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## XIX International Conference on Public Policy & Management

### Book of Abstracts

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**27 August 2024 (Tuesday)**

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#### **Session 1**

**Time:** 11:30 – 13:00 | **Venue:** P-11

**Topic:** Policy Challenges in Gig Economy

**Chair:** Anil Suraj

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#### **Alternative Approaches to Financing Gig Workers' Social Security**

Umar Farooq Patel (*Hamad Bin Khalifa University, Doha*) & Shariq Nisar (*Rizvi Institute of Management Studies and Research, Mumbai*)

The gig/platform economy has witnessed sharp growth in the past decade owing to technology adoption and servicing various everyday needs. This has resulted in the rise of informal work contracts and several partners/associates whose employment structures differ significantly from traditional work contracts. India is the 2nd largest market in terms of the number of gig workers. However, gig workers are vulnerable to health and economic shocks without any contractual social benefits from the platforms they are associated with.

The government of India and a couple of state governments have enacted laws to provide social security to these gig workers. However, much remains on paper, including the potential approaches to offering these solutions and the financing required to meet this demand. This paper explores how the centuries-old and globally recognized mutual care model can ride the growth in the platform economy in India and offers suggestions for the pressing issues concerning a large population's health and economic well-being without access to social security benefits in a quasi-formal work structure.

## **Gender Dynamics in the Gig Economy: Challenges and Policy interventions in the platform era**

Sheetal Chadda, Neelam Dhall (*Jagan Institute of Management Studies, Delhi*) & Disha Garg (*Rukmini Devi Institute of Advanced Studies, Delhi*)

For the majority of the countries, diversity of the workforce and inclusion of women in employment have been their persistent goals. Not only does this ensure women's equality in society, but it also leverages human potential for economic development. Over the last few years, the rise in platform-based gig work has created a new avenue for women's inclusion in the workforce as it offers them flexibility be it in terms of temporal or spatial. However, the gender positioning of these jobs typically assigns beauty, care and other lower earning jobs to women.

This genderization will ultimately result in lower earnings and fewer jobs for them alongside reinforcing gender association with the work. In traditional jobs the demarcation between males and females still exists and multiple researches are being carried out to emphasize the importance of diversity. Various statistics suggest that gig working will overshadow traditional jobs in the coming decades. Against this backdrop, the present study aims to investigate the dimensions associated with the gig economy using bibliometric analysis and conceptually examines three aspects that act as deterrents, namely, legal issues, societal norms and safety for the inclusion of women in the gig economy. The study has its managerial implications in providing plausible solutions to policymakers' concerns about women's participation in platform-enabled gig economies.

### **Discovering resilience element from the chaotic career navigation – How do we help women Gig workers?**

Anushree Mehta (*Shri Jairambhai Patel Institute of Business Management and Computer Applications, Gandhinagar*), Nimmi P M (*Amrita Vishwa Vidyapeetham, Coimbatore*) & Divyang Purohit (*Indukaka Ipcowala Institute of Management, Gujarat*)

The study looks into the career navigation of gig workers who cater to the knowledge economy in India. We specifically look into thriving at gig employees' work and how career navigation leads to thriving at work. We also looked into the mediating role of career resilience and the moderating role of gender in this association. Following the cross-sectional research design and convenience sampling, we have received 278 responses out of which the usable responses were only 215. After assessing reliability and validity the structural equation modelling was done with the help of AMOS 26.

The results revealed that career navigation is having a positive impact on thriving at work and career resilience. Further, career resilience is having a positive impact on thriving at work. Next, career resilience also acts as a partial mediator between career navigation and thriving at work

among Indian gig workers. The moderating role of gender is discussed further and policy recommendations are given by the end of the article.

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## **Session 2**

**Time:** 11:30 – 13:00 | **Venue:** P-12

**Topic:** Emerging Technologies and Policy Implications

**Chair:** Rajendra Bandi

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### **Governing with Algorithm: A Structured Approach for Responsible AI Integration in Public Policy**

Pranjal Jain (*Lovely Professional University, Punjab*) & Pooja Jain (*University of California, Berkley*) & Anju Jain (*University of Delhi*)

Artificial Intelligence (AI) as a sociotechnical system offers unprecedented opportunities to enhance public service delivery across sectors such as healthcare, education, and transportation through advanced data analytics and automation. Governments and public organizations across the world are increasing their AI adoption rates. However, they face twin challenges. First, the integration of AI in public policy has not been examined with scholarly depth. Second, the researches for private sector cannot be replicated to public domain per se due to difference in nature, extent and purpose.

Therefore, the study performs a systematic literature review, to propose a structured 4-Pillared RCOS framework—Recognize, Conceptualize, Operationalize, and Supervise for integrating AI in public policy. The model advances the understanding of the field by interconnecting it with 10 public policy components delineated by OECD to not just identify the potential use-cases of AI but how to have AI in the system. The research is beneficial for integrating AI in public policy design, development, deployment and improvement.

### **EU AI Act - Key learnings and recommendations for AI policymaking in India**

Kapil Mathur (*Amazon Web Services*) & Arijit Sikdar (*University of Wollongong, Dubai*)

AI developments are seen to provide significant benefits and positively impact economic growth and performance of businesses, which has heralded organizations to implement AI. However, AI implementation is fraught with risks of undesired effects and intentional misuse leading to call for effective AI regulation. Though different jurisdictions are trying in their own way to develop AI regulations, EU has become the first jurisdiction to develop a comprehensive AI regulation.

India in envisaging to develop AI initiatives that could provide scalable solutions for emerging economies and endeavor to tackle some of the global challenges, which makes it imperative to have India's AI regulation aligned to international standards. Therefore, considering the EU AI Act as a benchmark this paper analyses how AI regulation in India could be modelled based on EU's AI Act. Using an interpretivist approach, the paper identifies key features from EU AI Act as well as identifies key consideration for India specific policy development.

Integrating the two, the paper proposes a framework of how learning from EU AI Act can be utilised to support the Indian context, and proposes a set of recommendations for AI policymaking in India. The outcome of the paper is to contribute towards creating the building block for developing AI regulation in India.

**Emotional banking with a BOT or Digital Avatar A PLS Sem based study based on PSR (Para Social Relationship theory) on factors impacting adoption of Digital banking through AI**

Nishi Malhotra (*IIM Sambalpur*)

**Purpose:** The major objective of this study is to measure the impact of various attributes, such as social attraction, physical attraction, and task attraction on para-social relationship. The study also seeks to measure how para-social relationship mediates the association between the three attributes (above-mentioned) on perceived credibility and informational influence, with consumers' intention to purchase banking products.

**Study design/methodology:** PLS SEM has been used as it is believed to be most suited for the study due to the multivariate non-normality in the data, along with the small sample size. Data has been collected using the 5-point Likert scale from approximately 151 respondents, who were selected using the non-random sampling method based on purposive sampling, coupled with convenience-based sampling.

**Findings:** Largely, the findings reveal that both social and physical attractions do have a positive impact on the para-social relationship, further leading to perceived credibility and informational influence. Notably, this perceived credibility and informational influence lead to the consumers' intention to purchase banking products, albeit with the use of AI (Artificial intelligence)-based chatbots and digital assistants.

**Originality:** This is possibly among the first-ever studies extending the para-social theory for purchasing banking products and services using AI (Artificial intelligence)-based chatbots and virtual assistants.

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### Session 3

**Time:** 14:00 – 15:30 | **Venue:** P-11

**Topic:** Diversity & Inclusion

**Chair:** Rajalaxmi Kamath

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#### **Does Financial Inclusion Mitigate Social Exclusion?**

Rikhia Bhukta, Sarani Saha (*IIT Kanpur*), Debayan Pakrashi (*ISI Kolkata*) & Ashish K. Sedai  
(*University of Texas at Arlington*)

This paper examines the impact of financial inclusion in reducing social exclusion. Utilizing a quasi-experimental setup involving a 2005 Reserve Bank of India policy incentivizing bank branch openings in underbanked districts, we employ regression discontinuity design analysis with data from three nationwide surveys and censuses.

Our findings reveal significant consumption increases and poverty reduction among marginalized castes compared to non-marginalized castes, narrowing caste-based welfare inequality. We also observe enhanced social inclusion for marginalized castes. Three channels—informal finance, business finance, and the labour market—are found to contribute to the welfare gains of marginalized castes. Our results withstand various RD design checks. In conclusion, this study underscores the role of inclusive formal banking sector in mitigating deep-rooted social norms like caste-based discrimination within society.

#### **Accessibility and Right of Persons with Disabilities to Work and Employment: An Analysis**

Bhumika Modh, Prerna George & Ashmira Hamirani

(*The Association of People with Disability, Bangalore*)

A person with a disability (PwD) faces significant challenges and encounters obstacles across various aspects of life. Out of the estimated one billion, or 15 percent, of the world's population which are persons with disability, the International Labour Organisation (ILO) estimates about 80 percent are of working age.

An analysis of the economic consequences of excluding people with disabilities from the world of work has been done by ILO and it is estimated that US\$ 1.37- 1.94 trillion is lost in GDP annually. The independence of PwDs through livelihood opportunities is an underlying goal of the Rights of Persons with Disabilities Act, Convention of Rights of Persons with Disabilities and even the Sustainable Development Goals.

One of the most significant barriers to inclusive work has been the lack of accessibility. Accessibility doesn't simply mean having access to employment, but systematic alterations in the workspace to include PwDs. That may mean infrastructural modifications, attitudinal changes or even availability of assistive devices. Through two separate focus group discussions and legal policy analysis, this paper stipulates that accessibility is the cornerstone of inclusion and sustenance of PwDs into the workforce.

### **From Mahatam to Rai Sikh: A Case of Tribe-Caste Continuum and A Forgotten Tribe of Punjab**

Akhil Jain (*IIM Bodh Gaya*) & Surendra Singh Shekh (*Rajasthan University, Jaipur*)

The Mahatam/ Rai Sikh is a De-notified Tribe from pre-partition Punjab and was previously labelled as a "criminal tribe". They were subjected to criminalisation under the Criminal Tribes Act of 1871 during the colonial era and put criminality as their ascribed status. Further, different State administrations post-partition and in post-colonial India allocated them to three constitutional categories: Scheduled Caste and Scheduled Tribe (which represent the erstwhile 'untouchables' and so-called 'tribal' populations), Other Backward Classes, or no category at all.

This has resulted in significant geographical disparities and led to many anomalies in defining the identity of the broader targeted population. This study found in its exploration that these 'geographical disparities' are not the product of the anomalies in defining the community in post-partition Punjab or post-colonial India. Instead, these anomalies derived from pre-partition Punjab or colonial India itself. This study aims to trace these anomalies historically and present the existing conditions of the community as a consequence of these historically derived anomalies. It was also observed that the community in the state is also in the process of acclimatising to their new identity of being included in SCs. If the state imposes another identity of ST on the community, then they might be exposed to the identity crisis that they consciously neglected over the last century by assimilating into the Sikh faith.

The study recommends that the state should not intervene in that process. If the community demands such status in the future, then definitely consider it based on the findings of the study conducted on them. Hence, the study recommends that they remain in SCs.

### **Gender-based discounts on Taxes related to Property: Role in bargaining power of women in household**

Faiyaz Julfikar & Sukumar Vellakkal (*IIT Kanpur*)

This paper examines whether gender-based property taxes discount related to land property in India increases women's bargaining power within the household. The question is analysed in the

context of a property tax discount given to women by different states introduced at different times, in which discount are granted to a woman while buying a land on her name or jointly with husband. We find that the tax discount directly increases the land ownership of women after the treatment. We find that the tax discount for women increases the bargaining power of women within the household. Adoption of clean cooking fuel, flush toilet has increased significantly.

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#### **Session 4**

**Time:** 14:00 – 15:30 | **Venue:** P-12

**Topic:** Policies on Climate Change and Sustainability in Industry and Agriculture

**Chair:** Haritha Saranga

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#### **Understanding the Interplay and Impact of Sustainable Finance, ESG Strategy, and Information Technology Integration in Sustainable Enterprise Performance: Policies and Recommendations**

Samridhi Kapoor (*Central University of Karnataka*), Manoj K (*SIBM*) & Pragya (*IIM Sirmaur*)

Sustainable financing, environmental social governance strategy and information technology integration can play a strategic role in the financial success of an organisation. In light of this, the present study attempts to investigate how sustainable finance, environmental social governance and information technology integration impacts sustainable enterprise performance. Further, it also examines how organisational commitment and support moderates the relationship between environmental social governance and sustainable enterprise performance and information technology integration and sustainable enterprise performance. The primary data collected from 290 manufacturing industry employees was analysed using structural equation modelling.

The study results indicate that sustainable finance, environmental social governance strategy and information technology integration have a significant positive impact on sustainable enterprise performance. The results further ascertain that organisational commitment and support positively moderates the relationship between environmental social governance and sustainable enterprise performance and information technology integration and sustainable enterprise performance. The findings imply that in order to improve financial performance, the company should embrace robust environmental social governance policies and put in place an efficient information technology integration adoption and implementation plan.

## **Integrating Climate Change Policies: Impact on Industry and Agriculture Sustainability**

Lakshmi Patibandla & Phani Kumar Katuri (*Vignan's Foundation for Science, Technology & Research, Guntur*)

Climate change is a massive risk to the biosphere and social structures in the world among other prospects in the human artificial structure. This paper explores the complex interplay between climate change policies and two pivotal sectors: Industrial and agricultural products are the major products exchanged in the international market. In view of the fact that these sectors are among the biggest emitters of Green House gases, the context of integrating climate policies in these sectors cannot be overemphasized in climate change mitigation and adaptation.

Based on a vast literature review, you will find in this paper a systematic review of the various instruments related to the fight against climate change, with the analysis of the industrial and agricultural sectors at its core. In this context, it outlines the major factors that hamper the effective adoption of such policies, which are technological aspects, costs, and social/political factors. Furthermore, the study aims at describing the current and future trends and practices developing in these sectors, e.g. climate-smart agriculture practices or green industries to address the climate risks and vulnerabilities. Drawing on these findings, the paper outlines a series of practical implications that would contribute to enhancing the cohesiveness of CCI of industry and agriculture. Thus, highlighting coordination between climate policies across sectors in this study, this work highlights the need for a harmonious approach to enhance sustainable development goals, economic growth, and social welfare in the age of climate change.

## **Fostering public-private partnerships for lowcarbon green infrastructure in India**

Divya Bansal (*Amity University, Noida*), Purvi Pareek (*REVA Business School*) & Naboshree Bhattacharya (*Amity University, Jharkhand*)

This research aims to investigate the impact of government policies on promoting public private partnerships (PPPs) for low-carbon green infrastructure development in India. The study will conduct a comprehensive analysis of existing policies related to renewable energy, sustainable transportation, green buildings, and waste management to evaluate their effectiveness in incentivizing private sector investment and collaboration. Through the examination of case studies and interviews with key stakeholders, the research seeks to identify challenges, opportunities, and best practices for enhancing the role of government in facilitating PPPs for sustainable infrastructure development. The findings will contribute to the growing body of knowledge on the intersection of public policy, private sector engagement, and sustainability, providing valuable insights for policymakers, practitioners, and researchers interested in advancing India's transition to a low-carbon economy. By understanding the dynamics between government policies and PPPs, this research aims to inform the development of more effective strategies for fostering sustainable infrastructure growth and accelerating India's progress towards a greener future.



## **Does climate adaptation lead to higher income of hill farmers? Insights from field survey in Uttarakhand, India**

Samar Tyagi & Subir Sen (*IIT Roorkee*)

IPCC reports that mountains are exhibiting a higher increase in average temperature and variations in precipitation patterns compared to the global average. It has irreversible consequences on hill agriculture because it is sensitive to changes in temperature and precipitation. The farmers are undertaking steps towards protecting the loss of crops and incomes, and such decisions are referred to as the adaptation strategies in the climate change literature. For example, growing climate-resilient crops, crop diversification, shift in timings of farming operations, fertiliser and pesticide management, soil and water management, and other multiple off-farm options are major adaptation strategies pursued by hill farmers.

This paper investigates the factors that motivate farmers to opt for climate adaptation strategies in the Indian Himalayan state of Uttarakhand. The study further measures the impact of such strategies on households' farm income. Using a field survey of 400 farmers based in Tehri Garhwal district, we find that farmers' education level, land size, economic status, access to extension services, off-farm activities, access to credit, crop insurance, mechanisation, irrigation, climate information, and past exposure to climate extremes like droughts are the key determinants of adaptation choices.

Our analysis highlights that those who adapt receive higher farm income. Therefore, farmers are majorly shifting to non-cereal crops such as off-season vegetables and high-value medicinal and aromatic plants, and even investing in polyhouse-based farming, which is a departure from traditional agriculture practice in the region. From a policy point of view, the study advocates that strengthening agrometeorological advisories and establishing market linkages are the most important interventions to augment household farm income further.

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### **Session 5**

**Time:** 15:45 – 17:15 | **Venue:** P-11

**Topic:** Macroeconomic Policies

**Chair:** Ritwik Banerjee

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### **Spatial Income Convergence among & within the Indian States**

Manish Chauhan, Somesh Kumar Mathur & Praveen Kulshreshtha (*IIT Kanpur*)

This paper investigates the dynamics of economic convergence at the sub-national level, specifically focusing on states and districts within India. Employing spatial analysis techniques,

we uncover intricate patterns of regional development and convergence. Our analysis reveals positive spatial autocorrelation for certain variables, such as Gross Fixed Capital Formation, initial GDP levels, Health Index, Per capita Power Consumption, and Literacy Rate, indicating spatial clustering and the influence of spatial factors. We explore both unconditional and conditional convergence, with results suggesting that while income convergence trends are evident, they vary significantly across regions. The Financial Inclusive index and Good Health index play crucial roles in driving growth, with positive coefficients indicating their positive influence. Remarkably, lag variables, reflecting the influence of neighboring regions, exhibit similar signs as the primary variables, underscoring the interdependence of growth determinants. Notable exceptions include the lag of road length, which negatively impacts growth in regions with better infrastructure in neighboring states. Beta convergence dynamics are examined at the district level, revealing distinct patterns within major states. Some states exhibit clear evidence of beta convergence, while others diverge or experience convergence with varying degrees of significance.

Furthermore, the paper delves into the speed of convergence, demonstrating that districts in states like Kerala and Tripura are catching up with their more affluent counterparts. Speeds of convergence and divergence vary, shedding light on the diverse economic dynamics across the country. Geographically Weighted Regression (GWR) unveils that lower-income states have a higher potential for catching up with wealthier ones. In sum, this study offers a nuanced understanding of economic convergence and divergence in India, emphasizing the significance of spatial factors and the multifaceted variables influencing regional development. These findings contribute valuable insights for policymakers and researchers striving to promote balanced economic growth and development within the nation.

### **The Resilience of Creative Microclusters During Crises**

Sawan Rathi, Josh Siepel, Monica Masucci & Roberto Camerani (*University of Sussex Business School*)

Firms in the creative industries are well-known to be organized in clusters and are particularly reliant upon close-knit production networks and sensitive to urban agglomeration. In this paper, we explore the extent to which highly localized agglomerations affect regional resilience. Emerging literature highlights the importance of microgeographies, particularly creative ‘microclusters’ at the street, neighborhood, or town level, as distinct from creative ‘clusters’ at the city level. It suggests businesses in these microclusters may have distinct characteristics from traditionally conceived clusters identified at the city level.

In this paper we use evidence from the UK to suggest that local networks, trust, and knowledge spillovers within microclusters, as opposed to clusters, caused these areas to be particularly resilient to crises such as COVID-19. We use official labor market statistics in the UK at a fine grained MSOA (Medium Super Output Area) level from 2016 to 2022. Using difference-in

differences techniques, we show that during COVID-19, the number of employees in MSOAs that were part of creative microclusters grew by 9.15 percent compared to non-micro cluster MSOAs. The effect holds for microclusters but does not hold for creative clusters, suggesting that microclusters were uniquely resilient compared to clusters more broadly. To understand the mechanism of this resilience, we used survey data from 900 UK creative firms conducted pre-pandemic. We find that companies in microclusters are more likely to sell primarily to businesses, their clients are more likely to be located locally, and they are more likely to place higher value on proximity to customers and other firms in the same sector. We argue, therefore that these local supply chains provided the source of resilience and growth as the UK emerged from the pandemic. These findings about the importance of microgeographies for resilience have substantial implications for our understanding of drivers of resilience in light of disruptions to distributed global supply chains.

### **Digitalisation and material well-being at household level**

Apra Sinha (*University of Delhi*), Sushanta Mallick (*Queen Mary University of London*) &  
Abhishek Kumar (*University of Southampton, U.K*)

Recent developments in FinTech have made financial inclusion a policy priority across the globe. Using aggregate data, we observe that quality-of-life indices that include financial inclusion strongly correlate with per-capita income across Indian states. In this context, using two rounds of household-level survey data from India spread over two decades, we explore the extent to which financial inclusion enables consumption smoothing, as consumption levels tend to correlate with both types of inclusion. Our results suggest that traditional financial inclusion is more effective compared to digital financial inclusion for consumption smoothing. This is because traditional inclusion leads to a larger reduction in borrowing costs compared to digital inclusion. Further, consumption smoothing due to financial inclusion depends upon wealth; at higher levels of wealth, consumption smoothing due to both types of inclusion is more pronounced. This is driven by an imperfection in financial markets where higher wealth acts as collateral and leads to a further reduction in the borrowing costs for these households.

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## Session 6

**Time:** 15:45 – 17:15 | **Venue:** P-12

**Topic:** Labour Markets and Employment

**Chair:** Tirthatanmoy Das

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### **Mapping Gender Norms and Women’s Labor Force Participation: A District-Level Analysis Using National Family Health Survey (NFHS) and Economic Census Data (ECS)**

Subhagriya Chakraborty (*IIM Bangalore*)

This paper investigates how social norms, particularly around women’s autonomy can explain women’s labour force participation using NFHS-2015-16 and economic census data from 2013. It employs principal component analysis to create indices representing different dimensions of these norms. Findings suggest that norms related to decision making, mobility, and ownership positively correlate with higher labor force participation of women, while those linked to domestic violence perception, actual violence, and body autonomy show a negative correlation. This aligns with the concept of male backlash discussed in literature. Overall, the research highlights the complex interplay between social norms and women’s participation in the labor force, stressing the need for nuanced policy approaches.

### **Labour Market Outcomes and Alcohol Consumption: A Quantitative Analysis**

Deepak Kumar & Shruti Sengupta (*IIT Roorkee*)

We utilized the second round of India Human Development Survey (IHDS) to study the impact of alcohol consumption on the employment status of working adults in Indian settings. Simultaneously, this study aims to comprehensively understand the conceptual, intellectual, and social framework related to alcohol, (un)employment, work, and labour market outcomes. To address that, we utilised the databases of Scopus and Web of Science, employing ‘OR’ and ‘AND’ logical operators and keywords for the last 30 years (Jan 1993 - mid-June 2023). Through our search, we initially identified 1,085 articles. Subsequently, we narrowed the selection to 160 articles using specific inclusion and exclusion criteria, forming our study's basis. The research is divided into two main parts: performance analysis and science mapping. The study represents one of the most comprehensive bibliometric analysis of alcohol consumption and labour outcomes to date.

## **Keeping women in full time jobs: A statistical Evaluation of Policy Enablers**

Sujatha Ramesh (*IIM Indore*)

Keeping women in the workforce in full-time occupations is an economically important imperative for nations like India with a youthful population. With the bulk of the millennials now in the labour workforce, it is relevant to study how they make work arrangement choices and what factors they consider significant in doing so. These parameters need to be identified from across psychosocial, economic, and operational factors to adequately inform organizational and national occupational policies for women. This paper used secondary data from the 2018-19 YouGov-Mint-CPR Millennial Survey. Backward elimination was applied on a list of 17 prospective variables to identify only the ones imparting significant effects, using which an Ordinal Logistic Regression (OLR) model was built. The novelty of this study is that the algorithmically identified variables were not only socially relevant but also *operationally* instructive. The propensity of Indian millennial women, as compared to men, to be engaged in full-time work, was analysed through five moderating considerations *viz. importance given to autonomy, use of own transport, non-work time spent on activities, ease of finding jobs, and importance given to working from home*. The analysis revealed that all the moderating factors except the importance-of-working-from-home were significant in influencing the decision of Indian millennial women to assume full-time work. In addition, *being married or partnered, as well as the importance given to work-life balance* overall were found to have partial mediating effects. Recommendations have been made for organizational and national policy makers to evolve impactful occupation policies.

## **When overconfident managers follow the herd**

Somroop Mukherjee (*ISI Kolkata*)

I study whether the reputational incentive to herd in a sequential decision making setting occurs if agents are extremely overconfident and optimize using only their private signal. I find that under plausible conditions, the reputational incentive is so strong that the second in queue may still herd in case of signal mismatch with first; i.e. the second optimizes by discarding signal of first but ends up finding it optimal to follow the first. The model with overconfidence can explain well known empirical regularities such as analyst experience having a positive relation with forecast boldness and more herding in firms with opaque information environments. A more general form of overconfidence is  $k$ -overconfidence ( $k$ -OC) when signals of predecessors is underweighted and not discarded ( $0 < k < 1$ ). If managers use the  $k$ -OC rule (homogeneous  $k$ ), I show that overconfidence causes a discontinuity in reputational herding at  $k=1$  (the Bayesian benchmark). When  $k \rightarrow 1$  and the prior probability that the manager is smart  $\theta \rightarrow 0$  (the other type dumb is  $1 - \theta$ ), then there is no reputational herding. Alternatively, when  $k \rightarrow 1$  and accuracy of signal  $p \rightarrow 1$ , there is no herding. Finally, as with rational managers, signals of smart managers need to be correlated to generate reputational herding.

**28 August 2024 (Wednesday)**

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**Session 7**

**Time:** 10:00 – 11:30 | **Venue:** P-11

**Topic:** Agriculture & Rural Development

**Chair:** TBD

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**Unveiling Effectiveness of an Unconditional Cash Transfer to Agricultural Households: Evidence from Indian Agriculture**

Neeraj Katewa & Debdatta Pal (*IIM Lucknow*)

Governments worldwide implement farm support policies to assist farmers, yet the universalization of such measures may lead to inefficient resource allocation. Our study examines the impact of an acreage-linked (unconditional) cash transfer program in India, designed to support landowning farmers in their initial farming investments. Utilizing difference-in-differences framework with National Sample Survey data, we observe an overall positive impact on agricultural performance. However, the program's effects are heterogeneous, revealing a 25% increase in crop productivity for medium and large farmers compared to an 11% increase for small and marginal farmers. This disparity is attributed to transfer amounts based on landholding size, shaping investment decisions to cater to diverse agricultural needs. Medium and large farmers allocate more funds towards agricultural machinery and equipment upgrades, enhancing productivity, while smaller transfers to marginal and small farmers primarily address household consumption needs. We validate our results through an alternate identification strategy (triple difference estimation based on rural bank branch penetration) and various robustness checks. The study suggests that cash transfers can enhance agricultural performance but that tailoring them to address specific needs and resource limitations of different farmer segments could lead to more equitable outcomes.

**Does Agricultural insurance Promote Agricultural Green development: Evidence from Panel fixed effects model**

Ashu Tiwari (*University Canada West*) & Yousuf Malik (*Woxsen University, Hyderabad*)

The current paper tries to estimate the relative agricultural green development competitiveness of 27 Indian states and examines the factors that determine the agricultural green development. India is a leading global producer in several categories of crops, including rice, wheat, sugarcane, cotton,

and pulses, at same time around 43.96 percent of the labor force is employed in agriculture, thus this sector holds the key in achieving SDGs. The green development index shows that states like Uttar Pradesh having higher green competitiveness is because of their better irrigation and higher number of farmland insured. Whereas states like Himachal Pradesh, Uttarakhand and Punjab have the lowest level of green competitiveness because of higher consumption of fertilizers and pesticides. Fixed effects model has been used to estimate the determinants of agricultural green development competitiveness in panel setting. The results indicated the positive relationship of Agricultural green development (Endogenous variable) with explanatory variables like, hectares of land insured, per capita power availability, bank branches in rural areas and Increasing crop intensity. The Dumitrescu and Hurlin(2012) panel granger causality indicates the economic growth at state level in India granger causes agricultural green development.

### **Sacred and Stray: Policy Analysis for Managing Cattle Population**

Ayushi Singh & Samir K Srivastava (*IIM Lucknow*)

The challenge of managing stray animal populations, which significantly impacts agricultural economies worldwide, has not been fully addressed in existing literature. This paper examines the complexities of stray cattle management, with a particular focus on India, where laws prohibiting cow slaughter contribute to the issue of un-productive cattle. Our findings indicate that in the short term, government fund- ing should be directed towards strategies such as sexed-semen usage and castration, while sheltering proves effective in the long term. The policy of adoption shows effectiveness only when incentives are increased. Using System Dynamics modeling, this study analyzes the impact of key policies on the stray cattle population, proposing an optimal policy mix by evaluating the effectiveness of different interventions. The results highlight the necessity of strategic budget allocation and integrating diverse policies to control and manage the stray cattle population effectively.

### **Digital Platform Capabilities in Transforming FPOs: Mediating Role of Business Model Experimentation**

Kumar Aashish, Abha R. Dixi (*Jaipuria Institute of Management, Noida*) & Mukthy Sumangala (*National Institute of Fashion Technology, Kerala*)

Digitalization has developed into a multifaceted phenomenon that has significantly impacted the business world. Enterprises of all sizes are investing in digital platform capabilities, and this investment is facilitating them to perform business model experimentation to bring innovation. This paper explores the role of two crucial growth-promoting variables in developing the performance of farmer producer organizations (FPOs). The study utilizes partial least square-structural equation modeling on 211 Indian FPOs engaged in the agriculture sector. The study's

results highlight that while digital platform capabilities facilitate business model experimentation for organizational performance, competitive advantage plays a critical mediating role in this process. In addition, this research also examined the mediating role of business model experimentation on digital platform capability and competitive advantage. In light of the research findings, policymakers, FPO consultants, and managers will gain practical insight to develop an intervention mechanism and enhance the performance of the entities. Future research may explore the testing of the model in different geographic locations having diverse ecosystems.

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### **Session 8**

**Time:** 10:00 – 11:30 | **Venue:** P-12

**Topic:** Education Policies

**Chair:** Soham Sahoo

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### **Teachers' Concerns Regarding the Implementation of the Curriculum and Credit Framework for Undergraduate Programmes (CCFUP) of the National Education Policy (NEP) 2020**

Taronish Pastakia & Ambrish Dongre (*IIM Ahmedabad*)

As part of the implementation of the National Education Policy (NEP) 2020 in India, the Academic Year 2023-24 saw the commencement of the implementation of the Curriculum and Credit Framework for Undergraduate Programmes (CCFUP) by all relevant Higher Education Institutes (HEIs) across the country which calls for a radical change in the basic structure of Indian undergraduate programmes. We argue that the CCFUP is not a run-of-the-mill policy amendment but rather a major policy innovation for undergraduate degree granting organisations to adopt and implement. With that aim, we have attempted to study the innovation adoption process of the CCFUP through the theoretical lens of the Stages of Concern (SoC) framework of the Concerns Based Adoption Model (CBAM). Using the Glaserian Grounded Theory approach, 30 in-depth semi-structured interviews were conducted (22 practitioners and 8 change facilitators) using iterative theoretical sampling with the stoppage criterion of theoretical saturation, to study the concerns and lived experiences of teachers who have been actively involved in the implementation of the CCFUP at the grassroots level since the past one year. To aid in triangulation of the qualitative data, standardized questionnaires using the SoC framework, were additionally administered to all participants, from which concerns profiles were prepared for the practitioners and change facilitators. Many crucial findings emergent from the data and their implications for course correction in policy implementation at the macro and meso levels are discussed in detail.



## **Causal Impact of Noncognitive Abilities on Cognitive Abilities: Evidence from India**

Vanshika Chaudhary & Ajay Sharma (*IIM Indore*)

This study attempts to understand the nature of causal impact of noncognitive skills on cognitive skills to test how these skills cross-foster. We hypothesize that different noncognitive abilities, by inducing effortful behaviour towards learning, cause a child to develop higher cognitive abilities, subject to their developmental stage. To test this, we specify a stage based production function of the technology of cognitive skills, building on Cunha and Heckman (2007). In this technology of cognitive skill formation, we regard noncognitive abilities as endogenous. Hence, we employ IV estimation for causal identification. We use the child's sibling's noncognitive abilities and her caregiver's perception of well-being as excluded instruments to generate exogenous variation in the child's noncognitive abilities. We find that higher self-belief in one's ability to drive her own actions and results – that is high agency and an internal locus of control – has a positive and significant effect on maths and quantitative cognitive abilities of the child at the beginning of adolescence, but not on language and receptive vocabulary skills at that developmental stage. This causal impact becomes insignificant at middle adolescence stage. Based on these results, we speculate that the causal impact of noncognitive skills on cognitive skills might be stage dependent and domain-specific.

## **Digital divide and Learning Losses: The Mitigating Impact of Home Internet Access During Shocks**

Utkarsh Choudhary (*Krea University, Andhra Pradesh*)

School closures caused by diverse shocks like pandemics and natural disasters exacerbate existing inequalities in educational outcomes. The COVID-19 pandemic particularly emphasized this challenge, prompting urgent solutions. While access to technology at home is not a panacea, it can serve as a crucial foundation for building resilience against learning losses. This study investigates the impact of technology access at home on learning and educational outcomes during the pandemic using two recent nationally representative datasets from India, National family health survey (NFHS) and Annual status of education report (ASER) from India. I use a difference-in-differences (DID) approach with entropy balancing to estimate the causal impact of technology access in the form of internet on reading ability and dropout. The results suggest that having access to the internet has a positive and statistically significant impact on reading ability and dropout. Access to technology decreases dropout and increases the reading ability of students by 2.5 and 2 percentage points respectively. These findings suggest that technology access at home can play a significant role in mitigating learning losses during the COVID-19 pandemic. Policymakers should focus on bridging the digital divide to ensure that all students have access to the technology which can help them mitigate the learning losses induced due to school closure in wake of various shocks.

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## **Praxis 1**

**Time:** 11:45 – 13:15 | **Venue:** P-11

**Topic:** Policies on Health and Welfare

**Chair:** Allen Ugargol

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### **Deciphering Policy Processes of Urban Sanitation in Odisha**

Baksheesh Sachar (*IIT Bombay*)

India has seen transformation of the sanitation infrastructure through the Swachh Bharat Mission (SBM) in 2014 which aimed to eliminate open defecation. SBM significantly increased access to toilets addressing the front end problem of access however the majority of the urban allocation of budget has been used to build toilets leaving little money for safe faecal sludge disposal. Towards handling the increasing amount of excreta generated across India, two key technological approaches have been used. First, the centralised sewer based systems where excreta is transported in underground sewer networks to a sewage treatment plant. It has been historically prevalent in metropolitan cities. Second being the decentralized non-networked sanitation systems (NSS) such as FSM which is focused on treatment of excreta at a different site. FSM systems have expanded exponentially across many small towns of India in the past decades. This is an emerging technology for small towns.

Given the challenges faced by small towns, the government of Odisha has made an attempt to provide sanitation services to its citizens across all its 115 cities and towns. This scale up has engaged various state and non-state actors in various multi-stakeholder policy processes. These processes are assessed from the lens of actors, interests & powers.

This paper attempts to understand the policy processes in scaling up of FSM in Odisha. Research is performed through thorough review of secondary literature such as academic papers, policy instruments, reports published by relevant actors, presentations and letters released by government. Further this research is supplemented by key informant interviews engaged in Odisha's FSM developments. The findings of the research places emphasis on policy capacity across different stages of the policy.

## **Cradles of Hope: Karnataka's Koosina Mane as a Catalyst for Women and Children's Advancement**

Daksha Jain (*Centre for Research in Schemes and Policies*)

Provision of effective day care for young children is essential as it provides support to both mothers and young children. This case study examines the initiative called Koosina Mane which represents an innovative approach for addressing low female labour force participation in rural areas through the provision of childcare services. Implemented by Gram Panchayats of Karnataka under the guidance of the Department of Rural Development and Panchayat Raj, this program aims to establish crèches across rural Karnataka, enabling more women to enter and remain in the workforce. The study outlines the program's objectives, implementation strategies, and operational modalities, highlighting its phased rollout across various administrative levels.

Operating on a convergence model involving multiple government departments, the program provides comprehensive childcare services including nutrition, health monitoring, and early childhood education. Field observations from 65 crèches reveal significant positive impacts, such as improved childcare, enhanced nutritional support, and increased community trust. The case study also presents successful examples from specific Gram Panchayats, illustrating local innovations and solutions to challenges. The Koosina Mane initiative is lauded as a model for public policy intervention that promotes gender equality and socio-economic development, with aspirations to scale up and serve as a national pilot for institutional childcare.

## **Online Mode of Tobacco Hazards Awareness for Capacity Building and Awareness Generation: A Promising Initiative, in addition to the existing Tobacco Control Measures**

Neeta Ghate (*Mendadkar's Children Hospital*)

In India, it is important to create awareness about health hazards of both Smokeless tobacco, (twice the prevalence of smoking) & smoking. Our tobacco hazards awareness work was started in 2014 in Mumbai. During COVID Pandemic, creating awareness about tobacco hazards, and disseminating information about Government of India's initiatives about Tobacco quitting, assumed an urgency. Accelerated digital transformation was also incorporated by our country's health sector. For tobacco health hazards awareness & information about tobacco quitting services, an online tobacco hazards awareness initiative was undertaken on various platforms and for a diverse audience. This included Capacity building of doctors, via lectures, presentations in conferences, talks for healthcare staff, dental, medical students, a school -based tobacco hazards awareness program for students of Municipal Corporation of Greater Mumbai. Creating awareness in society about hazards of Tobacco – articles for website, online newspapers, online talks, interviews on TV, in Marathi was also done. In addition to the existing Tobacco control initiatives, Online mode of creating awareness about incorporating tobacco control at all levels of healthcare delivery, needs consideration as a policy initiative, for capacity building of healthcare workforce.

The unique online school-based tobacco (smoking & smokeless tobacco) hazards awareness program by a medical professional, appears a promising initiative, with potential of scalability.

### **Working with the Community: An Ethnographic Study of De-notified Tribes of Rajasthan**

Surbhi Dayal (*IIM Indore*)

The paper focuses on the denotified tribes of northern India. These communities practice sex work as their traditional occupation, and their livelihood is dependent on the earnings of the sex work. This paper delves into the journey of a field researcher and an NGO, aiming to overcome the socio-cultural taboos that the de-notified tribes encounter in their daily lives. Both started their journey in this field in 2000, started their first community school in 2002, and are currently operating in twelve hamlets belonging to denotified tribes in Rajasthan. The paper focuses on utilizing sociocultural perspective and creativity to engage and retain first-generation learners in the classroom. The paper delves deeper into the various perspectives, methods, and strategies that researchers can employ to understand the communities living on the margins. It goes on to discuss how this NGO used inter-community activities to encourage social interaction between the denotified tribes and larger society. To conclude, this paper sheds light on how understanding the sociocultural context of communities is important to engaging them in the education system, as well as how NGOs and researchers can play a significant role in bringing people living on the margins into the mainstream of society. This study proposes a creative educational model for inclusive education that aims to bridge the gap between marginalised tribes and larger society through a micro-level experiment. This study uses multisited ethnography as its central research method. The research employed reflexive ethnographic methods. Specifically, the method included participant observation and in-depth interviews.

### **Beyond Books: Improving Future Readiness in Students Through NGO Interventions in Rural Libraries**

Hashir P.V (*Centre for Research in Schemes and Policies*)

Karnataka's Gram Panchayat libraries have undergone significant transformations through campaigns to promote reading habits, efforts towards digitization to equip them with digital resources and internet connectivity, and upgrades to make them disabled-friendly. This case study examines the impact of government-NGO partnerships in enhancing the future readiness of children in these libraries.

The study focuses on three NGO initiatives: Grama Digi Vikasana (GDV) by Sikshana Foundation, Nanna Oletigaagi Granthalaya by the Children's Movement for Civic Awareness (CMCA), and Grantha Mithra by Akanksha Charitable Trust. GDV addressed the digital divide by providing essential technological infrastructure to libraries, Nanna Oletigaagi Granthalaya instilled

citizenship values and life skills through activity-based learning, and Grantha Mithra offered educational programs to support the academic and personal development of rural students. Each initiative significantly enhanced the libraries' roles as community educational centres by promoting digital literacy, civic awareness, and learning opportunities.

The lessons derived from this study highlight the importance of collaborative efforts between government and NGOs in enhancing public services. These examples from Karnataka provide valuable guidance for policy practitioners aiming to replicate the successful transformation of rural libraries in other regions, demonstrating the potential for significant social impacts through well-coordinated interventions.

### **Effectual Public Healthcare Deliverance: Post National Health Policy A case study approach of National Health Mission, Karnataka**

B G Prakash Kumar (*National Health Mission*), Vinitha Krishna Naik (*FORE School of Management, New Delhi*)

Healthy citizens are the greatest asset of any nation”, has inspired me as a Medical Administrator, academician for Health Department. Multi-faceted roles from PHC Medical Officer to Additional Director, State Programme Manager, NHM in the four decades, I have emphasized on health advocacy. As an administrator, I promote the “grand convergence” of public, private health systems with the advent of National Health Policies and regulatory framework of converging IT initiatives.

Karnataka, a pioneer in health reforms from time immemorial has significantly formulated initiatives to provide accessibility, availability, affordable equitable healthcare deliverance to its people. In 2005, NHM & DHFWS were converged for effectual program implementation. Health Systems has manifold reforms during 1st -Vth Phase of Planning Commission, regulatory frameworks, SOPs by utilizing adept governance over the decades. Despite successful implementation of Health Policies across the State, there persist gaps in policies, governance with no transparency and accountability.

This is a trivial effort to enumerate the persisting gaps, challenges incurred during Implementation utilizing exploratory narrative case study based on experience, expertise towards essential health reforms to ensure transparency, accountability. This eventually will pave way towards effectual state public healthcare transformation. A detailed analysis of pioneered digital innovations on par with public policies adoption and implementation across the State is enumerated. Financial Budget allocation, expenditures enables the achievement of health parameters towards attainment of universal healthcare coverage substantiate practical reforms for effectual healthcare deliverance.

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## Track 1

**Time:** 11:45 – 13:15 | **Venue:** P-12

**Topic:** Emerging Technologies in Governance: Perspectives and Policy Implications

**Chair:** Rahul De

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### **From Pixels to Progress: A Case Study on Digital India**

Monica Singhania (*University of Delhi*)

This case describes the culmination of a new era for an aspiring and growing nation, India. It delves into the ambitious Digital India program launched by the Government of India in 2015. This comprehensive study provides a detailed analysis of the program's objectives, implementation strategies, impact, and challenges. The case study introduces Digital India as a monumental government initiative designed to bridge the digital divide, promote inclusive growth, and leverage technology to enhance the lives of India's citizens. It emphasizes the program's overarching goal of making digital services accessible to all. This case study serves as a valuable resource for policymakers, researchers, and stakeholders interested in digital transformation, digital inclusion, digital governance, and the socio-economic development of emerging economies. It offers several learning objectives including to offer a holistic and detailed understanding of the Digital India Program; to appreciate the various initiatives launched under the umbrella of Digital India; to present and highlight Digital India as an Interoperability Framework towards citizen empowerment; to present and understand Digital Transformation and to highlight and appreciate Digital India as a step towards Digital Transformation of the country.

### **Jeevan Pramaan: The Digital Solution for Annual Life Certificate for Pensioners**

Raghu Raman, Ramana Acharyulu & Vinith Kumar Nair (*Amrita School of Business*)

The case "Jeevan Pramaan: The Digital Solution for Annual Life Certificate for Pensioners" delves into the introduction and impact of the Jeevan Pramaan initiative in India. Jeevan Pramaan is a digital solution that simplifies the process of providing annual life certificates for pensioners, especially the elderly and retired individuals. This case explores the challenges pensioners face in submitting life certificates, the demographic changes in India, the role of the government's pension system, and the introduction of Jeevan Pramaan as a digital intervention. The case attempts to address several learning objectives including to understand the challenges pensioners face in India, especially the elderly when submitting annual life certificates for pension disbursement; to explore the demographic changes in India and the implications for the pension system; to analyze the role

of the government's pension system in India and the need for an efficient life certificate submission process; to evaluate the impact and benefits of the Jeevan Pramaan initiative in simplifying the pension certification process. including a field survey and perception analysis and role played by Jeevan Pramaan during the COVID-19 lockdown; to examine the key stakeholders involved in the Jeevan Pramaan system, including Pension Sanctioning Authorities, Pension Disbursing Agencies, and pensioners. including a field survey and perception analysis; to discuss the importance of biometric authentication and the Aadhaar platform in the digital transformation of pension certification and to consider the legal and ethical aspects of data sharing and privacy concerning pensioner information.

The case focuses the government of India initiatives to usher in e-governance practices in almost every walk of life of citizens and gives utmost attention to the retired employees of the government of India as well, and ease their challenges and difficulties through silent reforms in processes, procedures and the government-individual interface, thus facilitating faceless resolution of myriad challenges that people struggle with.

### **Parivahan Seva Portal: Transforming Indian Transportation Regulation Services with Technology**

Ananthi Rajayya, Payel Das, Ramana Acharyulu & Vinith Kumar Nair

*(Amrita School of Business)*

The "Parivahan Seva Portal" is a visionary initiative undertaken by the Government of India to revolutionize the nation's transportation infrastructure. India has an extensive road network and provides amenities to millions of people every day, thus road transport is one of the important ingredients for the social and economic development of the country. India has the second largest road network in the world stretching 5.52million kilometres in length. It is also the third largest automobile manufacturing hub in the world. Set against the backdrop of India's rapidly growing population and increasing urbanization. With wide variations in state policies and manual/system-based procedures being followed across the country, it had become necessary to define the same standards for these documents on a pan-India level to ensure interoperability, correctness, and timely availability of information. The Ministry of Road Transport and Highways (MoRTH) has taken up a series of technology led initiatives to address the issues facing internal and external stakeholders and also to improve productivity. Starting from vehicle registration and driving licenses, to monitoring of road construction – all are conceived, designed and facilitated through one or more IT tools. NIC has been actively involved in many of these. Over 1300 Road Transport Offices (RTOs) across the nation have been made computerized by the Ministry of Road Transport & Highways (MoRTH). Subject to specific restrictions and permits, RTOs issue Registration Certificates (R.C.) and Driving Licenses (D.L.), which are essential requirements and recognized nationwide. A series of reforms and changes happened in the transport sector from 2019 to 2022.

The government was able to formulate clear-cut policies on vehicle registration, scrapping of vehicles, ownership, etc.

The Parivahan portal, comprises various online services and information related to transport and road-related matters. "Sarathi" and "Vahan" are two important software applications developed by the Ministry of Road Transport and Highways (MoRTH) in India to manage various aspects of vehicle registration and driver licensing. Sarathi is an online application that is primarily used for managing driver's licenses in India. Vahan is an online application designed to manage vehicle registration and related processes. Both Sarathi and Vahan are part of the larger Parivahan portal, which is the official portal of the Ministry of Road Transport and Highways for all transport-related services and information in India. These applications have been instrumental in reducing paperwork, enhancing transparency, and improving the efficiency of processes related to driver licensing and vehicle registration.

This case study seeks to provide a comprehensive overview of the Parivahan Digital India Initiative, its impact on the transportation sector, and its implications for the broader digitalization efforts in India. The case objectives include to evaluate the rapid reforms happened during the last few years in the transportation sector and the Role of technology in inducing the same; to examine how policy level changes can affect improved service delivery and quality of living by the citizens; to learn how a concurrent subject under the constitution of India needs to be executed at central and state level administrative machinery so that citizen centric services are rolled out; and to examine the role and significance of disruptive innovation in shaping public policy and build accountability, transparency and hassle-free services to the clients of the portal, stakeholders at all levels and cadres and ordinary citizens, equally good.

### **Income Tax Service Portal**

Pushpender Kumar (*Institute of Management Studies, Ghaziabad*), K Ranga Rao (*IRS*),

Ramana Acharyulu & Vinith Kumar Nair (*Amrita School of Business*)

In India the income taxpayers touched a new record, 6.77 crore Income Tax Returns (ITRs) filed till 31st July 2023 which has record growth of 16.1% Year-on-Year (PIB August 01, 2023). This has been made possible through the Income Tax Return Portal (e-ITR). Earlier, tax collection was mainly done through manual counters provided by the department or at the special tax collection drives a week before the tax returns system of tax collection, (Bhatnagar, et al., 2008) the Income Tax Department in 2006 has developed Income Tax Portal as a Mission Mode Project under the National E-Governance Plan. The main aim was to provide a single window access to the income tax related services for taxpayers and other stakeholders.

The Case on Income Tax Service Portal intends to document the processes through which the portal was designed and developed, and the functions it has taken up to ease the tax filing and



refund process.

The case on the Indian Income Tax Returns Services Portal highlights the government's efforts to upgrade and improve its income tax services for citizens. It underlines the importance of effective project management, stakeholder integration, and ongoing evaluation to meet the evolving needs of taxpayers and achieve the government's objectives.

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## **Track 2**

**Time:** 14:15 – 15:45 | **Venue:** P-11

**Topic:** Indian Knowledge System and Public Policy

**Chair:** B Mahadevan

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### **Readings from Daishika Shastra: Indic Theories on Society and Polity**

V Srinidhi (*Purnapramati*)

Mainstream theories on state, economics, public policy, society, and polity are predominantly Eurocentric and homogeneous. However, reimagining these theories through the sociocultural contexts of specific geographies can make them more meaningful and feasible to implement. The Daishika Shastra, an understudied Hindi text from the 1920s based on the teachings of a spiritual teacher in the Kumaon Himalayas, documents Indic theories on these subjects. This presentation offers an overview of the text and advocates for its serious study to provide culturally rooted insights for Indian public policy.

### **Public Policy - By the Purushartha, Of the Purushartha**

G V Shivakumar (*INDICA, Hyderabad*)

Traditionally, individuals pursued Purushartha in Bharat. Through Dharma one fulfilled Artha & Kama striving for Moksha in parallel. This pursuit was enabled by an ecosystem of families, communities. The state protected this pursuit by protecting communities and enabling them to configure themselves for this pursuit. Various factors in modern times have disturbed this pursuit. Modernity and Industrialization has made communities dysfunctional and inorganic. Communities have broken into nuclear families and families into assorted individuals. Mere individuals cannot pursue Purushartha. These raise the questions: To whom should the responsibility of enabling the pursuit of Purushartha be transferred? What is the role of the State and Public Institutions? How can Public Policy come to the aid of an individual in one's pursuit of Purushartha.

## **Cultural Inspired Public Policy**

Amarnandha Reddy Manchuri (*Samskruti Foundation, Hyderabad*)

Culture is an all encompassing concept and often spoken to include mores, beliefs, rituals, practices, etc. These have comprehensive bearing on the manifestation of policies and their outcomes. This paper focuses on the relationship among these taking certain sectors like water management and food industry.

## **IKS Perspective of Public Administration**

G Ramesh (*NITI School of Public Policy & Leadership, Bangalore*)

IKS perspective on public policy and administration has been sporadically discussed in practise and academics. Often it can be from the works of Chanakya or poems of Thiruvalluvar or illustrations from various regimes of the past centuries. These have been discussed in terms of State' role, society – family role, justice and governance, taxation, trading, war practices, etc. IKS principles may be especially useful in understanding social sectors like water, environment, common resources, swachh bharaat, education, etc. This looks at how IKS principles can be used to understand and apply to public administration as a sampler to provoke more studies from this perspective.

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### **Track 3**

**Time:** 14:15 – 15:45 | **Venue:** P-12

**Topic:** Women's Empowerment, Capability and Public Policy

**Chair:** TBD

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### **Measuring the impact of social welfare policies on women's wellbeing in West Bengal: An explorative study**

Jhumpa Mukherjee (*St. Xavier's College, Kolkata*)

India has implemented a broad range of public policies for women's empowerment — from education and health care to livelihood. The vision of the public policies for women in India is to facilitate their empowerment and development, mostly in economic terms. This study seeks to examine empowerment from the perspective of women's overall wellbeing. Wellbeing can be expressed as the combination of feeling good and functioning well; experiencing positive emotions like happiness and contentment as well as the development of individual potential, having control over own life, freedom from domestic violence and having positive relationships. The present study aims to understand how women's wellbeing is shaped by social policies that have women as

the main beneficiaries drawing upon Martha Nussbaum's Capability Approach as the theoretical framework. The study focuses on the women recipients of the Sasthya Sathi (West Bengal Health Scheme) and Lakkhir Bhandar, (Cash Transfer), two schemes being implemented in West Bengal as a part of women's empowerment. The study utilizes household level data from the Indian National Family Health Survey (NFHS-5) during 2019-2021 and 2005-2006 to examine the impact of the two schemes on women's wellbeing before and after the implementation of the schemes in West Bengal.

### **Social Welfare Policies and Women Empowerment: A Study of Select Schemes in West Bengal**

Molly Ghosh (*Barrackpore Rastraguru Surendranath College West Bengal*)

Social welfare policies form an integral part of governance in a welfare state. India follows a combination of all three models of welfare regimes as specified by Esping Anderson- residual, universal and corporate welfare. The goal of social welfare policies is to provide a safety and security net to the disadvantaged sections of the population. The ultimate objective is expected to be capability building and agency formation of the beneficiaries. Social welfare policies need to be evaluated from this perspective. In India, there are several social welfare policies and schemes at the central and the state level to ensure gender justice. In this context the present paper would like to address the question that how far specific social welfare policies facilitate well-being of specific category of women through an analysis of their functioning, capabilities and agency. As a part presentation of a broader track, the present paper would target the impact of two social welfare schemes-Swabalamban & Kanyashree on underprivileged young women in the age group, 18 to 25 years in the districts of Kolkata and North 24 Parganas of West Bengal. As a theoretical framework, it would use Martha Nussbaum's capability approach and focus on select relevant capabilities from her ten central human capabilities. It would use qualitative method wherein the respondents will be surveyed, and the data analysed through the lens of capability approach to correlate capabilities-rights-choice-agency-functioning.

### **A Probe into Policy-induced Empowerment of Women Mat (Madur) Weavers of Sabang in West Bengal**

Sreemoyee Ghosh (*Lady Brabourne College West Bengal*)

The discourse of human development projects diverse complexities and dimensions of socio-economic inequality and injustice from varied perspectives. In understanding these social nuances, Martha Nussbaum's Capabilities Approach is an emphatic theoretical framework that critically reveals the gendered face of reality. Nussbaum's Capabilities Approach emphasises the notion of choice or freedom of each individual in the form of a set of opportunities available to each person

in a society to choose and act. Consequently, it enables her to lead a dignified human life. By drawing upon Nussbaum's theoretical arguments, this paper tries to understand the direction, nature and degree of development or well-being of poor women in India by exploring the question of empowerment in terms of capability building and consequent agency creation of women. By undertaking an empirical study by the qualitative method of ethnography, precisely, it delves into the issue of empowerment of women artisans who work as home-based workers in the mat (madur) industry of Sabang block in West Medinipur district of West Bengal. The issue of women empowerment has been examined by critically analysing public policy intervention at the grassroots level. The policies under study are, namely, Central Government initiated Scheme of Fund for Regeneration of Traditional Industries (SFURTI) and Utkarsh Bangla Scheme, introduced by West Bengal Government. With this focus on policy-induced capability building, the paper argues that while policy intervention directs and determines the nature of women's well-being, policy silence on certain crucial aspects relating to women empowerment simultaneously gets exposed in the process.

**29 August 2024 (Thursday)**

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**Session 9**

**Time:** 10:00 – 11:15 | **Venue:** P-11

**Topic:** Industry and Governance

**Chair:** G Raghuram

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**Maritime Security: An Indian Perspective**

A Nagaraj Subbarao, Mohan Srinivasan, Anurag Jalan & Anant Pophali

*(Dayananda Sagar University)*

As India's economic might grows, protecting its long coastline and marine environment is critical to its long-term relevance and sustainability. While India may not have the biggest Navy, it has one that is technologically robust. India can also project naval power through its policy of active collaboration with foreign navies and partnering with other maritime blocs. As a policy, the Make in India initiative strengthens the Indian Navy internally, while collaborative associations give it external reach. India needs a holistic and comprehensive maritime policy that is both strategic and tactical. This paper considers these policies, reviews the Indian Navy's role as a partner in maritime blocks and develops an implementable model. India must develop a coherent and implementable policy to determine its direction in the foreseeable future. This will allow the nation to protect its

resources and project power while not being hegemonistic or threatening, as some countries in the vicinity are deemed to be. Any policy driven by a model needs to work in independent silos which are in concordance with each other to provide an engine for pragmatic action and a road map that is both ambitious, forward-looking and actionable in the short-term, medium-term and long-term. Thus, this paper falls into a strategic policy initiative concerning India's Maritime Policy.

### **Does gender matter for good governance?**

Vijayshree Jayaraman (*Centre for Advanced Financial Research, Mumbai*)

Our study investigates the causal effect of local leaders' gender on good governance, particularly concerning the provision of public employment. Utilizing a mixed-methods approach and a novel panel dataset covering approximately 6,282 Gram Panchayats, we examine whether women leaders perform comparably to their male counterparts in delivering public employment. We find that Gram Panchayats with a woman president experience a 3.8 percentage point decrease in individuals employed in the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) compared to those with a male president. This decline is attributed to higher costs and discrimination faced by woman presidents. Our results remain robust across various tests and are supported by insights from field. In conclusion, our study sheds light on the nuanced effects of gender representation in governance, emphasizing the need to rethink beyond electoral reservation to truly improve women's political participation.

### **Grand vs. Petty Corruption: Natural Resource Extraction**

Ayushi Choudhary & Rupayan Pal

(*Indira Gandhi Institute of Development Research, Mumbai*)

This paper compares the effects of grand corruption versus petty corruption on economic surplus, environmental damage, and social welfare in the context of natural resource extraction. The extraction of natural resources by a profit-maximizing monopoly is modeled using a multi-stage game. There are two alternative scenarios. In the first scenario, the social planner is corruptible and the monopolist can bribe the social planner to influence the quota policy for extraction in his favor (Grand Corruption). In the second scenario, the social planner is honest but the monopolist can bribe local inspectors to overlook illegal extraction (Petty Corruption). Results demonstrate that when petty corruption-induced losses in the monopolist's revenue per unit of extraction is greater (lower) than grand corruption-induced distorted valuation of net marginal environmental damage, grand corruption leads to higher (lower) environmental damage, higher (lower) economic surplus, and lower (higher) social welfare compared to that under petty corruption.

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## Session 10

**Time:** 10:00 – 11:15 | **Venue:** P-12

**Topic:** Environment and Sustainability

**Chair:** Deepak Malghan

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### **Access to Drinking Water in India: A study across three decades from 1991 to 2020**

Kirti Sharma Aribam, Aditya Shrinivas & Gopal Naik (*IIM Bangalore*)

This study examines access to clean drinking water in India over the last three decades. We utilize nationally representative data on access to drinking water. Over the last three decades, there has been a shift from the utilization of Wells to Handpump/ Tubewell & Tap/Piped for drinking purposes in rural India. However, rural households have historically and continue to depend on Handpump/Tubewell for their drinking purpose predominantly. Besides, there is a trade-off between tap drinking water demand and utilization of the natural endowment of water (eg. groundwater level) in rural areas in India. In rural areas, if the primary source of drinking water is situated outside the premises, households mainly rely on sources within a 0.5km radius. This daily water-fetching task, which typically takes nearly an hour per day, predominantly falls on adult females. During periods of insufficient drinking water from the primary source, particularly in the summer months, this problem is distributed almost equally among all rural households regardless of their income classes which means there is an external factor that determines the insufficiency of drinking water. Regarding quality and hygiene, most rural households do not implement any water treatment methods before drinking. Finally, access to tap drinking water within the premises is predominantly concentrated among higher-income households & higher social groups.

### **Building Heat-Resilient Communities: A Collaborative Approach to Beat the Heat**

HariPriya Kesavan, Anshu Sharma (*STS Global*) & Shradha Choudhary (*Resilience AI*)

Climate change is causing an increase in the frequency and magnitude of extreme climate events like heatwaves, floods, and droughts, leading to a significant loss of human life and assets. Under such extreme climatic conditions, the cost of inaction includes an increase in healthcare expenses, loss of lives, loss of income due to absenteeism at work, and people's diminishing well-being.

Resilience AI, a Tech4Impact start-up working towards digitising climate risk and sustainability lifecycles, studied the effects of heat in Vivekananda Camp in Delhi using ResSolv™. ResSolv™ is an artificial intelligence (AI) based heat risk determination model, modularising spatial interventions in any focus environment. The findings from this assessment were four-fold, and

also indicated that indoor heat has worse effects on health and livelihoods than outdoor heat. These circumstances are even more grim within densely built settlements that are occupied by marginalised communities, where cooling methods are also scarce. This study underscores the need for tech-enabled community-based early warning system.

Climate resilience requires resilience at every step. Using three-fold policy interventions that can be implemented and achieved over short, medium, and long periods of time based on climate (heat) risk assessments, reducing the cost of inaction. AI-based climate risk assessments working at the intersection of climate and built-environment innovation could prove to be vital for both, greenfield and brownfield constructions. Automated early warnings using AI could complement early climate forecasts. This could aid in re-route of emergency response to high and medium-risk zones, thereby reducing the cost of recovery.

## **We Imagine a Future and our Imaginings Horrify us: Media Discourse Analysis of Environmental Risk Communication and Sustainable Energy in India's Nuclear Industry**

Tanya Ahuja (*IIM Ahmedabad*)

As surging energy demands, climate change and international commitments nudge governments to adopt cleaner energy, the alternatives to fossil-fuel based power sources are not infallible. At COP26, India pledged to establish 500 GW capacity of non-fossil energy by 2030, curtailing carbon emissions by one billion tons. Nuclear energy facilitates high energy density, low greenhouse gas emissions, and long-term sustainability. Nevertheless, concerns of waste management and safety engender the “Not in My Backyard” (NIMBY) problem. Discrepancies in risk communication engender public policy contentions which may insidiously deter sustainable energy-policy implementation, by stirring mayhem and mistrust. The aim of this paper is threefold: First, to undertake a media discourse analysis for systematically evaluating risk communication gaps around environmental policy in India, generalisable to other contexts; second, to accentuate the colossal potential of nuclear industry to meet India's sustainability goals; and third to theoretically accommodate the role of media in democracies in shaping environmental policy discourses. Divided into four sections, the paper in section one traces the evolution and status of India's nuclear industry, underscore its potential for sustainable energy. Section two elucidates the conceptual and theoretical framework, moored in Baruch Fishhoff's Mental Models Approach to Risk Communication. Using John Dryzek's environmental policy discourse analysis methodology, and exemplified through the case study of Kudankulam, the paper undertakes a qualitative Media Discourse Analysis of 243 news articles of 'The Indian Express' and government data reports accessed through EMIS Professional and CEIC databases. The findings of the study stress the indispensability of deliberative democratic governance to efficaciously communicate scientific findings, manage risk and collectively embrace sustainability. Additionally, the paper contributes theoretically by proposing a Nine-Cs Framework (NCF) for comprehensively analysing Media Discourses around Environmental Policies to guide future research.

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## **Praxis 2**

**Time:** 11:30 – 12:45 | **Venue:** P-11

**Topic:** Policy Innovation & Best Practices Case Studies

**Chair:** Nivedita Prasad

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### **Measuring Success: A Case Study on District Performance Index developed by Social Welfare Department, Karnataka**

Anjali Shivananda (*Freelance Public Policy Consultant*)

Performance monitoring and benchmarking are key priorities for the Government of India and the Development Monitoring and Evaluation Office (DMEO) of NITI Aayog has played a significant role in this initiative. Inspired by these national efforts, the Social Welfare Department (SWD) of the Government of Karnataka developed the District Performance Index to monitor district performance within the state. This Index was designed to align with the priorities of SWD's schemes and policies and its budgetary objectives. The development and implementation process involved identifying relevant performance indicators, conducting multi-stakeholder meetings with various SWD officers, weighting the indicators according to their importance, and undertaking comprehensive data collection at the district level. Following this, a detailed data analysis was conducted for each parameter, and districts were ranked based on their performance. The final rankings were assigned using a weighted score formula aligned with SWD's priorities.

This case study contributes to the existing literature on performance monitoring by presenting a structured quantitative framework focused on a specific department within the Government of Karnataka—SWD. Unlike studies that focus on macro-level monitoring, this research provides an in-depth examination of one department's efforts. It highlights the engagement of decentralized government agencies, such as the District Social Welfare Office (DSWO) and the Taluk Social Welfare Office, throughout the development and implementation process. The study also addresses the challenges encountered during the rollout of the Index and discusses the outcomes, that includes improved governance, enhanced service delivery, and increased accountability within SWD that aligns with the broader objectives of social justice and development.

### **How to Enable a Vibrant Ecosystem for Impact Investment: Lessons from India**

Ajit Phadnis (*IIM Indore*), Simran Ahluwalia (*BCG*), Utkarsh Agrawal (*IIT Kanpur*) & Vishal Reddy (*IIM Indore*)

Impact investing (II) in India has grown remarkably over the last two decades, touching close to



\$ 6 billion in investments in 2022, and ranking number four in the world in the number of impact investors. Our case study illustrates the factors that contributed to the vibrancy of the II ecosystem in India amidst the challenges of limited resources and underdeveloped institutions. Drawing from the theoretical framework on II ecosystems, we highlight the deliberate and concerted actions by market participants and the government that contributed to enhancing the diversity, coherence and coordination of the ecosystem. Our findings are drawn from an analysis of private equity and venture capital deals that took place between 2000 and 2023, interviews with investors, support organisations and the industry council, and a review of media articles. The findings highlight the promise for II in India but also identifies crucial challenges for its sustenance. The Indian case presents lessons for other countries in the Global South to how to promote the development of II ecosystems.

### **Quantifying the financial implication of implementing Electricity Rules**

Umakanta Panda (*Electricity Regulatory Commission Bhopal*)

Ministry of Power is coming out with New Electricity Rules which needs to be aligned with the Regulations notified by State Electricity Regulatory Commission to protect the interests of stakeholders at large especially Consumers in the Electricity value Chain. This paper will address which activities needs to be aligned at the Generation, Transmission and Distribution business so that the objective of framing rules is achieved. In order to align the rules substantial amount of investment needs to be done by the Licensees which they can claim during filing of ARR which are preconditions while granting Licenses to transmission and distribution companies. For aligning the rule broadly there are two mechanism one way is to claim through ARR or claim in ARR in next financial year through true up filing. The paper will try to address and quantify what percentage of ARR is on account of implementation of these Rules which will be passed on to the consumer.

### **Personal2Public: A campaign to nudge commuters of Bengaluru to use public transport twice a week**

Srinivas Alavilli & Pawan Mulukutla (*WRI India*)

#Personal2Public is an initiative by WRI India in collaboration with Bangalore Political Action Committee (B.PAC) along with civic and social groups (Bangalore Apartment Federation & others), and corporate entities (ORRCA – Outer Ring Road Companies Association & others) to nudge Bengalureans that use personal vehicles for daily commute to switch to public transport at least twice a week (the 2 in Personal2Public) by better understanding their needs and working with Government agencies (BMTCL/BMRCL/DULT/BBMP) and employers to address the gaps in last mile connectivity. As a result, several metro feeder buses have been deployed and running at

capacity. As of now, Metro and Bus systems of Bengaluru are recording highest daily ridership numbers.

The heavy dependence on personal vehicles by white collar workers is a major contributor for congestion & pollution in areas like Whitefield and the ORR in Bengaluru. With Metro finally reaching one of the IT clusters (Whitefield), it was the perfect time to nudge employees.

The story of #Personal2Public is about building a large coalition of organizations representing various sections and successfully convincing government agencies to get involved & act in a timely manner working with stakeholders. In this case study, we aim to present the ‘how’ - how to build an inclusive coalitions, how to articulate demands, convert them into actions, and construct win-win scenarios driven by strong political leadership. We believe that the lessons learned in #Personal2Public can be applied in any other Indian city and even beyond the realm of urban mobility and public transport.

### **Bridging the Skills Gap - The Industry Linkage Cell Initiative of the Government of Karnataka**

Navaneeth Ganesh (*IIM Visakhapatnam*), Meghamala C & Archana Mahadeva (*Government of Karnataka*)

India, with its fast-growing economy and demographic dividend, is positioned to become the skill capital of the world. Most of its population falls within the working age group, presenting a significant opportunity for economic growth. However, this window of opportunity is small; if not leveraged promptly, the dependent population will increase significantly. India currently needs to generate 12 million jobs per annum. The government is facilitating this through various policies and programs, such as Production Linked Incentives (PLIs), Credit Guarantee schemes, and promoting manufacturing in India. Despite these efforts, a true economic transition requires human capital that can create value on a global scale by successfully integrating with local industries. To achieve this win-win scenario, the Government of Karnataka has created the Industry Linkage Cell, which strategically brings together industry, academia, and government to facilitate industry-relevant training. This paper delves into the need for greater industry involvement in skilling and examines the Government of Karnataka’s Industry Linkage Cell initiative as a potential model for industry-led, demand-based, employment-linked skilling. It explores the operationalisation of this initiative, the onboarding of partners, and policy decisions to make it more attractive to industry partners and beneficial for candidates. Additionally, the paper covers allied activities to promote the initiative, its progress over the first two years, challenges in roll-out and implementation, best practices, and recommendations for sustainable scale-up. This practitioner’s perspective is informed by the authors’ close involvement in the initiative’s conception and implementation in various capacities.

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**Track 4**

**Time:** 11:30 – 12:45 | **Venue:** P-12

**Topic:** Fostering Sustainability of Jal Jeevan Mission

**Chair:** Arpit Shah

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### **Drinking water quality standards in India**

Atul Singh, Akshita Vyas, Aditya Shrinivas & Gopal Naik (*IIM Bangalore*)

India has made significant progress in providing access to drinking water for its population. However, the quality of drinking water has received comparatively less attention in research and policy. This paper examines the evolution of drinking water quality standards in India, focusing on the policy framework, regulations, and related legislation—or the gaps therein. While there has been an emphasis on provision on drinking water and establishing quality standards for drinking water, discussions on the regulatory framework for enforcement and monitoring of standards have been largely limited. This paper examines various aspects of drinking water quality standards in India and highlights the need for strengthening the regulatory framework. Additionally, the paper reviews case studies from other countries on relevant legal frameworks of drinking water policy.

### **A Framework for Involving Communities in Drinking Water Delivery**

Prerona Sengupta & Gopal Naik (*IIM Bangalore*)

JJM envisages that the community should co-own the water delivery system and operate and maintain it as its own. However, due to inability of the community and lack of proper Information, Education and Communication, the community involvement in the O&M of drinking water delivery system continues to be low. This study aims to explore the steps through which the state/government can influence the psychological co-ownership within the community as well as between the state and the community at the household level and community level. It aims to determine the factors affecting psychological co-ownership in pre-construction phase in terms of willingness to pay and it aims to determine psychological co-ownership in post-construction phase in terms of degree of participation at both the levels. The future scope of this study can focus on introducing behavioural interventions and conduct a follow-up study to understand the impact and effectiveness of the interventions which can have potential policy implications.

## **Does NGO presence matter in Rural Drinking Water Service Delivery?**

Prem Shankar Mishra & Gopal Naik (*IIM Bangalore*)

In pre-implementation or implementation phases of the Jal Jeevan Mission (JJM) program, there have been reported inadequacy of IEC (Information, Education, and Communication) activities, capacity building development, awareness campaign, and trainings related to JJM throughout the country. This gap has led to challenges in fostering community willingness to take ownership and manage the drinking water supply system, operation and maintenance, and ensuring financial and institutional sustainability. To address these issues, NGOs (Non-Governmental Organizations) and SHGs (Self-Help Groups) can play a vital role in enhancing awareness, education, and best practices related to rural drinking water systems. This case study aims to understand the role of NGOs in enhancing the sustainability of rural drinking water systems.

This study was conducted in the Yadgir district of Karnataka, covering three Taluks: Yadgir, Wadagera, and Gurmitakal. A total of six villages were surveyed: Samnapur Melin, Hattikuni, Horuncha Tanda, Ullesugur Tanda, Siddapur B, and Paspool. These villages are part of the Single-Village-Schemes in the JJM program. At present two of these schemes are ongoing, one reported, and three certified. This study is an exploratory in nature and used content analysis to analyse the data. We used various data sources- interviews, observations and government documents/reports. We explored four dimensions of JJM implementation: source sustainability, O&M, financial sustainability, and institutional sustainability in the region.

*Kalike*, a Tata Trust organization, is closely working with the gram panchayats and communities of Yadgir district. A comparative case study was conducted between intervention villages and non-intervention villages in the district. Significant disparities were observed in the implementation, comprehension, and awareness of the JJM scheme between intervention and non-intervention villages. In villages where *Kalike* intervened, community participation and ownership of the program were significantly higher compared to those without *Kalike's* interventions. *Kalike* provided initial training to VWSC members, helping them understand their roles and responsibilities within the JJM scheme. Community management of the scheme for O&M, and financial situation were much better in villages where *Kalike* was involved. Concerns about the scheme sustainability were more pronounced in non-intervention villages.

### **Critical Issues in Financial Management**

Gopal Naik & Prerona Sengupta (*IIM Bangalore*)

JJM advocates for communities/local governments to be involved in the process of implementation and take over the operational and maintenance function of the rural piped drinking water systems. JJM envisages community involvement right from the beginning of the implementation at the time

of preparation of village action plan, preparation of detailed project report, infrastructure development and contribute 10 per cent of the investment cost of the project. This study highlights the importance of cost computation, which is necessary for proper financial management at MVS, IVDS and SVS level. The study identifies key factors that influence the fixed and operations and maintenance cost. The study provides the conceptual groundwork for pricing the water balancing welfare maximization and cost recovery. A few ratios are proposed for easy monitoring and evaluation of the schemes.

### **Data Visualization for Managing Public Programmes: A case of Jal Jeevan Mission**

Esha Chakraborty, Gopal Naik & Chandan Kumar (*IIM Bangalore*)

The Government of India had launched the Jal Jeevan Mission (JJM) in 2019, with a primary objective of providing every rural household with Functional Household Tapwater Connections (FHTCs) by 2024. Several schemes have been generated thereafter covering varying sizes of habitations to implement this project. However, program managers would find it difficult to assess its performance from tabular data available on the Integrated Management Information System (IMIS). This paper attempts to visualise this data using a multi-dimensional framework. The data for all districts of Karnataka have been mapped geospatially using GeoPandas and Folium libraries in the form of a dashboard. Different metrics such as FHTC Coverage, Har Ghar Jal Status, Scheme Information and Water Quality Data have been used. Visualizing these metrics identifies areas needing attention and reveals if the problem is geographically congruous. Key observations show that most districts have 80%–90% FHTC coverage, while Bengaluru Urban and Kolar are only at 45%. At the other extreme, Gadag has achieved 100% FHTC, but almost 50% of villages are yet to be Har Ghar Jal certified. Districts such as Udupi show near-perfect water quality, whereas Dharwad shows multiple occurrences of bacteriological as well as chemical contaminants. In several villages of the Tumakuru district, Field Testing Kit (FTK) data is seen to be missing. More of such similar observations can be obtained from our dashboard which will eventually help the program managers.

### **Do Nudges Help in Making Public Service Function? Evidence from WASH Programme in Schools in Karnataka**

Rajesh Kumar, Prerona Sengupta & Gopal Naik (*IIM Bangalore*)

This study examines the effectiveness of type 2 transparent nudges in improving the functionality of Water, Sanitation, and Hygiene (WaSH) facilities in government schools in rural Karnataka. The effectiveness of these nudges is assessed by their impact on the maintenance and usage of WaSH facilities and their subsequent influence on students' attitudes and behaviors toward sustainable water use. Data were collected through structured on-site surveys and interviews with

school personnel from 23 rural schools in Tumkur district.

The observations reveal significant disparities in the condition and performance of these facilities. Despite reliance on Panchayat borewell water, the functionality of drinking water systems varies, with some benefiting from operational Jal Jeevan Mission (JJM) installations while others struggle with non-functional systems. Handwashing facilities are frequently inadequate, and sanitation infrastructure, primarily pit latrines, faces maintenance issues. Additionally, there are deficiencies in wastewater management and rainwater harvesting, as well as gaps in knowledge about water quality and sanitation practices. The study suggests that increased investment in infrastructure, regular maintenance, and comprehensive training for school stakeholders are essential. It advocates for a collaborative approach involving government bodies, NGOs, and local communities to ensure equitable and sustainable WaSH facilities, thereby improving educational and health outcomes in rural areas.