden estates to provide basic health centres as well as restrictions governing the working and living conditions of these labourers. However, it appears that even after 60 years after the enactment of this act, the working conditions in tea gardens are as deplorable as ever. Despite their hard effort, these workers are compensated at a marginal pay rate. The wages they receive merely allow them to survive and not to enjoy a better and more comfortable life. Numerous studies reveal that in tea plantation workers are exposed to exploitative work schedules, control mechanisms, low payments, appalling housing and living conditions, with limited opportunities for collective bargaining. As a result, all the indicators of human development achievement of this community are extremely poor. In this backdrop, this research study attempts to determine the extent of poverty and socio-economic status of the tea garden labourers of Assam. The study is mainly based on primary data gathered from Dibrugarh, Nogaon and Kokrajhar District of Assam. The study uses a multistage sampling technique and the sample size of the study is 455 tea garden labour households. The necessary primary data is collected through interview schedule and direct personal investigation. To estimate the level of poverty, some renowned parameters such as head count ratio and poverty gap index have been utilised and to assess the socio-economic condition of the sample tea garden labour households a self-developed

socio-economic status index has been formed. The data has been analysed using a variety of statistical methods, including the t-test, ANOVA, and post-hoc analysis. The present study reveals that the extent of poverty among the sample tea garden labour household is quite high, exceeding the state average. Not only the incidence of poverty but also the depth of poverty is deeply ingrained among the sample tea garden labour households. Likewise, the socio-economic standing of the sample households is far from satisfactory. Key Words: Poverty, Socio-economic status, Tea Garden labour

Self-Help Groups in fostering Financial Inclusion through Microfinancing: A Comprehensive Analysis of Kerala and West Bengal

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Sustainable development continues to emphasise the importance of financial inclusion and selfhelp groups have become an effective tool in providing easy access to microfinancing facilities. The founding of the Self-Employed Women's Association (SEWA) in 1970 is considered the origin of self-help groups (SHGs) in India. The largest microfinance scheme in the world was born out of the SHG Bank Linkage scheme, which National Bank of Agriculture and Rural Development (NABARD) initiated in 1992. Starting in 1993, SHGs were allowed to open bank savings accounts by NABARD and Reserve Bank of India (RBI). In 2011, the initiative took on a national dimension and transformed into the National Rural Livelihoods Mission (NRLM), which is currently the largest poverty eradication effort globally. The current study focusses on the Indian states of Kerala and West Bengal highlighting the functioning of SHGs in advancing financial inclusion through microfinance. The study explores the establishment, operation, and spread of SHGs in West Bengal and Kerala, taking into account the differences in policy frameworks, cultural dynamics, and socio-economic conditions between the two regions. A comprehensive analysis of the financial services accessed by SHGs is carried out in order to investigate the efficacy of microfinance in empowering people especially women and promoting grassroots entrepreneurship. Self-help groups and financial inclusion have emerged as pivotal instruments in the global battle against poverty, embodying strategies designed to empower individuals and communities through enhanced access to financial services and resources. The multifaceted impact of these initiatives is particularly evident in their ability to facilitate savings, credit access, and incomegenerating activities, thereby enabling individuals to break free from the shackles of poverty. As a comprehensive approach, financial inclusion catalyses a positive feedback loop by equipping individuals to build assets, invest in education, and secure better healthcare, collectively elevating their overall livelihoods. The current study also highlights the difficulties faced by SHGs in advancing financial inclusion, including problems with sustainability, scalability, and governance. By comparing Kerala with West Bengal, it is possible to find best practices, lessons learned, and possible places where SHG-based microfinancing projects could be implemented more effectively. The fact that the women employed by the SHGs are now more financially aware and that loan disbursements could reach the respondents

quickly and readily was a crucial factor in their rise. The conclusions of the study provide financial institutions, development professionals, and legislators with important new information as they strive to improve financial inclusion. It is possible for stakeholders to create more focussed and efficient strategies to meet the financial needs of marginalised communities and encourage inclusive economic growth by having a deeper awareness of the subtleties of SHG-driven microfinancing models in various regional contexts. A major reason behind this was that the women working in these groups were now more financially literate and the loans disbursements could easily reach the respondents without delays, which helped in their growth. Our study shed light on the ways in which SHGs serve as social change agents, upending conventional gender norms and promoting a feeling of communal solidarity. These organisations help to build resilient, self-sustaining communities that are better prepared to withstand economic shocks by fostering entrepreneurship and financial literacy.

Contractualisation of Workers: A Study of Selected Indian Manufacturing Industries

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A transformation is underway in the employment patterns in manufacturing sector across the globe from the last few decades as there is an augmented preference to hire contract workers in order to be cost efficient. The pattern of acceleration in contractualisation is observed in both developed and developing countries. Formal manufacturing sector in India plays a vital role in offering substantial decent employment opportunities. But owing to factors like rigidity in labour laws, heightened competition resulting from economic liberalisation, various pro-employer judicial stances and increasing scale of operation, informality is prevalent even in the formal sector in India. Existing literature presents conflicting findings regarding the factors contributing to the accentuated inclination of firms to engage contract workers. This paper presents an insight into the trends in growth, intensity and determinants of contractualisation of workers in three organised manufacturing industries that is, manufacturing of tobacco products, manufacture of refined petroleum products, and building of ships and boats industries. Time period of the study is from 1998 to 2018. Present research is based on secondary sources of data, extracted from various issues of Annual Survey of Industries, Labour Bureau, Ministry of Labour and Employment, Government of India, Shimla and Chandigarh, Ministry of Statistics and Programme Implementation, Government of India and from various issues of United Nations (UN) Comtrade database by World Bank. Ratios and percentages are used to present a picture of growth and intensity. The findings indicate a fluctuating trend in growth of absolute number of contract workers in all the three industries due to various judicial interpretations, and global economic slowdown of 2008. Also, during the time period, rising trend of proportion of contract workers among total workers is observed in manufacturing of refined petroleum products and building of ships and boats industry, whereas, fluctuations in the intensity of contract workers is observed in manufacturing of tobacco products industry. The most significant period of growth in contractual labour is identified as the

golden period, spanning from 2002 to 2007. Determinants are analysed through the application of a time series econometric model. The analysis of the determinants exhibits that, trade unionisation has played a significant and positive role in the decision to hire contract workers in all the three industries. Also, export intensity has been an important factor influencing the decisions of hiring contract workers in all three industries as it has a positive impact on contractualisation. Negative relationship of differential labour cost and contractualisation of workers in all the three industries in India reveals that firms prefer to save cost by hiring more contractual labour in their factories. Negative relationship of capital labour ratio is found with contractualisation of workers in manufacturing of tobacco products and building of ships and boats industry and insignificant relationship in manufacturing of refined petroleum products industry. Results also reveal that average firm size has a negative and significant role in manufacturing of refined petroleum products industry and an inverse relationship is found between firm size and the hiring of contract workers in refined petroleum products. Policy suggestions are made regarding the improvement in the industrial relations among employers and employees, and regarding flexibility in the strict labour laws in India.

Gender Compatibility Issues in Engaging the Gig workers in India

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In recent times, there have been many changes in the way global and national economies are functioning. After the liberalisation of economy at the global level and in India, some new forms of production and professional engagements have been arising. With the globalisation of production and distribution of goods with the added advantage of transportation and knowledge sharing, the speed of change in the professional environment has been unprecedented. It has been felt in many studies in many countries that the employment relations are changing. Globalisation along with industrialisation and urbanisation is penetrating the deepest core of social functioning in all the societies in countries. With the fast rate of urbanisation, the nature of society, production and the relation between employee and employer is changing. This type of engagement with production or per formative processes is a new development, which is made possible because of the recent development in communication transportation and urban lifestyle. Technology has greatly enhanced our capabilities of engaging in a productive manner, and because of this the new category of workers without employers has emerged in the world. One of such which has been observed is the rise of "just in time workforce" or "the on-demand workforce", which in essential sense indicate two words — the informal and lose nature of employer and employee relations in modern times. This type of employment is widely discussed in the literature related to the gig economy. The term "Gig Workers" comes from the employment of musicians to play for a particular show or event and charge a good amount of money. The Cambridge online dictionary defines the gig economy as "A way of working that is based on people having temporary jobs or

doing separate pieces of work, each paid separately, rather than working for an employer". It is a very common term used in the western world and suits their settings. While in India wherein 70.7 percent of the population lives in rural area, there is a need to examine its possible outcome in respect to social, economic, and psychological terms. Given the special characteristics of third world societies and their insecurities, the gig economy has to be seen through the lens of poverty unemployment and lack of education facilities in India. The global nature of the economy and the Indian economy cannot be seen as a similar phenomenon. After the neoliberal reforms and opening of the economies, the world is witnessing an unprecedented growth in the new employment relations. The advancements in science and technology along with the urbanisation of society are creating new avenues for gainful relations in societies. The traditional forms of employment relations and productive processes are emerging giving more autonomy and freedom to the workers. However, at the same time, there are communities and sections of society who are not able to use these opportunities. This is because of their social and cultural lag, which challenges their compatibilities in relation to better engage in the gig economy in India. This paper argues that the social and cultural lag in India is playing negatively against the women gig workers communing from the tribal background. This paper concludes that there is a need to study the social and cultural disconnect as made visible by the recent and haphazard development of facilities and infrastructure in India.

Infrastructural Services and Social Security Benefits Play Catalytic Role for Gig Workers of Food and Beverage Industry in Mumbai Metropolitan Region **Development Authority (MMRDA)**

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Mumbai Metropolitan Region contributes 4 percent of the country's gross domestic product (GDP). Few services in the region are contributing significantly. In Mumbai, the gig workers of food and beverage industry are more as compared to other municipal corporations in Mumbai Metropolitan Region Development Authority (MMRDA). The Ambernath municipal council has more gig workers as compared to Matheran Municipal Council. Rural parts of Vasai have less gig workers but Ambernath and Kalyan rural has more gig workers. Employment generated by the wholesale and retail trade, restaurants and hotels was more during 1990s in Mumbai. But currently this industry is growing very slow in terms of employment as compared to other industries and employment. The ordinary least square (OLS) regression shows that gig workers of food and beverage industry are positively correlated to all municipal corporations in Mumbai Metropolitan Region but negatively correlated to Thane and Panvel rural area. Sewage and water supply is positively co-related to gig workers in

Vasai Virar municipal corporation. Most of the units in the food and beverage industry are small and do not provide employment throughout the year. The social security is not provided to most of the units. Hygiene, payment, work hours, training is not provided to temporary labours. State government must draft rules and regulations for this sector with strict guidelines to industries in this sector. Gig economy has provided jobs to millions but with irregular income, long working hours and with no appreciation towards their efforts. Gig service providers in the food and beverage industry lack worklife balance while dealing with personal struggles. Food and beverage service providers face a tough time gaining employment opportunities, especially in times where employment gigs are few and labour is available in abundance. The suggested solution to their problems would be establishing a good employer-employee relationship, having the government fix their standard working hours, decent pay along with overtime benefits, flexible timings, maternity leaves and a secure work environment which can help retain the workforce. This research studies the: (1) work-life balance issues faced by the gig workers in the food and beverage industry; (2) problems encountered by the gig workers in terms of lack of infrastructural services; (3) lack of social security benefits to gig workers in the food and beverage industry; and (4) issues faced in terms of sanitation, sewage and water in different areas of the Mumbai Metropolitan Region. We have developed the economic model to understand and examine the workers in the food and beverage industry in Mumbai Metropolitan Region. With the help of ordinary least square regression, we can find the correlation between dependent and independent variables. The nature of the dependent variable is number of gig workers in MMRDA. An independent variable consists of number of workers in different municipal councils and corporations, rural and urban area, water supply, solid waste and sewage in each municipal corporation. The equations have been calculated with the help of Statistical Package for Social Sciences (SPSS). The paper shows that certain areas of the Mumbai Metropolitan Region have more labour working in the industry such as Mumbai, Thane, Ambernath, Vasai, Kalyan and Bhiwandi whereas areas such as Panvel and rural parts of Thane have negative growth of gig workers in the food and beverage industry. Thus, all the food and beverage units must be registered with the government. The government must fix minimum working hours, salary, maternity leave, flexibility and minimum wages. Every unit must follow standard work practices at their respective workplaces. Provident fund and adequate leaves should be provided to workers. The fundamental solution is to improve the working environment and economic conditions of the gig workers which shall help to retain the workforce of this sector.

Gig Economy and Women in the State of Bihar: **Dimensions and Perspectives**

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The term gig economy came in vogue during the 2009 financial crisis. It reached its vortex with the outbreak of coronavirus disease (COVID-19) pandemic. Recently, several literature, articles and reports have projected gig economy as an effective answer to gigantic problem of unemployment in several countries of the world. This present study on gig economy aims to define gig economy, discuss its unique features highlighting the relevance of growth of gig economy particularly in state of Bihar in creation of employment opportunities and to which extent it is justified. The present study throws light on the differences existing in work culture of gig workers, self-employed workers, organised sector workers, and unorganised sector workers. As a generator of large employment opportunities distinctive features of gig economy have been analysed and juxtaposed to the problems and hurdles faced by women in Bihar while entering the gig economy. The prime concern today is why this new category of workers known as gig workers emerged. The answer lies in changing needs of the human beings, changing environment propounded by COVID-19 and technological advancement. The United States is the largest labour market for gig workers. The digitalisation and outbreak of COVID-19 accelerated the 'gigification' of large economies. The present study uses primary and secondary data to corroborate whether gig economy is capable of creating employment opportunities in Bihar or especially for women. With the above objective in mind, the research is based on field work, conducted through survey questionnaire of around 200 respondents in different location from 5 districts of Bihar. The questions were formulated to capture and assess the socioeconomic background of respondents, penetration of digital tools and digital awareness. Questions were structured to obtain information regarding monthly income, ownership of mobile phone smartphone or feature phone, access to Internet service, knowledge of operating mobile banking to reach to correct conclusions. The article also suggests few corrective measures to overcome difficulties faced by women in Bihar. To avail benefits of gig economy, Bihar needs to work on basic parameters of illiteracy, digital literacy, change in orthodox thinking especially towards women and thus bridging the rural urban gap, and at the same time measures should be taken for building financial and credit facilities. Benefit of the new gig economy can only be harnessed when there is change in traditional mindset of Bihar and expansion of internet users in Bihar. Not only number of internet users are lowest in Bihar but there is large digital gender gap too. Gig economy can become a source of increasing livelihood if the working population is digitally literate. In Bihar, 76 percent of population is still engaged in agriculture. However, the job creating sectors or opportunities offered by gig economy as discussed require skills that are more suited to urban areas. Job opportunities offered or created by gig economy require a minimum level of literacy which is not suitable for workforce in Bihar as we know that Bihar has the lowest female literacy and it does not rank high in male literacy too. A more conscious, streamlined and targeted effort by leaders and population of Bihar can only help women to harness the benefits of gig economy and take women on the path of economic prosperity.

Assessment of Worker Satisfaction with Special Emphasis on Gig Economy: A Survey

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IThe labour market has experienced significant transformations in the last few years due to factors such as digitalisation, delocalisation of manufacturing, and a rise in temporary and part-time employment. The well-being and working conditions of employees were also influenced by these changes. The concept of job satisfaction is linked to the idea of employees' or workers' well-being. Job satisfaction has been extensively researched in business science and has an extended history of being a prominent topic in organisational study. In the context of organisational behaviour, it was first examined in the 1930s and is currently the most well-known variable. During and after the Great Recession, companies were laying off employees. There was a ready pool of workers and fresh graduates seeking jobs. There was a gap in the labour market between the labours and the customers seeking a certain amount of value in the services. Certain platforms were introduced at this time to bridge this gap and the economy around it has experienced rapid growth since then. The last 20 years have seen tremendous advancements in Internet and cellular communications technology (ICT), which have accelerated changes in work and fuelled the gig economy. Increased use of freelancers by big businesses for both short- and long-term projects has contributed to positive development in the gig economy. The gig economy is defined as an economic system whereby the workers or individual service providers are connected with final users via digital platforms, hence it is also referred to as a platform economy. The gig economy is a rapidly expanding phenomenon in which individuals use online platforms to perform a variety of freelance, full-time, part-time, or temporary occupations. On the other hand, little is understood about gig workers' satisfaction levels and how to assess them. Research on job satisfaction and its quantitative analysis has been crucial for a long time. Numerous scholars from the past to the present have employed a variety of quantitative methods, particularly the use of indices to gauge employee satisfaction. These studies have assessed workers' job satisfaction taking into account a variety of factors or job satisfaction indicators. Notwithstanding the widespread belief that gig economy workers constitute a subset of all employees in an economy, gig workers stay out of the workforce due to several characteristics, including flexibility, part-time employment opportunities, online platforms, etc. In general, and in the gig economy specifically, this study seeks to give a thorough overview of the quantitative components of worker satisfaction. Common variables are noticed in different indices offered by several authors. Work itself, wage, promotion and growth prospects, work intensity, colleagues, working environment, work-life balance, supervision, recognition, contracts and other benefits are some of those variables. Additionally, it offers a conceptual framework based on a review of a wide range of existing literature for evaluating gig workers' job satisfaction. For gig workers, autonomy, flexibility, independence, working-hours, cost of providing services and online application's

interface are certain factors peculiar to this sector. The findings indicate that several variables, including pay, independence, flexibility, skill development, social contact, and work-life balance, affect how satisfied gig workers are. According to the study, the suggested methodology can be used to assess and compare gig workers' levels of satisfaction across various platforms, industries, and geographical areas. The business model of the platform and guidelines of the regulatory authorities can also impact the satisfaction of gig workers. In addition, it is advisable to take into account a few other significant factors that past gig economy researchers have overlooked, such as coworkers, the workplace, and work-life balance, when developing an index for a quantitative assessment of gig workers' satisfaction. The primary flaw of the paper, despite its suggestion of a framework, is that we haven't created an index that would facilitate future scholars' work in this area. Nonetheless, it is anticipated that the framework and detailed evaluation would draw in academics to further build an index to gauge the satisfaction of gig workers. The index can offer insightful information on a range of aspects of job satisfaction in diverse job kinds and geographic areas. As a result, the results will be beneficial for developing appropriate policies and sector regulation.

An analysis of India's Blooming Gig Workers

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With the advancement of technology and new innovations, the working nature and labour relations of the world have completely changed. A new concept of worker that is 'gig' worker has risen across different countries of the world. Gig worker is an integral part of the total workforce of a country. Gig worker is a person who performs work or participates in a work arrangement and earns from such activities outside of the traditional employer-employee relationship. India, the nation with the youngest population of the world and a huge demographic dividend of half a billion workers, widespread adoption of internet, technology and smartphones along with faster urbanization, starts a new era of revolution. The article is purely based on existing literature and secondary data sources. The article specially highlights the scenario of the gig workers in India where it discusses an estimation of gig workers, category wise gig workers, occupational and industrial classification of gig workers. The article tries to analyse the social security and income pattern of the gig workers. It also discusses severe issues and challenges of the workers and different policies taken by the government to improve the condition of the gig workers. In India, the gig workers are increasing rapidly. As of 2020, 7.7 million workers relied on gig jobs in India and it is estimated that by the end of this decade, the number of such type of workers will be increased to 23.5 million. In 2019-20, gig workers share is 1.33 per cent to total employment and it is expected that it will be reached to 4.13 per cent. The percentage of gig workers in organized sector, according to NITI Aayog report, is increased from 25.9 per cent in 2011-12 to 37.6 per cent in 2019-20, whereas in unorganized sector, it is declined from 74.1 per cent to 62.4 per cent. The trajectory of future development of gig work indicates an expansion within the organized sector. Industrial classification of gig workers shows that in 2019-20, more than one-fourth of the gig workers are engaged in retail trade sector. In the same period, only 0.2 per cent workers are engaged in

electricity and gas. On the other hand, occupation wise classification shows that about 23 per cent of the gig workers works as a shop salesperson and 13 per cent works as a motor vehicle driver. The gig workers works outside of a traditional employer-employee relationship, and therefore these workers not able to take opportunities of social security benefits like health insurance, paid leave, provident fund etc. In 2011-12, 23 per cent workers are able to access social security benefits and in 2018-19 it is increased only by 3 per cent. These workers face severe challenges such as insecure income, lack of employment benefits, worst working conditions etc. Hence, design and implementation of the social security coverage in a proper way and active state intervention is required to improve the status and condition of the gig workers. An immediate need for skilling, re-skilling and up-skilling is required for future workforce.

How Decent the Working Conditions of Gig Workers in India? A Legal and Policy Perspective

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The world of work and the conditions of workers have been continuously changing throughput the history from freelance workers in the early civilisation period, to slavery in ancient and medieval period, to wage contracts in colonial period, to rights and, job, social security based work in modern period, to again freelance work in digital period. This freelance work though a digital technology is called a gig work or platform work. The workers working under the platforms are gig workers or platform workers. These workers are newly emerging with growth of digital technology where people are connected through internet-based websites or apps for their economic activities. As these jobs are freelance and newly emerging, they do not have comprehensive laws and policies for their decent and just working conditions, wage rates and social security. Both Central and some State governments in India made few laws and policies for the purpose of gig workers in India. In this context, it is important to make a critical study of working conditions and legal and policies related to gig workers in India. With this background, this paper addresses the following objectives and studies the status of gig economy and gig workers in India, critically examine the legal and policy aspects of gig workers in India, and studies the fair working conditions of gig workers in India This paper is based on the secondary level data and information collected from various public and private sources like legislatures, policy papers, discussion papers, status reports etc. This follows analytical approach consisting of analysis of both quantitative and qualitative data/information. The number of gig workers (UPSS) has shown a consistent increase over the years from 2011-12 to 2019-20. The figures have risen from 25.2 lakh to 68.0 lakh during this period. NITI Aayog has also projected the gig workers to grow to 1.27 crore with 4 percent share by 2024-25 and to 2.35 crore with 6.7 percent share by 2029-30, which indicates higher growth in the future. Fairwork India results indicate that, no single company scores the maximum score of 10 in terms of fair pay to the gig workers in India. Companies such as Flipkart, Bigbasket and urban companies are relatively better with score of 5 to 7 indicating the fair work to the gig workers

in these companies. Sadly the major gig companies such as Amazon, Uber, Ola are very poor in their fair work score indicating bad conditions for the gig workers in these companies. The food service companies like Zomato and Swiggy are in the middle level of fair work score. The government had taken some measures for the gig workers such as bringing new legislations for the gig workers such as Consumer Protection Act, 2019, Consumer Protection (E-Commerce) Rules in 2020, Social Security Code 2020, and schemes such as The National Policy on Skill Development and Entrepreneurship 2015: Skill India Mission Pradhan Mantri Kaushal Vikas Yojana (PMKVY), Jan Shikshan Sansthan and Deen Dayal Upadhyay Gramin Kaushalya Yojana (DDUGKY) provide short-term training. As also, "Transformation of Aspirational Districts" 2018 – with special focus on skill training of youth in 112 Aspirational Districts, including those from vulnerable and marginalised sections of society, and "PM Street Vendor Atmanirbhar Nidhi Yojana" (PM SVANidhi Scheme). The following measures are to be taken to ensure decent working conditions for the gig workers in India through laws and policies such as addressing the present learning crisis and skill gap for the future gig workers, strengthening skill development, bridging the digital divide, strong social security, ensuring fair work and inclusive and sustainable opportunities and growth.

WORKSHOP SESSION 2

Role of Population, Nonrenewable Energy Consumption, Government Expenditure, CO2 Emissions and Inflation for Achieving Sustainable Development Goal-13 in India

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This study attempts to construct a macroeconomic model aligning with the United Nations Sustainable Development Goal Thirteen (SDG-13) for India. Utilizing the Seemingly Unrelated Regression Equation (SURE) model delves into the interconnected dynamics among the energy sector, income, and the environment, focusing on identifying common influential factors within a system of four simultaneous equations over the data from 1971-2021. Notably, the research identifies the services sector, agriculture sector, nonrenewable energy consumption, government expenditure, money supply, per Capita carbon dioxide emissions, inflation, and population as pivotal influencers in these simultaneous equations. It is discerned that the services sector, nonrenewable energy consumption, and government expenditure play a significant dual role in environmental degradation, given their contributions to increased energy demand, which, in turn, leads to emissions. Furthermore, these identified variables wield substantial influence over economic growth. This analysis contributes to developing a comprehensive macroeconomic framework to advance environmental sustainability in India while aligning with the imperatives of SDG-13. This study attempts to construct a macroeconomic model aligning with the United Nations Sustainable Development Goal Thirteen (SDG-13) for India. Utilizing the Seemingly Unrelated Regression Equation (SURE) model delves into the interconnected dynamics among the energy sector, income, and the environment, focusing on identifying common influential factors within a system of four simultaneous equations over the data from 1971-2021. Notably, the research identifies the services sector, agriculture sector, nonrenewable energy consumption, government expenditure, money supply, per Capita carbon dioxide emissions, inflation, and population as pivotal influencers in these simultaneous equations. It is discerned that the services sector, nonrenewable energy consumption, and government expenditure play a significant dual role in environmental degradation, given their contributions to increased energy demand, which, in turn, leads to emissions. Furthermore, these identified variables wield substantial influence over economic growth. This analysis

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Labour Relations and Labour Process in Platform Capitalism: The Dynamics of Work in Platform-Based Food Delivery in Delhi

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The rise of digital technologies into various fields of society has reshaped the world into countless ways, touching upon sectors like communication, healthcare, entertainment, science, and transportation. One of the most prominent transformation has occurred in the world of work, particularly within the platform economy, marking a significant shift in labour relations and labour processes. Various sectors, including marketplaces, taxi services, food delivery, the beauty industry, and courier services, have experienced substantial changes catalysed by digital platforms acting as intermediaries. The food service industry stands out as a prime example of this transformation, with the emergence of online food delivery platforms revolutionising the sector. According to Statista, the market size of online food delivery in India surged to US\$3 billion in 2020 and is anticipated to reach US\$13 billion by 2025. This remarkable growth contrasts sharply with the scenarios of a decade ago, where only a few players, such as Mumbai's Dabbawallas and local tiffin services, dominated the food delivery segment. The rise in digital platforms has not only impacted the industry's scale but has also redefined labour relations and processes within it. The disruption caused by food delivery platforms like Swiggy, Zomato, and Deliveroo has led to a fundamental shift in labour markets, challenging traditional employment systems. These platforms have introduced flexible work arrangements, categorising food delivery workers as "gig Workers" or "platform Workers." They claim that these individuals operate independently as contractors rather than traditional employees, signalling a paradigm shift in the nature of work associated with food delivery. This study aims to understand the dynamics of labour processes in food delivery services, specifically focusing on Zomato workers in Delhi. The primary objective is to understand the reorganisation of work and the changing power relations between workers and employers in the context of platform capitalism. This study aims two answer two major questions: Firstly, how do the dynamics of labour processes in food delivery services reflect the reorganisation of work and the evolving power relations between workers and employers? Secondly, in what ways has the introduction of technology and digital platforms transformed the organisation of labour in food delivery services? To address these questions, the study adopts a qualitative research methodology, incorporating both secondary literature analysis and primary field surveys. By combining insights from existing literature with prima data from the field, the research aims to provide a comprehensive understanding of the interplay between technology, digital platforms, labour relations, and labour processes in the context of Zomato workers in Delhi. Therefore, this study examines the transformative impacts of digital platforms on the organisation of work and working conditions in the gig economy, focussing on the case of food delivery workers in Delhi. It explores how the rise of app-based food delivery platforms like Swiggy and Zomato have disrupted traditional employment systems and labour relations, leading to more flexible but also more precarious arrangements. The study will also discusses key issues like the classification of gig workers as independent contractors rather than employees, algorithmic management, working conditions concerning hours, income stability, health and safety. It also touches on how gig work impacts marginalised communities and questions around workers' rights and collective action.

Pattern and Determinants of Household Debt in Punjab: An Analysis based on the NSS 77th Round

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Debt plays a significant role in economies today and has far reaching developmental impacts at both micro and macro level. This has been documented in the case of India wherein, bank regulation and expansion has been liked with reduced poverty and increased economic growth. However, increased debt can have adverse impacts as well. India's household debt has been increasing which necessitates more in-depth study at the national and state level. Household debt in Punjab attracts special attention due to farmer suicides and other sufferings indicating its adversarial nature. Hence, the objective of the paper is to elaborate the extent and pattern of household debt in Punjab within the context of purpose of debt and sources of credit agency using the All-India Debt and Investment Survey, 2019. Further, the paper attempts to elucidate the social and economic factors that determine household debt in Punjab. The study estimates the incidence of indebtedness of Punjab at 29.1 percent just one percent below the national average of 30.8 percent. Also, there is high rural urban difference in household debt in Punjab with rural indebtedness at 35.1 percent compared to urban indebtedness at 20.6 percent. It is evident from the marginal effects of binary logistic regression that social factors such as religion and social group have shown significance in affecting household debt. In terms of religion, households that follow Hinduism have 14.05 percent lesser probability of having debt in comparison to other religions.

For Islam and Sikh households, this decrease in probability is similar, at 12.89 percent and 9.46 percent, respectively. With other social groups including General Category (GC) as the reference category, it is evident that Scheduled Tribe (ST) households and Other Backward Classes (OBC) households have 2.38 percent points and 1.55 percent decreased probability to have debt respectively. This relationship is opposite for Scheduled Caste (SC) households, wherein in comparison to the reference category, there is increased probability to have debt by 6.11 percent. This indicates that certain social factors can affect debt taking behaviour of households. Moving on to the economic factors, household size and debt have a positive and significant relationship wherein the marginal effect of .0235 indicates that for each additional household member, the probability of household incurring debt decreases by 2.35 percentage points. The rural sector has the marginal effect of .1132 indicating that in comparison to urban areas, households belonging to rural areas have 15.24 percent increased probability of having debt. All household types have a positive relationship while affecting household debt. The highest probability of incurring debt (19.82%) is for households which are self-employed in both agriculture and non-agriculture ventures. This is followed by households involved in casual labour (13.49%) and salaried households (12.28%). Landownership also plays a positive role in incurring debt wherein owning more assets increases the probability of having debt by 1.19 percentage points. Moreover, it is to be noted that with an increase in monthly expenditure of households there is a 16.98 percent increase in probability of having debt proving the use of debt in smoothing consumption requirement of households. The paper concludes with necessary policy implications and future research directions.

The Trend of Employment in The Informal sector in the Agriculture sector of the Indian Economy and the Demand for Social security

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The labour market of India is divided into two major sectors, first one being organised & second one is unorganised sector but the major segment lies unorganised. As per the survey of the National Sample Survey Organisation (NSSO) the total employment in the economy in both organised and unorganised sectors was 47 crore, out of which about 17 percent were in the organised sector and 83 percent in the unorganised sector. Thus, 80 percent of the people are employed in the unorganised sector and less than 20 percent are in the organised sector. An important reason for working in the unorganised sector is the socio economic factors existing since British era, informal labour market is an important sector of the Indian economy, in which even before the implementation of New Economic Policy (LPG) in the early 1990s, There existed a huge unorganised labour force, which continued growing. In current scenario, the unorganised sector provides the most in the secondary sector and in addition to this, working labourers such as rickshaw pullers, vegetable vendors, cart drivers, masons, tailors,

handicrafts, khadi and village industries, etc. has deteriorated. In which the condition of women is concerned. According to this Periodic Labour Force Survey (PLFS) 2017-18, 52 percent of women are self-employed in urban areas, 27 percent are working on daily wages and only 21 percent are engaged in the organised areas, of which few of them have also been part of mental and physical harassment cases at the workplace. To improvise the situations, Government has come up with Unorganised Workers Social Security Act 2008 to give a sense of social security & welfare. The unorganised working population is still living a life full of deprivation which is not acceptable, without adequate facilities to fulfil their daily requirements. Indian economy is the fastest growing large economy in the world, in whose development the unorganised sector has also contributed significantly. Workers in the unorganised sector who have been paid less than the minimum wage fixed by the government and are denied social security such as pension and health insurance as well as dignified work. The government should formulate a comprehensive policy keeping in view the changing nature of the labour market and give them due participation in the system, recognising their contribution to the economy. It is now the responsibility of the state to provide employment to migrant unorganised labourers in the era of COVID-19 global pandemic. Economic and social security will have to be provided to them by promoting their involvement in effective schemes like MNREGA, Pradhan Mantri Gramin Sadak Yojana, and the Ministry of Women and Child Development, Ministry of Labour and Employment should organise awareness camps in this regard. If the state starts effective efforts as soon as possible to provide economic and social security to the workers of the unorganised sector, then the workers of the unorganised sector will be benefitted. The workforce participation of women in India was 28.2 percent in the year 2004-05, which decreased to 21.7 percent in the year 2011-12.

Manufacturing Output and Employment: An Empirical Analysis

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The output and employment are the most important indicators to study the performance of any economy. The nature of the relation between these variables determines the macroeconomic policy. As per data released by RBI from 1991 to 2022, the contribution of annual manufacturing output in India has been 13% to 17% of its GDP. An increase in manufacturing output leads to higher demand for labour which increases wages and lowers the level of unemployment. Also, higher manufacturing output contributes to economic growth leading to an increase in aggregate demand of the economy, further creating opportunities in other sectors and attracting investments ceteris paribus. Since the manufacturing sector provides only 11.6% of total employment in India as per PLFS data, it becomes pertinent to study the empirical and economic relation between manufacturing output and unemployment. The main objective of this paper is to empirically investigate the relationship between two variables and examine statistical relationship among both. Prof. Arthur Okun in hisseminal work Potential GNP: its measurement and significance (1962) performed an empirical study on the output and unemployment in the US economy and found it to be negatively related. Other authors have held

his observation valid in several economies. Specifically, Ball (2016) held the validity of Okun's law in developing and 20 advanced economies. However, Mayer and Murat (2018) found Okun's law unstable over time. Statistically, the level of employment could be affected by the level of output however to what degree other factors are influencing employment needs attention to derive the theoretically better relation between manufacturing output and employment as it has been performed by Okun. This further gives the opportunity to theoretically find the possibility of modeling manufacturing output and employment relation. In this study, we are using a structured approach to analyze the empirical and economic relationship between unemployment and the manufacturing output of India from 1991 to 2022. Starting with a unit root test using the Dicky Fuller Test, wherein both variables—unemployment and manufacturing output founds to be stationary with 99% confidence. To study the relationship, the coefficient of regression is examined, which displayed a similar trend as noted in Okun's observations. Moreover, advanced statistical methods such as VAR (Vector Autoregressive), Granger Causality, and VECM (Vector Error Correction Model) are employed to investigate the short-term dynamics between employment and manufacturing output. Our findings suggested that manufacturing sector employment has a Granger-causal impact on outpute. The VECM analysis revealed a divergence in long-run equilibrium, showing how the variables respond to each other over time. To ensure the robustness of our model, diagnostic tests to check for stability have been conducted, and the results confirmed the model's stability. This means that the relationships and patterns identified in our study are consistent and can be considered for further analysis. To develop a theoretical model based on the impulse response function. This model will provide insights into how changes in manufacturing output may influence employment and vice versa.

Welfare Policy and Labour Market Outcomes Among Persons with Disabilities (Pwds) in India: Evidence from the NSS 76th Round

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India is the host of one of the largest population of persons with disabilities (PwDs) in the world. However, a large section of this population has been unable to access opportunities for economic and social progress, despite the enactment of the RPWD Act, 2016, the country's most ambitious disability rights legislation to date. This study attempts to analyse the impact of the Indian government's two primary welfare policies – the disability certificate and a cash transfer (the pension) - on employment outcomes for PwDs. Logistic regression results show that having a certificate with percentage of disability less than 60%, raises the probability of employment by 17%. As the extent of disability rises above 60%, the probability of being employed declines. However, the largest effect size is seen for a narrow set of registered salaried jobs. The effect of the pension is analyzed through a propensity score

matching technique for each state, keeping out of pocket (OOP) disability expenses as the outcome, and pension as the treatment. The results reveal negative and significant treatment effects (ATT) of the pension on OOP disability expenses. Interpreting OOP expenses as an indicator of the 'conversion handicap' faced by PwDs (Sen, 2004), we argue that cash transfers can also indirectly reduce the barriers to employment.

Understanding the Dynamics of Occupational Structure in Nagaland

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IThis paper attempts to study the trend in the occupational structure of the population in Nagaland through the course of five years, from 2017 to 2022. The trends in occupational structures are very closely related to the economic growth of a nation as an economy shifts from a subsistence state to a modernised and industrialised sector. Such a structural change in the workforce distribution is pertinent for the development of any economy. An understanding of occupational structure of a population warrants the comprehension of the composition of its working force. The proportion of workers engaged in each sector of the economy provides with a clear and definite picture of the socio-economic development of the nation. Nagaland is a state in the North-eastern region of India with Kohima as its capital. Agriculture remains one of the main sources of earning livelihood for the people of Nagaland with almost 70 percent of its population engaged in the agriculture and allied sector and an almost negligible number of industries and corresponding industrial activities. This paper further attempts to dissect the proportion of workers and study the occupational structure in the categories based on region and gender. Secondary data has been collected from the annual reports of the Periodic Labour Force survey (PLFS) under the National Sample Survey Organisation (NSSO) for the period of 2017 to 2022, and the 2011 Census of India. The objectives of the study serve as guide to the various data selected and the data is organised and processed using suitable tables, diagrams and statistical tools to arrive at the results. An analysis on the occupational structure in Nagaland reveals that majority of the working population are engaged in the primary and tertiary sectors with 43.6 percent and 42.8 percent respectively of the total working population engaging in these two sectors in 2021-22. On the other hand, percentage share of the working population in the secondary sector is very low with only 13.6 percent of total workforce participating in the secondary sector in 2021-22. Looking at the genderwise workforce distribution, female workers are more in the primary sector while the male workers are dominant in both the secondary as well as tertiary sectors. The trend in the past five-years from 2017 to 2022 also depicts the percentage of female workers in the primary sector to be increasing while its share in the secondary and tertiary sectors fluctuates slightly over the years. On the other hand, the percentage share of male workers in all the three sectors for the past five years shows only slight variations of increase or decrease in workforce participation across the three sectors. From the analysis, it is evident that Nagaland has great potential in improving its industrial sector, with more emphasis on research

and development. With the ever increasing population, the government has a huge responsibility to shoulder in developing all sectors of the economy so as to generate more employment opportunities and thereby absorb the growing manpower, which will also curb the problem of unemployment and lead the economy towards a more developed and sustainable path of progress.

India's Labour Market: The Safe Guarding Policies and **Shun Protectionism Measures**

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The India's Labour Market has divided into two parts namely informal and formal sector, as both of these labour markets having skill and unskilled characteristics. The informal sector labourers are the mainly issue in the labour market scenario in India. The crisis of employment in India has been well- documented statistics even before and after the economy received the massive post Covid 19 shock after the lock down. As the consequence of the burning of the employment crisis has severely affected for the people at the bottom and middle of socio economic classes are more. The nature of economic growth depends upon the labour market characteristics in India and on the other hand, technological change is also either upward or downward trend of the labour market. In India has the embarking the promulgation of appropriate labour laws and policies. If it is happen definitely, then automatically enhance the rights and collective bar gaining of wage level in the Indian Labour Market. The global unemployment rate at 5.1 percent show a modest improvement on 2022, but the jobs gap remains elevated. The joblessness and the jobs gap have both fallen below pre-pandemic levels but global unemployment will rise in 2024, the ILO noted adding that growing in equalities and stagnant productivity are the causes for the concern, In India, the real wages are "Positive" compared with other G20 countries, according to the United Nations. In general, the International Labour Organisation warns of rise in unemployment, decline in real wages fail to keep pace with inflation, altogether pushing the 1 million workers falls into extreme poverty. This paper mainly attention towards the India's Labour market safe guarding policies to rectify the challenges faced by the India's labour force and especially migrant workers in India. This paper mainly attention towards the India's Labour market safe guarding policies to rectify the challenges faced by the India's labour force and especially migrant workers in India.

Pattern and Reasons for Migration in India, with Special Focus on its North-Eastern States

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Migration or the movement of people is an important aspect of population change in any place after the natural process of birth and death. Migration generally refers to permanent or temporary movement of people from one place to another, it is a never ending phenomena that occurs as a result of various push and pull factors on respective place of origin and in the place of destination. While

the push factors could be lack of opportunities, low wages, rising population etc., the pull factors are in the form of higher expected income, higher scopes for employment, improved standard of living that attracts migrants from backward areas to urban or developed regions. Economic reasons is one of the important determinant of migration beside political and social reasons. Several theories on migration, like the ones given by Ravenstein, Lewis, Todaro, Lee etc., furnished the earlier ideas of economic aspect of migration. Migration also causes integration of ethos, values, faith and principles in terms of cultural exchanges, but this phenomenon can often results in conflict and increased tension between indigenous communities and migrants. In many cases, the host communities have stood against the regular inflow of migrants into their locality owing to the reasons like limited availability of resources, cultural differences, security concerns etc. Thus, migration is an essential factor in shaping and developing the socio-economic and cultural structure of human society. The internal labour migration across India is a key feature of spatial distribution of labour throughout different states, which renders important contribution in India's overall development. India has a large share of young population between the age group of 15-59 years, as a result, migration plays very important role in catering employability, within or outside the nation, to the actively work seeking population of India. This paper attempts to study different patterns of migration in India and also in north-eastern part of India, and to understand various reason behind migration. This paper puts together the data from various secondary sources like Census survey, periodic labour force survey (PLFS) 2020-21 report and National Sample Survey (NSS) 64th round report to analyse the issues, pattern and reason for migration in India and its north-eastern states. The paper reveals that, in India employment related reasons is principal factor for male migration and marriage is the main reason behind female migration. Male migration was found to higher than female migration is almost every category of reason for migration except marriage. In terms of pattern, majority of movement occurred within a district or intra-district migration, which is followed by inter-district migration. Most of the male migrants in urban area have moved from across different districts or inter-district movement within the same state, while in rural area majority of male migration was intra-district migration. While, majority of female migration in both rural and urban area was intra-district migration. Every states in northeast India observed growth in its total number of Migrants in past two decades. The State wise comparison of all the northeast regions reveals that employment-related reasons, marriage and movement of parents/ earning members are some of the major reasons behind why people migrates. The migration pattern as per the four stream of migration in northeast India is not as similar as Pattern in India as a whole.

Employee Retention through Conflict Management Strategies in IT Organisations

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Globally, India has been considered as one of the most preferred destination for information technology enabled services (ITES) companies. It is due to the availability of a large pool of English speaking scientific and technical talent with domain expertise in specialised areas with a strong track

record of delivering a significant cost advantage and world class information security environment. In addition, Excellent telecom infrastructure and rapid growth in business infrastructure has ensured unhindered growth and expansion of ITES sector enabling business policy and catalysing regulatory environment. On the other hand, one of the biggest problems faced by information technology (IT) organisations in India today is the increased employee attrition. Repetitive low-end jobs, physical and psychological problems and inadequate growth opportunities are major reasons cited for high attrition rate. The impact of employee attrition can be disruptive and costly. The negative impacts of employee attrition is described through the factors like: a) high financial cost, b) disruption of social and communication networks, c) loss of business expertise due to administrative problems, and d) productivity losses and workflow interruptions affecting service quality leading to image loss of the organisation and many more. In reality, retention of key employees is imperative to the long-term health and success of any organisation. The human resource (HR) leaders can act as catalysts of change by deploying effective conflict management strategies, tools and processes, thus creating a value and culture that invests in its people. Some of the pro-active conflict resolution strategies recommended to be adopted by managers to circumvent the prospects of employee attrition in IT organisations include: a) recruitment of right talents, b) hiring employee for a long haul with "multi-year job package", c) to handle high potentials effectively with sound exit policy for knowledge workers, d) growth and career opportunities, e) frequent promotions, f) 360-degree performance appraisal, g) "Boomerang hiring", h) to encourage innovation and skill development, i) to create talent stock exchange, j) telecommuting, k) to promote persistent work-life balance, l) to design workplace for fitness and wellbeing, and m) to adopt hybrid workplace model etc. Our review has also shown how various researchers have identified reasons behind the escalating problem of attrition and how many of them have even suggested recommendations to control it. Work has been done on various domains like the human resource management (HRM) systems and practices, job satisfaction, and burnout syndrome. However, no systematic and comprehensive work has been found that collaborates all facets viz., retention, employee motivation, new industrial approach, leadership, talent management etc to combat the most burning issue of present times i.e., attrition in IT industry. On the other hand, the vast majority lacks the strategy, culture and solutions to do so due to lack of conflict management approaches. In order to understand both the concepts of attrition and HRM, we need to study the literature in the light of both. Therefore, this review is designed to study the nature, state and factors affecting high employee attrition in Indian IT companies. The study also focusses on the role of conflict management and suggesting remedial measures to address the high attrition problem.

India's Economic Growth, Education and **Employment: An Economic Analysis**

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The study addresses the situation of "educated unemployment" in India. The study examines the relationship between educational attainment, employment and economic growth in India. The study also shows that higher levels of education contribute to higher per capita incomes in countries. Establishing a link between employment and development is done through human capital. The labor market, which mediates between educational options and career possibilities, helps us better understand the relationship between education and employment. This research attempts to address two main goals using secondary data. The first is to explore the relationship between educational attainment, employment, and economic growth in India with particular emphasis on the North Eastern States of India. In all Indian states, there is a large mismatch between the demand for and supply of labour. The study's goals are achieved by utilizing databases from a number of secondary sources, including the Central Statistical Organization (CSO), PLFS Data, the Planning Commission of India, the Registrar General of India, the Census of India, the All India Survey on Higher Education, the Statistics of School Education, Selected Statistics on School Education, and others. Simple regression analysis and descriptive statistics have been used to make statistical inferences. The study finds a positive relationship between educational level and GDP per capita. The paper also reveals that educational attainment has a positive role in raising national per capita income. Backward economies need to learn from the model of South, specifically. Kerela in terms of good achievement in human development indicators; especially, improvement in the level of technical education seems to be necessity of time particularly with reference to females. States should focus not only upon achieving good numbers in primary and secondary education but also on higher percentage of enrolment in higher education as well as in specific technical education. This paper deals with establishing a relationship between education, growth and employment. To tackle unemployment, imparting good technical education is essential. It is important to see that new universities or colleges are set up after careful consideration of the needs on the one hand, and more importantly, ensuring adequate resource support on the other hand. Even the literature by eminent economists suggests that the lack of technical education among females and the small number of females enrolling in professional courses are the main hurdles between the demand and supply gap of labour. Apart from the literacy rate, another indicator showing education status is the gross enrolment ratio. It measures the total population of all ages enrolled in different education programmes and the total population of the country in different age groups. Ranis et al. (2002) in their paper about interlinkage between human development and economic growth analyzed that all the levels of education are necessary for economic development of an economy. Tamil Nadu are the states like Bihar, Odisha, West Bengal, Jharkhand and Uttar Pradesh did not show an encouraging picture of enrolment. According to Tilak (2001), higher education contributes much strenghth to the overall education system. The internal rate of return is much higher in the case of higher education. Technical education which includes diploma courses, viz. certificate courses, polytechnics, ITIs, integrated courses, also plays a role in economic development.

Evaluating the Impact of Students' Perceptions of Classroom Environment and Teacher Beliefs and Attitudes on Student Outcome

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National Education Policy 2020 emphasises the importance of motivation and empowerment of teachers and their role in developing a caring and inclusive culture at their schools for effective learning. This is against the backdrop of a learning crisis in India, where a vast majority of students are below curriculum standards, and the average rate of learning is much lower than expected. Using Young Lives secondary school survey (2016-17), we study the impact of teachers' belief systems on their students' cognitive outcome i.e., math test scores. We measure three teacher beliefs using Exploratory and Confirmatory Factor Analysis: Teacher Biasness, Job Satisfaction, and Self-Efficacy. Five latent variables were created; one for Biasness and two each representing Satisfaction and Self-Efficacy. Biasness variable assesses how biased teachers are about the effect of class, caste and gender on a student's performance. Job Satisfaction latent variables represent the level of satisfaction from their current job and if they have enough opportunity to grow. Self-Efficacy latent variables indicate how positive teachers are about teaching being effective in student's learning trajectory and their confidence and beliefs about teaching being an important tool in overcoming familial barriers to learning. We also looked at how students' perceptions of the teachers' instructional practices play a role in determining their cognitive outcome. Two latent variables were constructed for the same. First, OLS regression analysis was conducted which served as a benchmark model, which was followed by the school fixed effects model. Standard errors were clustered at the school level. None of the teacher beliefs significantly affected test scores in the fixed effects model, whereas perceptions of the classroom environment emerged as a significant determinant in all the models. We found that only 13 percent of the variance in classroom perceptions was accounted for by the class, indicating that student perceptions of teachers' instructional practices are not credible indicators of teacher quality. Consistent with other studies, this paper finds that, the observed characteristics explain little of the variability in teacher quality. Furthermore, unobserved teacher characteristics seem to have no effect on student outcomes either. The paper adds to literature by suggesting that it is the students' perception of their teachers' quality (rather than the teachers' quality per se) that significantly affects student outcome. There are two aspects to this. Firstly, perceptions of students are determined by the teacher's actual behaviour, not by what the teacher believes. Even though what the teacher thinks may be consistent with the teacher's actual practice in school, what the teacher reports to the surveyor may be very different from what he thinks. Secondly, teacher subjects students to differential behaviour, resulting in the observed low correlation among student perceptions scores in the class. These perceptions might also largely be a function of the student's socio-economic background contributing to the psychological makeup of the student. These results clearly indicate a non-linear process of knowledge impartation at work which necessitates looking at what takes place in the classroom more closely. This paper focusses on

broadening and possibly redefining the definition of teacher quality within the policy context, which seeks an imperative discussion amidst the prevailing learning crisis in India.

Employment Trend of Kutch University Students with Special Reference to Economics as a Subject

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International Labour Organization (ILO) 2023 report suggested that globally the level of education has increased but at the same time unemployment remains high. This paper provides some highlights on the level of education and employment trend amongst college graduates with special reference to economics in Kutch district, Gujarat. Quality of labour is interrelated with level of education, however, level of education is not the only criteria to be employed. This paper attempts to answer the following questions: how education and market still remain in different direction or can't cope up with each other? what is the minimum requirement to be in job market and at same time is it increasing quality of work? Kutch is the biggest district of Gujarat, it has been on the path of development since the arrival of some industries in addition to agricultural development. Kutch is diverse in so that it has area like Gandhidham which is more developed and considered as mini Mumbai of the district. On the other hand, there are areas like Rapar, Abdasa and Lakhpat that are still not meeting with their basic requirements like food, shelter, water, sanitation, electricity, health and education. There are villages with no connectivity of road or with kutcha roads, having only primary health centre with one nurse, one primary school or both are located at far distance. This region has one only university since 2004, Children are still unable to get basic education, how are they going to get university education? If they are able to get university education is there any assurance that they will get benefits of work? Global scenario shows decline in higher level of education and lower level of labour force participation. What is the current scenario in district, how many students are enrolling in higher education, what is their background, what is their demographic profile, education of parents, their basic income, what inspires them to get higher education in the times of no guarantee of job, what is the force that drives them to be in university education, what are students getting after their university degree, why are they selecting economics as a subject, what kind of professional courses they are doing, from where are they getting fund for higher education, etc., were the questions that were asked in this micro level study. This study provides insights on students basic demographic profile based on the relevant data collected by the researchers from the one and only university in the region — Krantiguru Shyamji Krishna Verma Kachchh University. This study used a Google based online questionnaire to collect data from almost all the 10 tehsils of the Kutch district. Amongst all the tehsils a total 140 students who are pursuing graduation degree and who have passed the degree course are our responders. Research throws some light on secondary data from year 2011 till 2023.

Agrarian Alchemy: Relevance and Determinants of Farm Incomes in the Indian Context

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This paper explains the relevance and determinants of farm incomes in the backdrop of higher agricultural productivity in India. The country has undergone major agricultural transformation in the past few decades from being a less than self-sufficient economy to becoming an export hub for several agricultural commodities. However, does this higher production and productivity translates into higher incomes for our farmers is the primary question this paper is trying to address. Farm incomes is like an invaluable yard stick of the welfare of the farmers and overall rural development of the economy. Farmers require crop-wise information on costs and return for allocation of the limited resources that they have. The financial sector needs this information for building loan and insurance packages for farmers. Policy formulators use such information to undertake decisions about price and market support. This helps them in selecting production strategies, identifying the untapped potentials and constraints, and setting priorities with respect to availability of farm inputs. Thus, data on farm incomes and cost of cultivation plays a crucial role in determining the trajectory of the agricultural system. The issue of low farm incomes in India came into limelight two decades ago when farmers started committing suicides and is in the debates even today. Our farmers are experiencing a profit squeeze due to rising cost of cultivation, insignificant increase in the value of production, lower Minimum Support Price (MSP) for crops, declining size of holdings, inadequate supply of inputs and fluctuation in prices rendering the profession unremunerative. Farming as an occupation is not profitable and hence farmers are unable to sustain themselves forcing them to also indulge in non-farm activities. There has been an overarching discourse on importance of non-farm incomes and diversification of farm activities. Through this study we do not negate the importance of non-farm incomes but we also state that farm incomes (especially from crop production) form the core of the sources of incomes for the farmers. Hence, the issue of low farm incomes should be addressed adequately. We conduct empirical analysis using 77th round of National Sample Survey Organisation (NSSO) data on Situation Assessment Survey of agricultural households and understand the factors and reasons behind low farm incomes in India. The study reveals that policies like Kisan Credit Card Scheme and Soil Health Card Scheme aimed at improving formal access to credit and soil quality can hugely impact farm incomes. Thus, more policies like these should be introduced which can help farmers in making correct choices regarding resource allocation and credit expenditures. Our results also state that higher capital expenditure is an asset for the farmers in the long run. Higher capital expenditure is an investment and can boost up the farm incomes. The problem of unequal distribution of land should be addressed as making large investments is not possible for the small farmers and all farmers should have access to irrigation facilities. Crop insurance coverage and higher education significantly impacts the possibility of a farmer to earn higher incomes. Social factors also play a major role. The backward sections of the society have lower farm incomes on average.

General Equilibrium Approach to Evaluate Economic Growth and Welfare Policy Analysis: Network and Meta-analysis in a Systematic Review

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The prevailing economic policy analysis framework primarily relies on partial equilibrium analysis. Over the last five years, there has been a notable shift in the perspective of policy stakeholders towards employing a general equilibrium framework. However, there is a discernible gap in the existing research, as scholars have not explicitly examined the income-generating implications of policies. Therefore, conducting a systematic review of Computable General Equilibrium (CGE) models to analyse the income-generating impact of policies is imperative. The main objective of the paper is to examine the impact of policies on GDP growth and household welfare. This study employs PRISMA framework for the systematic review. Keywords for the review are obtained through a text mining approach guided by specific research questions. The text is in the form of the ten most appropriate pieces of literature selected by the author based on weights distributed to (1) journal ranking, (2) citations, and (3) appropriation. The review encompasses papers published between 1960 and 2023, sourced from three major databases: Scopus, Web of Science, and JSTOR. Utilising 42 selected papers, the network analysis explores geographical density association, author association, and close term association. The examination of geographical associations reveals that the bulk of policy analysis work is conducted by developed nations. Substantial collaborative efforts are observed among the USA, European nations, Australia, China, and India. A similar pattern is noted among authors from these nations. Key term associations identified in these studies include CGE, environmental impact, economic change, climate change, and energy efficiency. For the meta-analysis, a systematic data collection grid is established to organise information extracted from each article. Two separate databases are created—one specifically addressing the influence of policies on gross domestic product (GDP) growth and the other concentrating on their effects on household income. In the final stage of database construction, the processing, coding, and labelling of variables are carried out. Meta-analysis of CGE studies indicates an average 0.23 percentage increase in GDP and a 0.47 percentage increase in household income. The paper delves into the investigation of policy types, geographical areas, and characteristics of employed CGE models. Upon examining the year of publication and article type, no significant association with these characteristics is identified. However, an analysis of the temporal aspects provided by dynamic and static regimes revealed a positive and statistically significant correlation for time estimation concerning both GDP and income. This suggests that welfare gains tend to increase with the duration of the simulation. Additionally, a positive and significant impact of multi-country was observed for both effect sizes across all specifications. Contrarily, a negative impact of the Armington variable is observed for Income. Notably, MIRAGE and other models exhibit higher

welfare gains compared to GTAP models. The findings indicate that permitting substitution between domestic and imported goods adversely affects household income. Further investigation is warranted, considering the significance of this effect at the 10 percent level. As elucidated earlier, the standard Armington elasticities in GTAP models are lower than those in other models, potentially explaining why simulations based on GTAP values tend to yield lower welfare gains. Furthermore, a positive impact is identified for rural households. Simulations over an extended time period in multi-country studies reveal higher impacts of environmental policies on income-generating capacity. Additionally, simulations involving increased agricultural productivity show positive welfare gains.

Gig Workers in India: Navigating Challenges and Government Initiatives in the Dynamic Landscape of Platform Employment

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The gig economy, characterised by platform-based jobs, has witnessed exponential expansion, with an estimated 68 lakh (6.8 million) gig workers in 2019-20, projected to reach 2.35 crore (23.5 million) by 2029-30. While offering new opportunities, gig work has exposed workers to various challenges, including employment classification, wage disparities, job insecurity, and a lack of social protection. This review paper provides a comprehensive examination of the gig economy in India, focusing on its rapid growth, challenges faced by gig workers, and recent government initiatives aimed at addressing these issues. One significant challenge is the classification of gig workers as independent contractors, depriving them of essential employment rights and benefits. This not only results in low wages but also excludes them from social security measures, including health insurance and provident funds. Wage disparities and income volatility are pervasive issues in the gig economy, influenced by factors such as the lack of standardised wage structures and dynamic pricing models adopted by platform companies. Job insecurity is a looming concern, with gig workers facing frequent terminations and income instability due to arbitrary rule changes by platform companies. The lack of control over working conditions, including hours and job assignments, contributes to physical and mental strain. Social protection remains a pressing concern, with gig workers excluded from essential benefits like health insurance and retirement savings. The review acknowledges the lack of unanimous consensus on the definition of the gig economy but adopts the Congressional Research Service's definition for clarity. It emphasises the vulnerability of gig workers to exploitation and unfair treatment, with issues ranging from meagre wages to excessively long working hours. The enactment of the Rajasthan Platform Based Gig Workers (Registration and Welfare) Act, 2023, is highlighted as a significant step forward. The Act establishes a welfare board, provides social security measures, and emphasises the protection of gig workers' rights. It encourages engagement with workers' unions and recognises the importance of collective bargaining. Government initiatives, including the Karnataka government's plan to launch a ride-hailing app and the Delhi Chief Minister's announcement of a social security

policy for gig workers, are discussed. The Karnataka initiative aims to address challenges faced by auto rickshaw and cab drivers, ensuring fair earnings without excessive commissions. The NITI Aayog report emphasises the need for skill development and career progression for gig workers, proposing "Skill Certificates" or "Skill Passports". The Social Security Code, 2020, is acknowledged for defining 'gig worker' and 'platform worker,' but concerns about its universality and fragmented delivery system persist. In conclusion, the review paper underscores the multifaceted challenges faced by gig workers in India and the importance of comprehensive government initiatives. It recognises the positive steps taken, such as the Rajasthan Act and various state-level initiatives, while emphasising the ongoing need for regulatory enhancements to ensure social security and formalise the gig workforce. The dynamic landscape of the gig economy demands continued attention to safeguard the rights and well-being of gig workers, fostering a balanced and secure gig economy in India.

Growth of Rural Employment in India

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The growth of rural employment in India is a critical aspect of the country's economic and social development. This abstract provides a concise overview of the key factors and strategies related to the expansion of rural employment opportunities in India. Rural employment in India primarily centres around agriculture, and the government has implemented policies like the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) to provide a safety net for rural households. However, diversifying the rural economy through non-farm activities, skill development, and infrastructure development is essential. Microfinance, self-help groups, and government schemes play pivotal roles in promoting rural entrepreneurship and job creation. Additionally, rural digitalisation, agri-entrepreneurship, and managing rural-to-urban migration are crucial aspects of rural employment growth. Public-private partnerships (PPP) are also instrumental in fostering employment opportunities in rural areas. Despite ongoing efforts, challenges persist, including the need for sustainable and higherpaying jobs, addressing underemployment and seasonal unemployment, and ensuring inclusivity for marginalised groups. The growth of rural employment in India is a dynamic process that requires a holistic approach involving government policies, private sector engagement, and community participation. Rural employment in India is a topic of paramount importance, given that a significant portion of the country's population resides in rural areas, and agriculture remains a primary source of livelihood. Ensuring the growth of rural employment is not only crucial for the well-being of the rural population but also for achieving broader economic and social development goals. The rural employment landscape in India is characterised by its complexity and diversity. Factors such as population pressure, limited landholdings, seasonality in agricultural activities, and the lack of alternative income sources contribute to the challenges faced by rural residents in securing stable and remunerative employment. As a result, there has been a continuous effort by the government and various stakeholders to address these challenges and promote the growth of rural employment opportunities. This introduction provides an overview of the key factors that influence rural

employment in India and sets the stage for a discussion of the strategies and initiatives aimed at fostering employment growth in rural areas. In this context, we will explore the role of agriculture, non-farm activities, skill development, infrastructure, and government policies. We will also examine the impact of rural digitalisation, agri-entrepreneurship, and rural-to-urban migration on employment dynamics. The significance of PPP in this endeavour will be highlighted as well. Despite the progress made in recent years, several challenges persist, and these include the need for sustainable and higherpaying employment opportunities, addressing underemployment, and ensuring inclusive access to employment for marginalised and vulnerable sections of the rural population. The growth of rural employment in India is a dynamic and evolving process that necessitates a multi-dimensional approach, collaboration, and innovation. This exploration aims to shed light on the multifaceted nature of rural employment in India and the strategies employed to promote its growth and sustainability. 1) Poverty alleviation: One of the primary objectives of promoting rural employment in India is poverty reduction. By providing job opportunities to rural residents, particularly in economically disadvantaged regions, the government aims to improve income levels and raise the standard of living. 2) Reducing dependence on agriculture: Encouraging the growth of non-farm employment is a key objective. By diversifying the rural economy and creating opportunities in sectors beyond agriculture, rural residents can be less dependent on seasonal and often unpredictable agricultural income. 3) Skill development: Enhancing the employability of rural youth and workers is a significant objective. Skill development programmes aim to equip individuals with the skills needed to access a wider range of employment opportunities, including in emerging sectors.

WORKSHOP SESSION 3

What Compels Educated Male-Youth to Work as Unpaid Family Member or Doing Caring Jobs in India?

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What Compels Educated Male-Youth to Work as Unpaid Family Member or Doing Caring Jobs in India? Shruti Priya and Jajati K. Parida Abstract In India, the socio-cultural norms compel women to do the household chores and take care of the children and elderly in their family. This traditional gender roles often place the burden of caregiving on women, significantly impacting their lives, societies and economies. While women bear the undeniably larger share of unpaid care work, Men's participation is still lower. It does not allow men to perform such responsibilities, rather, expects them as the bread winner of the family. But the context, in which the educated youth unemployment is at the rise despite the structural transformation, men are now found as NEET (Neither employed nor in education and training). In this context, the labour market participation of educated male youth as either the unpaid family member or as passive job seekers should attract the attention of the policy makers. The main objectives of this paper to examine the trends and patterns educated male-youths participation in the domestic chores and caring jobs in the family. It also explores the factors determining educated male's participation in the domestic chores and caring jobs. This paper is based on secondary data. The unit level data collected through both the Employment and Unemployment Survey (EUS) and the Periodic Labour Force Survey (PLFS) of the National Sample Survey are used. The data analysis is done using the descriptive statistics, and Multinomial logit and Dubin-MacFaden regression models. The study apply logistic regression to observe factors that compel educated male youth to participate in unpaid care work at home. Some of the important variables in this paper are education, employment, area (rural area & urban area), size of the family. This paper gives us the idea that how these variables compel educated male youth to do in unpaid caring work at home. The main findings of the paper reveal that the share of male youth in workforce and their work participation rate (WPR) declined during the last decade, whereas their participation in unpaid care work increased. It has both positive side as well as negative side. It shows that gender inequality in unpaid care has reduced because of rising awareness of gender equality among youth. At the same time, it shows that the unemployment among educated male youth has increased. Educated male youth, those who participate in the household chores, they are either

"added labour" of the family or "discouraged workers" but they are not the main bread winner of the family. Based on the regression coefficients of the Multinomial logit and Dubin-MacFaden regression models, it is argued that "income effect" (negative) of labour market participation is relatively stronger than the "substitution (wage/earning) effect". Based on these findings it is argued that availability of suitable and adequate job opportunities in the non-farm formal sectors or a business promotion environment would help reduce the extent of the "discouraged labour" labour phenomenon in India. This paper focus into the educated male youth's involvement in unpaid care work in India.

Paid and Unpaid Jobs and the Caring Responsibility of Women in India

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Paid and Unpaid Jobs and the Caring Responsibility of Women in India Abstract Women's participation in the labour force is not only seen as a way to measure their economic empowerment but also for the overall well-being and prosperity of societies. It plays a pivotal role in fostering economic growth, poverty reduction, social progress, promoting gender equality, and addressing demographic challenges. Nevertheless, as a consequence of prevailing gender stereotypes and inequities, women bear a disproportionate responsibility of unpaid domestic and care responsibilities. It is the main reason why large number of women are out of labour force. The ongoing demographic structure in India reveals 68% of its total population are in working age (15-64 years). This implies India has potential to harness demographic dividend as an opportunity for accelerating growth. Promoting increased women participation in labour market is one of major factors for India to reap the benefit of demographic dividend. Women constitute almost half (48.4 %) of the Indian population and yet female labour force participation has stagnated at under 30%. The prominent activity that a significant number of women in India seem to be involved is in unpaid domestic and care activities. This study aims to investigate the trends and patterns of women involved in paid, unpaid and domestic or care activities across different age-group in rural and urban India. The study also shed light on the factors which determine the women work participation choice for paid, unpaid and domestic/care work. This study is based on various quinquennial rounds of Employment-Unemployment Surveys (NSS) covering the periods 1983 and 2012 along with the Annual Periodic Labour Force Survey (PLFS) data from 2017 to 2023. To find out the factors which affect women work participation decision, women work participation function have been estimated. Since, dependent variable is categorical and has more than three categories (paid, unpaid and domestic), a multinomial logit regression seemed to be appropriate choice. For the regression analysis the Annual Periodic Labour Force Survey (PLFS) data from 2017 to 2023 will be used. The preliminary findings of the study shed light on the fact that labour force participation of the women in India started increasing after 2017-18 across age-group (15-59). The findings also demonstrate that women participation in paid and unpaid household helper has increased after 2017-18 for the age group 30-59 years but is mostly determined by rural area. Talking about domestic or care activity participation, it has shown women participation is lesser in rural areas compared to

urban areas. Though the domestic participation of women in rural area are decreasing, they have again started participating in agriculture with increase in labour force participation. This implies that they are again getting observed in a low productive sector with lower wages and high degree of informality in employment. This study is particularly important, as India needs to harness demographic dividend, and addressing lower female labour force participation is critical for ensuring higher economic growth. By identifying the factors contributing to lower female labour force participation, policymakers can implement a range of targeted policies such as education and skill training, equal pay legislation, flexible work arrangements, inclusive hiring policy and anti-discrimination policies to address constraints and encourage women to come to labour market. Keywords: Women, Female Labour Force Participation, Paid, Unpaid, Domestic, Care Work

Investment in Human Capital, Formal Jobs and **Economic Growth in Indian States**

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Investment in human capital, formal jobs and economic growth in Indian states Urmi Paul1 and Jajati K. Parida2 Human capital is at the center of global strategy for development. Investing in people through nutrition, health care, quality education, jobs and skills helps develop human capital, and this is the key to ending extreme poverty and creating more inclusive societies. The countries cannot achieve sustained, inclusive economic growth and will not be fit to compete effectively in the global economy, unless they strengthen their human capital. Despite unprecedented human development gains over the past 25 years, countries face serious challenges, especially for the developing countries. In order to accelerate better investments in people for greater equity and economic growth and to create quality job opportunities in developing countries, the Human Capital Project is a global effort by World Bank Groups. The relationship between economic growth and human capital has long been a significant topic in the literature on economic theory. It is extensively used in both economic research and historical literature. This paper examines the relationship between investment in human capital and economic growth in all the Indian states for the period 1990-2019. This paper aims to find out answers to two important questions. How does investing in human capital, measured through indicators like education and healthcare, influence the emergence of formal jobs in different states of India? To what extent does an increase in formal jobs contribute to economic growth at the state level? The study statistically assesses the causal relationships between the human development indicators like education, health etc and employability in the formal jobs and also with economic growth in all the states of India. By finding human capital investments that are most impactful towards driving formal job creation and subsequent economic growth, the study can inform targeted interventions at the state level. Despite impressive GDP figures each year, millions of Indians remain trapped in informal jobs, struggling to escape the clutches of low wages and no social security. Both qualitative and quantitative methods have

been used to assess the effect of investment in human capital on employment and economic growth. Augmented Dickey-Fuller (ADF) unit root tests was used on the data and their stationarity was tested for. To determine the error correction term (ECT) and short-run relationship, vector ECM (VECM) was established. Granger causality was applied to examine the evidence of a bi-directional causal relationship between investment on some human capital indicators and economic growth. This paper is based on secondary data, taken from Handbook of Statistics on Indian States, Reserve Bank of India, National Sample Survey (both Employment-Unemployment Surveys and Periodic Labour Force Surveys unit-level data). While gross state domestic product at factor cost (GSDP), state-wise gross fixed capital formation (GFCF), state-wise public expenditure on health, state-wise gross fiscal deficit, state-wise capital expenditure, state-wise social sector expenditure were compiled from RBI, the data on employment were extracted from National Sample Survey (NSS EUS) and Periodic Labour Force Surveys. Long-run relation among economic growth, human capital investment and employment in formal jobs is found. It is found that both investment in human capital and employment results to a rise in economic growth. The study also exhibits that human capital innovation would lead to perpetual rise in economic growth

Structural Transformation, Urbanization and Changing forms of Employment in India

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Structural transformation, urbanization and changing forms of employment in India During 2004-05 to 2018-19, employment in agriculture was going downward while employment in services and construction has shown a positive growth. Since 2019-20 till 2022-23 the share of employment in agriculture is rising and it is falling in service sector. This phenomenon indicates that Indian economy is going through a process of structural transformation. India's economic transition from agriculture to service is reflected in the rise of urbanization. Though urbanization raise productivity by facilitating the firm-worker matching process, skill gap and informalization of jobs in urban area gives rise to informal workers with less productivity and lower earning. This implies, the positive spill-over effect of urbanization is not getting optimized due to skill gap and presence of informal employment in urban India. The objective of this paper is to investigate informal employment pattern based on individual characteristics. The paper further tries to see trends and pattern of formal and informal employment along with structural transformation in India. The paper in addition shed light on the cause behind the variation in trends and patterns. Data on organized, unorganized sector, formal, and informal employment status are estimated using secondary data from the year 2004-05 to 2022-23. The sources of the data are NSO Employment-Unemployment Survey, Periodic Labour Force Survey. To observed the impact of age, education, skill and training on informal employment dynamic panel data regression model seems more applicable. Generalized Methods of Moments is used considering the fact that cross-section observations are more than number of years

of data available. It is found that unemployment rate touched the highest in the year 2017-18 and showing a declining trend thereafter. But self-employment (mostly unpaid family worker) and employment in informal manufacturing (predominantly construction) is increasing, thereby generating a mass of informal workers. Between 2012 and 2017-18 employment rate (WPR and LFPR) declined and it increased in the post Covid Period. The structural transformation in India helped growth of urban population and urban workforce. The informal employment continued grow in Urban areas. Within formal sector informal and gig jobs stated growing during the last decade. During 2019-20 to 2022-23 the employment share of agriculture and construction is growing however services still remain dominating employment sector in urban India. Most of the addition to the labour force are likely absorbed by the unorganized non-farm sector as India manufacturing other than construction sector is unable to create rapid employment generation. In organized sector, share of both formal and informal employment is rising, but rise in the share of the informal employment is higher. Policymakers must foster decent work opportunities through formal skill development programs, invest in urban infrastructure, and strengthen social security benefits. When the process of de-industrialization will transfer to the process of reindustrialization, only then India can harness the potential of its urban workforce. Keywords: Structural Transformation, Urbanization, Informalization, De-industrialization

Structural Transformation and Growth of Jobs in West Bengal

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Structural Transformation and Growth of Jobs in West Bengal Provakar Das and Jajati K. Parida West Bengal is one of the 3rd most populous states in India, with a population of over 91 million people. It is also one of the most economically middle income developing states in the country, with a GDP growth rate of over 7% per annum in recent years. Agriculture is the backbone of the West Bengal economy, employing allmost half of the workforce. West Bengal has experienced relative political stability under the Congress and left government since Independence. Now West Bengal is enjoying political stability under TMC government since 2011. While political stability can create favorable conditions for economic growth and job creation, it is not a guarantee. The state's economy has grown at a moderate pace during this period, but job growth has been slow, particularly in the formal sector. One of the key challenges facing West Bengal is the need to transform its economy from a predominantly agricultural to a more diversified economy. A structural change that transfers surplus labour from agriculture and other informal economic activities to higher productivity sectors of the non-farm economy is necessary to achieve a sustained increase in per capita income and better employment conditions, according to past research. This will require a shift of labor from the agricultural sector to the nonagricultural sector. However, this process is not always smooth and can lead to unemployment

and other problems. This paper explores the structural change of employment and job growth in west Bengal using KLEMS data. The paper estimates the relationship between growth in employment and its influencing factors, a simple econometric model. The dependent variables are used in the model for estimation of growth in employment (ΔE) are growth in GVA (ΔG) at constant prices (2011-2012), growth in capital intensity (ΔK), change in WPR (ΔWPR) and change in the share of agriculture in GVA (ΔASG) at current prices. The paper also shows that job growth and their pace is determined by the employment elasticity and the labour supply. The employment elasticity is basically a measure of the percentage change in employment associated with a 1percentage point change in output. The paper shows that the pace of employment generation as well as structural change has been low in West Bengal, as compared to other states. This paper investigates the demand side factors which is obstructing West Bengal's structural transformation in the employment sector using secondary data at the state level. We observe that India directly experienced the transition from agriculture to services. The share of services with value added and employment increased significantly in the post-reform. Much of the increase in industry's employment was due to the construction sector. These trends suggest that structural change is being concentrated among the low-productive nonfarm sectors. We have observed that industrial and manufacturing sectors have stagnated their shares of value-added and employment, and we even observe a marginal decline in recent years. Services sector has come to contribute the highest to the total value-added, with agriculture contributing the least. Although the overall level of LF participation has been continuously falling, we have noticed an extraordinary rise in open unemployment and a decrease in LF participation. The current employment crisis is the outcome of structural transformation that has stopped due to the ineffective demand for skilled labour in the non-farm sectors. This crisis has caused real wages to stagnate, which has adversely affected GDP growth and the prevalence of poverty. This study suggests that one of the main reasons West Bengal's development process has failed is the absence of structural change and growth of jobs. Keywords: Structural change, Labour force, employment and West Bengal.

Gender Gaps in Accessing Education and Training, Quality Jobs, and Wage Inequality in Odisha

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Gender gaps in accessing education and training, quality jobs, and wage inequality in Odisha The economy of Odisha has been growing at an average of 7 per cent per annum during the last two decades. This high growth has resulted in a structural transformation in the state. Women, traditionally employed in the farm sector, are now looking for non-farm sector jobs as their education and skill

level improved. In this context, examining whether women with the same education and vocational or technical training qualifications can grab the formal job opportunities available in the formal non-farm sectors (industry and Services) is essential. Does any gender gap exist in accessing higher education (general) and technical or vocational training in Odisha? Are educated and trained young men and women equally likely to enter the formal job market? Do men and women earn equally, or does any wage differential exist between them? If yes, then what accounts for that in Odisha? This paper is based on secondary data. The unit-level data collected through the Employment and Unemployment Survey (EUS) and the Periodic Labour Force Survey (PLFS) of the National Sample Survey are used. The independent variables used in this paper are education, training, job quality, and wage inequality. For education, proxy variables included are Years of education completed, Type of education (primary, secondary, tertiary), Field of study, and Educational attainment of parents. Proxies for training variables are Type of vocational training received, Duration and quality of training, and access to training opportunities. Proxies for quality of jobs are Sector of employment (formal vs informal, public vs private), Job title and responsibilities, Benefits and working conditions. Wage inequality: Monthly or annual income, Hourly wage rate, Type of employment (full-time, part-time, casual). Dependent variables include Gender wage gap (Difference in average wage between male and female workers), Labour force participation rate (Percentage of individuals who are employed or actively seeking employment), Underemployment rate (Percentage of individuals working in jobs below their skill level or qualifications). Cross-tabulation and probit regression models examine access to education, training and jobs. The wage equation is estimated using Heckman's regression model, and then the wage differential between men and women is estimated using Oaxaca-Blinder and Machodo-Mata-Melley (MMM) decomposition methods. The study's main findings reveal that although girls' enrollment at the secondary and above level of general education has increased tremendously in the state, their access to technical and vocational training is still quite dismal. Furthermore, it is noted that the share of informal employment is higher in the case of men than in the case of their female counterparts. Though educated women in Odisha are employed in the formal sectors, their overall share in total formal employment is still negligible. Women with similar education and training are less likely to enter the labour market than their male counterparts. Moreover, the average wage of women in formal jobs is lower than that of their male counterparts. On average, about 30 per cent of the earning/wage gap is due to unexplained components (or discrimination). Both the "sticky floor" and "Glass ceiling" phenomenon are prevented in the state's formal labour market. Hence, womenspecific skill training and an adequate number of jobs must be promoted in the state to improve the situation.

Inflation Uncertainty, Economic Growth, and Labour Market Outcome Of Youth In India

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Inflation Uncertainty, Economic Growth, and Labour Market Outcome of Youth in India Anandita Doda and Jajati K. Parida Monetary policy has drawn special attention in recent years because of its possible linkages with youth unemployment, apart from its impact on economic growth in emerging nations, particularly in the context of the discussion on inflation targeting. As the Indian economy is likely to strive for sustained economic growth, understanding the role of inflation uncertainties in shaping the labor market outcomes of youth becomes imperative. Based on both descriptive statistics and System Generalized Methods of Moments (GMM) and Quantile Regression methods, this paper explores the relationship between inflation uncertainties, economic growth, and the labor market outcomes of youth in India. This paper is based on secondary data. The unit-level data collected through the Periodic Labour Force Survey (PLFS) during 2017-18 through 2022-23 is used to calculate the NSS region-wise work participation rate (WPR), Labour Force Participation Rate (LFPR) and Unemployment rate (UR). The GSDP across the NSS regions are generated by adjusting population proportion as weight. The inflation uncertainty is measured using standard deviation of the Consumer Price Indices at the region level. All other variables used as control variables are compiled from both the Ministry of Commerce, the Government of India, and the Reserve Bank of India. The regression results suggest that inflation uncertainty impacts the growth variable GSDP, trade openness, and other variables. Inflation uncertainty within a certain range contributes to growth of the economy, hence increasing wages as well as employment. Whereas inflation uncertainty beyond a threshold level affects both employment and output growth negatively. Our dependent variable is Youth Employment and our variables of interest are Inflation and Inflation Uncertainty. Real Gross State Domestic Product (GSDP), trade openness, and population are some of the control variables used for the empirical investigation. The Quantile Regression method used is flexible enough to estimate endogenously the threshold of inflation Uncertainty. Additionally, this approach does not rely on a specific functional form of the non-linearity aspect in any model. Policymakers also play a major role in this process. Policymakers do not choose the most effective monetary control measure, even after knowing that monetary surprises have an expected value of zero. Considering the Rational Expectation Hypothesis, higher inflation uncertainty would lead people to believe that inflation would be higher in the future as well, thereby making the expansionary fiscal policy of the government less effective. Policymakers should focus on choosing ambiguous tools to generate positive surprises if they care more about economic stimulation and negative surprises if they care more about inflation control. By delving into the intricate relationships between inflation uncertainties, economic growth, and youth employment outcomes, this study aims to provide a roadmap for crafting targeted policies that enhance the labor market's resilience, particularly for the youth demographic

Rising Underemployment Despite High **Economic Growth in India**

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Rising underemployment despite high economic growth in India ABSTRACT Underemployed is a part of employed person whose employment time or productivity/skill or training is not utilised according to their potential level. Underemployment is one of the most prominent labour market problems in India. Indian economy has been growing at a rate of about 7 percent per annum for the last two decades. Despite this high growth of output, jobs are not growing up to the extent. There is need to reduce the volume of open unemployment. Moreover, a significant proportion of the Indian work force (both farm and non-farm workers) are found under employed in India. This paper intends to measure the extent of under employment and to see the trend of underemployment in various sectors of India. The paper also explores the factors causing under employment in India. This paper is based on various rounds of NSS and PLFS for calculation of under employment and related indicators as well as for growth of output and related concepts, RBI databases are used. To measure the extent and to see the trend of underemployment, suitable statistical methods like ratio, elasticity estimation, and percentage are used. To determines the factors causing underemployment, underemployment function is estimated. To estimate the underemployment function, probit model is suitable econometric model. Since, here dependent variable is binary (1; underemployed & 0; otherwise). However, under employed is calculated as the percentage of employed person are included in different low-quality jobs according to their qualification label. The qualification label is determined by the level of education and training they have and, the underutilization is determined by the activity they performed. The underemployment is that a person which have higher qualification are going to the sector where their qualities simply is not being utilised. Again, the under employment is also calculated through farm and non-farm sector. In other words, a qualified/trained labour engaged in the casual labour in farm sector is simply called under employment in farm sector. For doing this, National Industrial Classification (NIC) is divided into two parts, farm sector and non-farm sector. The study findings suggest that the participation of youth (15-29 years) with education graduate and above as well as having formal vocational training for clerical, support works and elementary occupation has shown rising trend from 2017 onwards. This implies underemployment for youth with higher education and formal vocational training is increasing continuously. However, underemployment for the age group (30-59 years) with formal vocational training has also shown rising trend in the recent years. By looking at the employment status, findings of the study shed light on the fact that people with higher education and formal training are getting more observed as family household helper and is majorly determined by youth in farm sector. Addressing the problem of underemployment is crucial for economic development. The policymakers need to bring targeted interventions such as strengthening labour market information system, bring out more policies such as NEP for improving quality of education and promoting employment generation schemes for farm sector for reducing underemployment. Keywords: Underemployment, youth, economic growth, probit model

Impact of Remittances on Economic Growth, and Human **Capital Development in Asian Countries**

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Impact of remittances on economic growth, and human capital development in Asian countries Upendra Bharati and Jajati K. Parida Remittances play a pivotal role in the socio-economic landscape of Asian countries, contributing significantly to both human capital development and overall economic growth. Over the past few decades, developing countries have experienced a substantial increase in international remittance inflows originating from developed countries. In certain developing economies, remittances surpass other income sources, including foreign direct investment (FDI) and foreign aid transfers. Remittances represent financial transfers made by workers to their home countries. These financial inflows boost household income, which raises investments and consumption levels, and ultimately accelerates economic growth. Remittances allow recipients to make investments in skill development, healthcare, and education. Therefore, this raises worker productivity and makes the labor market more competitive and skilled. This paper examines the impact of workers' remittances on economic growth and human capital development in developing Asian countries. This paper is based entirely on secondary data. We use (unbalanced) panel data during the period 1993-2022 to investigate the relationship between remittances and economic growth in Asian countries. The primary source of information is the World Development Indicators from the World Bank. And some other sources, like the United Nations Development Programme (UNDP) and the International Monetary Fund (IMF). We use both descriptive statistics and econometric tools to analyze the empirical results. By using the unbalanced panel data regression for fixed effects and random effects models the estimated results show that the countries that have higher initial per capita income increase faster than those with lower income levels. To handle unobservable heterogeneity, the lagged dependent variable as an explanatory variable, the potential endogeneity of the remittance variable, and other explanatory variables in the model by using the panel system generalized method of moments (GMM) technique. The GMM method under Arellano-Bond (1991) is run on different specifications of the model. Regression analysis on all of the model's available explanatory variables occurs as part of the first specification process. The generalized method of moment (GMM) estimator is consistent when there is no secondorder serial correlation in the first differenced residuals. When an explanatory variable shows a correlation with an unobserved country-specific effect, the usual strategy is to eliminate the latter using a fixed effect transformation. From both static and dynamic models the estimated results show the long-run relationship between remittances and economic growth of per capita GDP by using a production function approach. Therefore, the overall effect of remittances on economic growth

is positive. The coefficient of per capita income is negative and it is insignificant in the GMM model. The secondary school enrollment rate is used as an indicator of human capital throughout this paper. It is regressed on independent variables which include remittances, official aid transfers, consumption, and per capita GDP to quantify the relationship between remittances and human capital. Additionally, the fixed effects model shows that each independent variable has a considerable value. In this fixed effects model, remittances contribute positively and statistically significantly to the building of human capital. The results indicate that there is no impact of remittances on physical capital accumulation. However, there is a positive effect of remittances on human capital and its coefficient is statistically significant.

Why is the Labour Force Participation of the **Elderly Rising in India?**

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Why is the labour force participation of the elderly rising in India? Population ageing is an inevitable demographic phenomenon which almost all the countries in the world are experiencing. This phenomenon is also primarily evident in India where the ageing of the population has been a consistent trend over the last few decades, resulting in widening the top of the age pyramid and an increased economic dependency among the elderly. One of the important factors in understanding the implications of an ageing population is the Elderly Labour Force Participation Rate (ELFPR). This paper primarily aims at studying the trend and pattern of Elderly Labour Force Participation Rate (ELFPR) in India and seek to analyse and explore the key factors determining the ELFPR in India. Various rounds of NSSO and PLFS data have been extracted to examine the trend, pattern and socio-economic determinants of elderly labour force participation rate in India. Probit binary selection model has been used. The explained variable is labour participation of the elderly which is a binary variable, comprising of two values: participation in labour force or not. The key explanatory variables include gender (male, female & others), age, age squared, number of children, region (rural & urban), marital status (single & currently married), education (primary, secondary & higher secondary and above), social groups (general, SC, ST, OBC), health status (poor, fair & excellent), Log of monthly per capita consumption expenditure, household size (latrine facility, drainage system, quality of drinking water & treatment of drinking water). Analysis of the trend shows that from 1993-94 till 2018-19, elderly participation in the labour force has shown a declining trend. It showed a moderate increase in 2019-20 (32.9%). However, it had declined between 2019-20 till 2021-22 (30.6%) attributed by the COVID-19 affected period. Again, in 2022-23, it shows an upward trend (32.9%). One key finding is declining probability of elderly participation in the labour force with an increase in age and also reports the non-linear effect of ageing on participation. The study shows that a significantly large proportion of elderly workers in India particularly are found to be employed in agriculture and informal sectors where there is no mandatory retirement. Also, elderly participation has been found to be more prevalent in rural areas characterised by lack of adequate social security

benefits in the rural regions and gender biasedness has been reported. The study reports higher incidence of financial insecurity among the rural elderly, female elderly (particularly widows), the aged residing in nuclear families or alone etc. The probit estimates indicate health and education to be primarily impacting elderly labour force participation. It is found that the probability of the elderly to participate in the labour force declines with educational attainment. The reason is that highly educated elderly are more likely to get employed in the formal sectors ensuring adequate pension benefits after retirement and hence, they are reluctant to get employed in their later life. It is also found that ELFPR is significantly impacted by heath status of the elderly. With improvement in the health status, the elderly are more like to participate. The study also reports a higher incidence of poverty among the elderly resulting in increasing their participation in the labour force. Rural elderly are found to be more vulnerable than their urban counterparts. Based on such findings, it is essential to undertake measures to increase the coverage of social security and pension benefits for those elderly working the informal sector. This will in turn help in reducing the incidence of poverty and protect the well-being the elderly people.

Working Patterns of Urban Informal Sector Workers in the Hilly State of Arunachal Pradesh: Insights from a Field Survey

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The limited economic development in Arunachal Pradesh has led to a pronounced inability to generate employment opportunities, particularly for its youth, resulting in elevated unemployment rates. This situation is exacerbated by the absence of industrialization, creating a dearth of job prospects. Unlike other states, Arunachal Pradesh heavily relies on government organizations for jobs, which has led to a critical situation as these avenues near saturation. Meanwhile, the informal sector, largely sustained by migrant workers from neighbouring states, serves as a vital source of employment. Addressing this pressing issue of unemployment poses a formidable challenge for the state government. This study delves into the dynamics of the urban informal sector in Arunachal Pradesh, drawing insights from primary data collected from 450 informal sector workers across seven urban localities in East Siang and Papumpare districts. By shedding light on contractual relationships, types of employment, and earnings quality, the investigation aims to unveil the socio-economic characteristics of informal sector workers. Gender dynamics underscore the importance of gender-sensitive policies, while migration patterns highlight the economic factors driving rural-urban migration. Educational attainment levels underscore workforce vulnerability, signalling the need for skill development initiatives. The nature of employment echoes Lewis's dualism theory, emphasizing self-employment. Payment methods, reflecting the sector's adaptability, vary widely, with monthly payments prevailing for stability but also revealing challenges associated with irregular incomes. Finally, an analysis of working hours exposes the labour-intensive nature of occupations in the informal sector, impacting worker well-being.

Socio-Economic Conditions of Brick-Kiln Labours in Kishanganj District of Bihar

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The manufacturing sector is one of the dominant sectors in India, with brick-kiln industries being an important component of the construction sector. The history of brick-making in India dates back to Harrapan and Mohenjo-Daro civilisation. Among all other states in India, Bihar has been the one, with the highest number of brick-kiln industries operating in it. As per the reports of 2017-18, Bihar has 6,602 registered operational burnt clay brick kilns, producing approximately 19.8 billion fired clay bricks annually. Within the state of Bihar, Thakurganj area in the district of Kishanganj has been a potential hub for a large number of brick-kilns. Thakurganj is located in the south-eastern region of Bihar and it covers an area of 507.24 sq. kms. It belongs to Purnia division. It is located 46 kms towards north from the district headquarters of Kishangani.

It is a block headquarter. Thakurganj is surrounded by Pothiablock from West, Kharibari block from North, Chopra block from East and Islampur block from South. The sub-district of Thakurganj lies in the border of the Kishanganj district and Uttar Dinajpur district. It is also situated in the border region of the state of West Bengal. Thakurganj is hosting a lot of brick-kiln industries. It is one of the most prominent places with over 150 brick-kilns. These brick-kilns are a significant part of the local economy, providing employment opportunities and contributing to the construction industry. The brick-kiln industry is often cited as a characteristic example of the informal sectors in India. The brickkiln industry of India is largely informal, with a significant portion of brick production happening in small and unregistered kilns. One of the key features of this industry is the prevalence of low-skilled labour, including migrant workers. The workers of the unorganised sector do not require any formal educational qualification in order to earn a livelihood. Numerous studies have been conducted by various researchers to know about the socio- economic conditions of the brick-kiln industry workers.

It has been found in most of these studies that the condition of the workers is quite concerning. The brick-kiln industry is highly labour-intensive, which involves manual labours for the preparation of bricks. These labours work in harsh conditions with no job security, low wages and no access to social security benefits like healthcare facilities, retirement benefits, etc. Further, their safety is not ensured by any labour laws or regulations. There are various instances of discrimination of workers on the basis on gender, wage, etc. The workers are also subject to various kinds of exploitation at the workplace. Workers are mostly employed on seasonal basis and are rendered unemployed for the remaining part of the year.

Despite the several shortcomings of the unorganised sector, it had emerged to be one of the major employment providing sectors in the economy. Due to its low barriers to entry, it can be made easily accessible to a large section of the population. On the light of the present study, this study looks to examine the socio-economic condition of brick-kiln labours in Thakurganj area of Kishanganj district

of Bihar. Further, these kinds of study are crucial to understand the challenges faced by workers in the brick-kiln industry. The study is conducted in five brick-kiln industries in the Community Development (CD) block of Thakurganj sub-district.

Dynamics and Migration Patterns in India: Insights from NSSO and PLFS Data

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Migration within India has undergone significant transformations in recent decades, becoming a pivotal force shaping the socio-economic landscape of the nation. With a burgeoning population exceeding 1.3 billion, the internal migration patterns in India carry profound implications for regional development, labour markets, and social structures. The movement of people from rural to urban areas has been a prominent feature of internal migration in India. Cities have become engines of economic growth, attracting migrants seeking better job opportunities and improved standards of living. This influx of individuals has not only driven urbanisation but has also posed challenges such as inadequate infrastructure, housing shortages, and increased competition for resources. Additionally, the migration of skilled workers from smaller towns to larger cities has resulted in a brain drain, posing a challenge for local development in rural areas. By understanding and managing internal migration patterns, policymakers can develop strategies to address the challenges posed by this influx of individuals. Investing in infrastructure development and affordable housing projects can help alleviate the strain on urban areas. Moreover, implementing initiatives to promote skill development and job creation in rural areas can help counteract the brain drain and promote balanced regional development. Ultimately, fostering equitable growth across the nation requires a comprehensive approach that considers the needs of both urban and rural populations. This study article intends to shed light on the reasons driving migration, such as economic inequality, educational possibilities, and access to basic amenities, by analysing data from National Sample Survey Organisation (NSSO) and Periodic Labour Force Survey (PLFS). It will also investigate the effects of migration on both sending and receiving regions, such as changes in labour composition, urbanisation patterns, and social cohesion. Furthermore, this research will investigate the effects of migration on the receiving regions, particularly in terms of the changing workforce composition. It will examine how migration contributes to urbanisation trends and the potential strains it may place on infrastructure and social services. Additionally, the study will explore the dynamics of social cohesion in both receiving and sending regions, analysing the extent to which migration may lead to tensions or integration among different social and cultural groups. Overall, this research aims to provide a comprehensive understanding of the multifaceted impact of migration on India, addressing various economic, social, and demographic aspects. The research employs a quantitative approach, analysing NSSO and PLFS data spanning multiple survey

rounds. The NSSO data offers a historical perspective, allowing for an examination of long-term trends in migration patterns, while the more recent PLFS data provides a contemporary lens on the labour market dynamics influencing migration. Statistical techniques, including regression analysis and trend identification, are applied to uncover correlations and patterns within the datasets. The research employs a quantitative approach, analysing NSSO and PLFS data spanning multiple survey rounds. The NSSO data offers a historical perspective, allowing for an examination of long-term trends in migration patterns, while the more recent PLFS data provides a contemporary lens on the labour market dynamics influencing migration. Additionally, the paper delves into the social and cultural implications of migration, highlighting how it affects community dynamics and social cohesion. It also discusses policy implications, suggesting the need for targeted interventions to address the challenges faced by both migrants and their host communities. Furthermore, the paper emphasises the importance of a comprehensive understanding of migration dynamics to develop effective strategies for sustainable development and inclusive growth. The findings of this research have direct implications for policymaking in India. Policymakers should consider the need for interventions that provide educational opportunities, improve access to basic amenities, and support the social integration of migrants and their host communities. Additionally, efforts should be made to address the loss of skilled labour in source regions and mitigate its impact on local economies. In conclusion, this research contributes to the ongoing discourse on internal migration in India by providing an analysis PLFS data. The findings highlight the importance of understanding the factors driving migration and the impact it has on various aspects of society and the economy. Moving forward, further research could explore the long-term consequences of migration on source regions, the role of social networks in migration decision-making, and the effectiveness of policy interventions aimed at addressing the challenges and opportunities associated with internal migration in India.

Dairying: An Employment Generating **Opportunity in Assam**

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Dairying: An Employment Generating opportunity in Asssam Aditi Koudinya Prof. Vandana Upadhyay Abstract: Key words: Labor, Co-operative, Unpasteurized, Distribution. Dairying in developing and underdeveloped countries is basically a labor intensive activity. From miliking to forage suppling, from dung cleaning to waste collecting. Again there are lot of employment opportunities in processing and marketing of those produced milk. Moreover marketing of dairy animals is also increasing rapidly at present time. Job opportunities in dairying includes suppliers of feed materials, shed manufacturers, animal health providers, animal breeding service providers and labour. The organized sector mostly sell processed or pasteurized milk whereas unorganized sector deals with raw unpasteurized milk. Job opportunities in dairying are forage suppliers, forage seed suppliers, meat suppliers, transport services for carrying milk etc. 70 percent of revenue in dairying reaches farmers unlike other high valued fruits and food item due to its unorganized form. In case of organized sector, only 26 per cent

of total revenue is received by the farmers, 8 per cent by transportation and distribution, processing and packaging get 55 per cent, 8 per cent by retailer, and remaining 3 per cent by bulking and cooling of the total revenue. In the current study, 48.5 per cent farmers sell their produce to the middle man who is known as a 'paikari'. Paikari again sold it toultimate consumer, hotels, or produce various Value added products by processing it in traditional method and sold it to customers. Moreover, it is more profitable for small holder farmers to sell milk in nearby areas without involveng any mediator, as they take a greater portion of total revenue of the produce. In the study 43 per cent farmer sold their milk to the ultimate consumer in neighborhood areas. Another 4.5 farmers sold milk by using oven vendor system where they get highest revenue as a retailer. A lowest portion of surveyed farmers sold their milk to co-operatives i.e., 2.5 per cent. Icreasing price of feed and fodder, and lack of proper knowledge causes loss in getting higher revenue by farmers in the studied areas. Remaining 1.5 per cent farmers sold some portion of their milk produce through middleman and some portion by delivering in the doorsteps of consumers.

Paradigm Shifts in Labour Markets: An In-Depth **Exploration within the Intricate Tapestry of** Platform Work in India's Gig Economy

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This research explores deeply the intricacies of the 'gig' economy, illuminating several aspects including the relationships that exist between platforms and workers, contractual obligations, and the critical function that rating systems play. It demonstrates how important user ratings are, explaining how they affect 'gig' workers' standing in the market and the platform's overall effectiveness. The essay discusses the power dynamics present in the 'gig' economy, highlighting the significant influence platforms have on workers and frequently provoking fierce conflict. Moreover, the discourse extends to the determination of responsibility in meeting customer obligations, posing critical inquiries about accountability and repercussions for potential shortcomings. The platform's control over service fees and the absence of bargaining power for workers underscore the formidable challenges they confront. The dearth of genuine autonomy is accentuated, as workers are bound by platform-prescribed conditions, curtailing their liberty to select or assess assignments. The article meticulously examines the rating mechanism from an alternative standpoint, unveiling how an onslaught of adverse reviews can imperil a worker's contractual ties with the platform. This reshapes the dynamics, illustrating that platforms are deeply enmeshed in the contractual relationship, transcending mere facilitation. One important point that has been examined is the absence of a requirement for a platform to provide a reason for its withdrawal, which gives customers a great deal of control over the decisions that are made because of their evaluations. The platform further solidifies its power with its exclusive control over service fees and work assignments, which are decided by secret algorithms. The influence of the gig economy on employees' flexibility is also investigated, casting doubt on the notion of autonomy.

The analysis indicates the complex feelings that 'gig' workers have about their work environment. It draws attention to the sample's notable gender disparity, average age of about 29, and predominately male demography. Due to financial hardships, unemployment, and being the only provider, many people turned to 'gig' workers, which caused a trend of rural-to-urban migration. Payment problems represent a crucial aspect that encompasses attitudes and difficulties surrounding remuneration. Overall work satisfaction is impacted by payment structure variability, perceived payment rate reductions, and worries about timely disbursements. One important component affecting trust and satisfaction is the consistency of timely earnings disbursement. Examining variables that affect 'gig' workers' commitment or disengagement, the study emphasises how crucial it is that payment plans and job distributions be regarded as equitable. Platform loyalty is impacted by issues with work allocation and distribution, policy openness, and consistent execution. In the ever-changing 'gig' economy, the study highlights the flexibility of platform loyalty and the beneficial effects that a sense of belonging has on workplace culture. An essential factor influencing the job satisfaction of 'gig' workers is the lack of diversity in tasks. Although some find contentment in performing similar activities, experienced workers highlight challenges related to monotony. Both male and female 'gig' workers encounter discrimination, cultural norms, limited job opportunities, and gender-specific difficulties. Concerns over their unpredictable employment status, lack of legal protections, and lack of rights are raised by 'gig' workers. Safety rules, payment schedules, and fair remuneration are brought up. To solve these issues and safeguard the wellbeing of workers, the report recommends the implementation of extensive regulatory frameworks. The more comprehensive examination looks at structural issues in the 'gig' economy and clarifies how it affect economic structures, work dynamics, and employment patterns. The study aims to enlighten stakeholders and policymakers about potential ramifications for the larger economy by correlating human narratives with macroeconomic developments. The complex dynamics of India's 'gig' economy are uncovered by a careful examination of multiple challenges. The study advocates for cooperative efforts to resolve concerns about rights, equitable remuneration, and safety laws to achieve a balance between flexibility and employee satisfaction. By tackling the issues raised by the research, the potential advantages of cost-effectiveness, economic inclusivity, and innovation in service delivery may be fully accomplished. When innovation and sustainability are balanced, the 'gig' economy has the potential to develop into a long-term, inclusive model for India's economy.

Beyond Linear Narratives: Unravelling the Dynamics of Capitalism in India

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This paper scrutinises the structural dynamics of development in the Indian economy, focusing on the persisting precarity within the informal sector. The central question revolves around whether the precarious conditions in the informal sector are transitory or if they represent a lasting state of affairs. Unlike conventional linear perspectives on development, the study challenges the notion of a

straightforward evolution from pre-capitalist to capitalist modes of production in the Indian context. Drawing on Althusserian structuralism, the paper explores the contingent and overdetermined effects of historical processes on the capitalist mode of production. This inquiry into the structural intricacies of 'development' in the Indian economy, particularly within the 'informal' sector, reveals a nuanced and multifaceted terrain. The enduring precarity of the 'informal' sector necessitates a focussed inquiry into whether it represents a transient condition or inherent logic of capitalist development itself. This paper challenges linear conceptions of development, postulating a structuralist approach that acknowledges the non-linear, contingent, and overdetermined nature of historical processes. It furthers Althusser's contention that the capital-labour contradiction is contingent and historically specific; historical processes intricately shape the contradictions within the capitalist mode of production. The conventional dichotomy between the 'modern' capitalist sector and the 'traditional' or pre-capitalist sector is deeply flawed. Instead, capitalism in India ought to be understood as a structural phenomenon: diverse modes of production are articulated into a dominant mode of production. The persistence of self-employment, conventionally perceived as emblematic of 'pre-capital,' challenges linear developmental narratives. The idea that the 'informal' sector constitutes a vestige awaiting assimilation into the 'modern' sector oversimplifies the intricate economic reality. Furthermore, the paper challenges teleological developmental approaches and the supposedly "apolitical" nature of institutions designed for development. This concept gains strength through an examination of the burgeoning gig economy, often labelled in mainstream discourse as 'independent entrepreneurs' or 'self-employed.' This characterisation challenges traditional notions of 'worker' within the contexts of collective bargaining and class formation. It is imperative to recognise that this[self-employed/ Own Account Worker] phenomenon may appear independent to the capitalist mode of production due to the fact that most of the self -employed fall outside the logic of capital. Notably, the majority of 'self-employed' individuals fall into an 'ancient' category, yet gig economy workers operate directly within the logical framework of capitalist accumulation. A 2021 report by Boston Consulting Group demonstrates that participation in the gig economy is more in postcolonial economies (5-12-%) than global north (between 1% to 4%). In postcolonial economies like India, there is a large 'wasteland' of informal labour markets coupled with high unemployment rates. Consequently, a substantial segment of the workforce finds itself compelled to transition into gig work due to the circumstances prevalent in the periphery of capitalism. This shift encompasses a diverse range of individuals, spanning from those facing precarious employment situations to recently unemployed professionals such as lawyers and engineers. In such circumstances, becoming a gig worker becomes not a choice but compulsion. This paper attempts to establish a theoretical discourse grounded in a structural understanding of post-colonial economies, with a particular focus on India.

COVID-19 and the Gig Economy: Challenges and Opportunities for the Future of Work Landscape

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COVID-19 and the Gig Economy Challenges and Opportunities for the Future of Work Landscape Abstract The COVID-19 pandemic has acted as a potent catalyst, propelling the gig economy into a state of overdrive. This paper delves into the innovation triggered by the Covid-19 crisis, focusing on three key themes. (1) Covid-19 led to exponential growth and a resurgence of the gig workforce (2) Beyond the traditional binary of formal-informal classification, there is a need for separate gig worker category for effective regulations so that social safety and job security can be met. (3) A multipronged approach combining qualitative and quantitative data analysis forms the backbone of this research. This paper deals with related research questions like: Did the pandemic accelerate or hinder pre-existing trends in the gig economy? Did the pandemic lead to the emergence of new types of gig work or platforms and led to changes in platform governance (e.g., worker classification and safety regulations)? The objective of the paper is to assess the long-term implications of the pandemic for the gig platform economy: Will the changes witnessed during the pandemic persist, or will the prepandemic trajectory resume? How might this impact planning and policy in the future? This paper is based on the hypothesis that the COVID-19 pandemic has fundamentally reshaped the relationship between gig platforms, their workers, and urban dynamics, leading to lasting changes that deviate significantly from the pre-pandemic trajectory. The motivation behind writing this paper is that this topic is incredibly timely and relevant as the pandemic's impact on the gig economy continues to unfold. There is a significant research gap and limited comparative studies that have been analysed across different gig platforms, particularly before and during the pandemic phases. While past research has acknowledged the transformative influence of COVID-19 on the gig economy, a critical research gap remains in the comparative analysis across different gig platforms. Our study employs a mixedmethods approach, combining quantitative and qualitative data analysis to assess the long-term implications of the pandemic for the Indian gig platform economy. We utilize the available data on the Online Labour Observatory's On-Demand and Supply platform, focusing on pre- and post-pandemic trends in areas like worker demographics, platform activity, and service patterns. This quantitative data is then visualized through impactful graphs, highlighting key shifts and relationships. To enrich our understanding, we delve into relevant reports and policy briefs, including the NITI Aayog's document on India's gig economy, extracting valuable insights and contextualizing our findings. Additionally, we employ forecasting techniques to project potential future trajectories based on the observed trends and identified relationships. The broad structure of the paper examines the existing research on the gig economy and its evolution, then looks into the statistical trends in the evolution of the gig landscape.

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Apart from that, it explores the delicate interplay between platform adaptability and worker security in the post-pandemic landscape. It then analyses the issues and successful adaptation strategies employed by platforms in the face of disruption. Also discusses the Gig work classification and advocates for a dedicated gig worker category to address the regulatory challenges and concludes with a call for action to make a robust regulatory framework for shaping a future where the Gig economy thrives and empowers the platform workers, fostering a pandemic-resilient and equitable economy.

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