

INDIA'S POLICY CHALLENGES FOR 2022



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Letter from the Editorial Board

Dear Reader,

When we were handed the responsibility of taking over the ISPP Policy Review (IPR) in October 2021, we set ourselves the goal to prioritise credibility, accessibility, and the voices of young scholars and professionals across the country. As a collective, we want our work to be diverse and reflective of ground realities. Today, as we release the first edition of IPR 2021-22, we are delighted to have upheld these values. Our journey so far has consisted of a fair share of learning and it would be amiss to not acknowledge the help we've had through this exciting journey.

Firstly, we would like to thank the Indian School of Public Policy (ISPP), the board, faculty, academic and career support, and administration for advising and encouraging our vision. We would especially like to thank Vincy Davis. While she is officially our Writing and Communications Professor, over the past four months she has also played the role of our mentor, inspiration, cheerleader, and confidant. Second, we would like to thank everyone who wrote to us with their valuable insights on the multiple policy challenges in the country. Without them, this edition would not have happened and we are grateful for their faith in us. Finally, we would like to thank the scholars of ISPP 2021-22. Their voices have helped shape our vision for this year and we are grateful for these insights.

Our theme for this edition is, "India's Policy Challenges for 2022". The pandemic has shaken our systems and exposed critical issues. It is imperative that we work towards developing sustainable and accessible solutions to address these issues.

Each paper in this journal is thoroughly researched and well thought out. We have compiled this journal such that it addresses the various concerns of our diverse nation. This journal will flow through perspectives on gender, education, rural India, the role of technology in empowering SMEs, and also on how behavioural interventions could help curb spitting!

As a group of budding policy professionals in our early 20s, we were hoping to bring some freshness to the policy discussion space and we hope our intentions are reflected through this piece of work. Putting together this journal edition has been a true rollercoaster and we would be lying if we didn't acknowledge our moments of doubt. In the lead up to the journal release, our job over the past two months has been to ideate, solicit, edit articles, and engage with the policy space over multiple mediums. Today, as we sit down to write from scratch to you – the reader – we are filled with pride and gratitude over the work we have been able to produce. We hope that the journal provokes thought and thereby action among you. We look forward to hearing your thoughts across our media platforms.

Thank you,

Team ISPP Policy Review

(Kavya Datla, Rishabh Ahuja, Tanaya Ramani and Rachna Deswal)

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Rural Identity and the (repealed*) Indian Agricultural Acts of 2020: A New Evaluative Perspective on Free Market Policies

Sattva Vasavada



Abstract

Of the many things that people have reason to value, the freedom to create and maintain social and cultural ties are of significant importance, especially in rural India. Such freedoms might be constrained or amplified by exogenous shocks or changes to economic or political systems. In this context, this paper seeks to analyse the impact of the (repealed) Indian Agricultural Acts of 2020 on social occasion expenditure and the autonomy of women farmers, which are two major constituents of rural Indian identity. It finds that these Agricultural Acts may influence the freedoms that people possess to partake in social and cultural activities that they have reason to value.

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** At the time of writing this paper, the Farm bills have been repealed by the parliament of India. The arguments listed below still hold, because the paper seeks to propose an additional lens to evaluate the Farm Laws and similar free market policies.*

Introduction

Methods of analysing development policies depend on our underlying conceptions of the end goals and means of development. This paper expounds on one such theory of evaluating development which believes that the goal of policy must be to advance individual and social freedoms, and not simply monetary gains. With this theory in the background, the paper looks at the (repealed) Indian Agricultural Acts of 2020, a free-market policy that intended to reform the Indian agricultural sector by liberalising and deregulating the agri-produce commodities market. A significant section of the agricultural sector resides in rural India where existing freedoms to create and maintain social and cultural identity would be affected by the introduction of such a policy. In this context, the liberty to express social and cultural identity falls in the domain of positive liberty: given certain economic circumstances surrounding an individual, are they able to participate in society in ways that let them pursue methods of maintaining their socio-cultural identity? The paper asks this question in relation to the Agricultural Acts of 2020. It discusses the impact of the acts on the expansion or restriction of an individual's domain of positive liberty to express their socio-cultural identity.

The analysis looks at two crucial examples where identity is created and maintained in rural India and links them to the Farm Laws. The first example looks at expenditure on social occasions and festivals and connects it to the Farm Laws. The second example looks at the role of seed exchange networks and its role in maintaining social ties and networks. The impact of the Farm Laws is discussed regarding the same. The paper also looks at an additional case: the autonomy of women (another critical freedom that people, especially women, value) in rural India and discusses how the Farm Laws might affect the same.

The paper is structured as follows: Section 1 explains the theoretical framework and the Farm Laws; Section 2 briefly relates the theoretical framework with the Farm Laws; and Section 3 expounds on the variables of interest: social occasion expenditure and the autonomy of women and then investigates the relationship between these variables and the Farm Laws in detail.

Section 1: Evaluating Development

The end goal of development cannot, and should not, be mere monetary gains in the national product. This is because, in the process of evaluating development through a purely economic lens, we lose sight of important aspects of human life that people value (Sen, 1999). Many such aspects of life are not correlated or causally connected to the national product, like cultural freedoms, social opportunities, and political transparency, among the various things people have reason to value. Thus, the end goals of development must incorporate the kinds of substantive freedoms and capabilities that people value and want to pursue. This idea of development was forwarded by Amartya Sen, who argued that development is a "process of expanding the real freedoms that people enjoy" (Sen, 1999). Thus, the evaluation of development policies must consider a multitude of variables that people have reason to value. A solely economic analysis: like a change in income or wealth, cannot capture the actual effect of the policy on the people it is intended towards. A particular policy might create a trade-off between two different kinds of freedoms that people value, or it might bolster many freedoms without sacrificing any. Such trade-offs must be evaluated and communicated democratically to the people that the policy targets.

In this context, this paper evaluates the Indian Agricultural Acts of 2020 (also known as the Farm Laws). The evaluation does not concern itself with only income effects, because these effects have been thoroughly analysed and debated on various platforms. It argues for an additional lens of evaluating the Farm Laws: namely, their social effects on rural society and its effects on the ability to create and maintain identity in rural India.

The Indian Agricultural Acts of 2020:

The Indian Agricultural Acts of 2020 (also called the Farm Laws) include two new Acts and one amendment that seeks to liberalise and deregulate the Indian agricultural sector. The first Act is called the "Farmers' Produce Trade and Commerce (Promotion and Facilitation; FPTC Act, 2020", which allows farmers to sell their produce to any buyer across the country, thereby providing "remunerative prices through competitive alternative trading channels" (FPTC, 2020). This Act abolishes the previous compulsion of selling produce at the Agricultural Produce Market Committee (APMC).

The APMC is a physical and locally centralised marketplace that facilitates transactions between farmers and traders. While most farmers sell their produce to private traders/ input providers instead of directly selling it at the APMC (Table 1, Appendix), deregulation would allow firms to create and manage their supply chains and points of procurement. This proposed increase in competition and the choice set of farmers is supposed to help them realise higher prices.

The second Act is called the "Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Act, 2020" (FPF, 2020). It provides a framework for agreements between farmers and firms (agri-business firms, processors, wholesalers, exporters, or large retailers) on selling future produce at previously agreed prices. It would allow firms and businesses to enter into a system of contractual farming, where farmers produce for companies based on mutually agreed terms. The Act intends to restructure traditional farming by resolving "resource use efficiency, optimal input patterns" and supply chain management (Kumar, 2021). The Act also intends to make the agricultural market more responsive to market forces by strengthening direct ties between farmers, firms, and consumers (Kumar, 2021).

The third amendment is a modification to an existing act: The Essential Commodities Act (ECA), 1951. It removes stocking limits on various agricultural commodities and calls for regulation of stock limits but only under extraordinary circumstances. Previously, governments could impose stock limits to control volatile commodity prices. The amendment seeks to improve food management systems by incentivising firms to adopt food storage practices. These three acts received the President's assent on 27th September 2020.

Section 2: Evaluating the Indian Agricultural Acts of 2020: An Additional Lens of Positive Liberty

A lens of evaluating development must encompass a series of freedoms, capabilities, and liberties that people have reason to value. This paper looks at the various positive freedoms people possess to create and maintain their social and cultural identity based on this approach of evaluating development. Evaluating developmental policies through the lens of positive liberty gives us a more holistic understanding of the freedoms and cultural liberties that are a vital part of the set of freedoms people possess (UNDP, 2004).

While conceptions regarding individual identity exhibit high variance from culture to culture, identity in India, especially rural India, is shaped and maintained by various interpersonal interactions in all spheres pervading their lives: economic, social, and cultural. This Indian identity is "exterior": dependent on the evaluation of a persons' status by other agents in society (Mines, 1994). These evaluations, in turn, depend upon the influence of the agent's family and the strength and quality of their social networks (Rao, 2001). Once an agent's identity is established and is socially quantified in terms of status and rank, it requires constant maintenance (Goffman, 1959). This maintenance requires demonstration and exhibition of actions that are deemed fitting to the "expected behaviours of one's rank within a social group" (Rao, 2001). Further, this exhibition requires certain commodities to function, which almost count as necessities (to live) that cannot be analysed independently of the local culture (UNDP, 2004).

Taken within the context of rural India, there exist commodities and norms that the deregulation of the agriculture sector would influence. These commodities and norms in turn affect some social and cultural freedoms that people value: the creation and maintenance of identity and status in society. As mentioned above, people in rural India value their status and identity not only for its effectiveness in maintaining stable social networks but also for the fact that it is an inherent part of their daily life. Hence, any deprivation in the expression of socio-cultural identity restricts an individual's set of positive freedoms. These possible deprivations are examined in the following section.

Section 3: Social Occasions and Public Festivals

One significant way to create and maintain status and rank is through expenditure on social occasions and public festivals (Rao, 2001). Spending on social occasions and festivals serves two purposes: 1) it maintains the social relationships that people value, and 2) it serves as a method of enhancing social status (Rao, 2001). This paper groups expenditure on social occasions and public festivals into Social Occasion Expenditure (henceforth, SOE). SOE has often been regarded as profligate expenditure and irrational in nature. However, because the Indian identity is quite different from the economically rational Homo Economicus, "profligate" spending is a method of shaping an individual's civic identity. Moreover, SOE has

been deemed to be economically rational too, as it helps solidify village-level social networks that help mitigate income shocks (Townsend, 1994).

Different field level studies have different estimates for SOE as a percentage of annual household consumption. Rao (2001) estimates SOE to be around 15% of annual expenditure, while Sachin et.al (2017) estimate SOE to be 21-28%, depending on the household's economic status. Upper-middle-class rural households spend 21% of their annual income on SOEs, while lower middle class to lower class households (often lower caste too) spend around 25-28% of their annual income (Sachin, Rajashekar, & Ramesh, 2017). Financing SOE constitutes about 14% of total household debt (Sachin et. al, 2017). People often employ various methods of financing SOE, ranging from borrowing from friends and relatives, non-professional moneylenders (shopkeepers in villages), microfinance institutions (MFIs), self-help groups (SHGs), and banks (Kamath, Mukherji, & Ramanathan, 2008). Loans from non-institutional sources (sources that exclude formal lending from MFIs, SHGs, banks) constitute about 32% of total household debt (NAFIS, 2016). Assessing the impact of the Farm Laws on social ties and relations would further require a causal chain connecting the Farm Laws to the institutions and norms that build and maintain status and rank. The node connecting both is the unequal income effect of the Farm Laws.

Income inequality and social status

Disparities in expenditure on social occasions mainly stem from pre-existing income inequalities. Rural disparities in income exist, with around 20% of households earning less than Rs.2500 per month, and the top 20% earning more than Rs.11,000 per month (NAFIS, 2016) (See Table 2, Appendix). This income inequality also translates to inequality in SOE, with the "middle class" spending 65% more on SOE than "lower class" households (Sachin, Rajashekar, & Ramesh, 2017) (see Table 3, Appendix).

Thus, the income effects of the Farm Laws must be analysed in the context of unequal class-wise SOE, and its effects on the creation and maintenance of identity in rural India. This raises questions: if the income effects are positive on average, what is the distribution of those income effects? If those effects are unequally distributed (say, according to land size/class), how would that affect class wise SOE?

Unequal distribution of the benefits depending on land size has been flagged as a concern regarding the Farm Laws (Kumar, 2021). These unequal benefits may arise due to larger land sizes being preferred over small-land holders, due to the amount and consistency of production of larger farms (Njeru, Njogu, & Olweny, 2018). This is precisely why large farm holders secure access to formal credit, while small landholders must avail credit from informal and non-institutional sources (See Table 4, Appendix). Because the maintenance of identity is dependent on SOE, an unequal change in SOE might increase the SOE expenditure of the households who were already spending more on social occasions. This would put greater financial pressure on lower-class households to maintain their identity by increasing SOE because the exhibition of their status and rank is dependent on the kind of exhibitions other people have (as seen above). They might finance this either by incurring more debt or substituting other household consumption for SOE. Moreover, because social occasions and public festivals are a space for enhancing social status, a greater disparity in income, and therefore a greater disparity in SOE, might make it harder for more impoverished individuals and households to enhance their social status. Such aspects of social life and freedoms must be analysed in the context of the Farm Laws.

Social Capital, Gendered Autonomy, and Seed Selection

The replacement of individual autonomy with market-oriented choices has been duly analysed (Illich, 1978). This replacement also has the tendency to affect different social classes differently. For instance, the Farmers (Empowerment and Protection) agreement on Price Assurance and Farm Services Act, 2020 would affect women in the domain of seed autonomy. While women are systematically excluded from various financial and household decisions, one area where they exercise their autonomy is while selecting seeds for sowing (Pionetti, 2006; García, 2006). The introduction of the Farm Law causes interactions between market forces and individual autonomy and restricts people from exercising self-autonomy. Moreover, seed exchange in rural India also acts as an agent to build social capital. Thus, seeds are important for two distinct reasons: seed exchange 1) helps in the accumulation and maintenance of social capital, and 2) gives women autonomous control over an essential factor of production.

1. Seed exchange and social capital

Once harvested, a part of the seed surplus is stored for sowing next season, and a part is exchanged and traded among farmers in the community. This seed exchange between small and marginal farmers serves to strengthen and maintain social ties and networks (Pionetti, 2006). Similar to expenditure on social occasions and festivals, seed exchanges solidify a farmer's position in the rural community. Because social networks rely on an interpersonal relationship that connects agents via information flows, commodity exchanges, and mutual social bonds (Poudel, Sthapit, & Shrestha, 2015), such networks strongly rely on reciprocal ties, especially in the case of seed exchanges (McGuire, 2008).

Thus, seed exchanges constitute an important part of rural Indian society. Based on this, the impact of the FPF (2020), which allows firms to decide farming inputs as a measure to enhance input efficiency, must be analysed in the context of its impact on seed exchange networks. When an external agent (here, a company) acts on behalf of agents present within a particular context (farmers), unintended consequences are bound to occur (effects on seed exchange networks). Because firms might choose to maximise profits, they would readily switch over to hybrid seeds from Open Pollinated Varieties, which are purebred and locally exchanged. While hybrid seeds increase crop production by 15-30% over purebred locally exchanged seeds and increase profitability significantly (Ramaswami & Pray, 2001), they cannot be resown and hence, cannot be exchanged or traded (Jitendra, 2019)

The penetration of hybrid seeds and seed liberalisation in rural farming has had varying effects on various crops (Ramaswami & Pray, 2001). 91% of farmers growing paddy still use locally exchanged seeds for production and exchange. However, post the implementation of the FPF (2020), the introduction of a bigger market-value oriented lens would put pressure on the prevailing "un-economic" and "financially expensive" social practice of seed exchange and purebred seed farming. While this shift in perception, and eventually in outcomes, can be evaluated as individuals maximising their individual or household utility, changes might be observed in the dynamics of individual identity interacting with the collective social identity. Agents develop an economically "rational" outlook that puts pressure on their prevailing social and cultural relations and networks. The FPF (2020)

introduces a more significant economic incentive to substitute local farming practices for economically beneficial methods, and therefore restricts and puts an upper bound on the set of choices a farmer can make. The adoption of hybrid seeds would be an impediment to seed exchanges, which would not be possible post the shift to hybrid.

Given that seed exchanges are essential for the accumulation of social capital, the effects of hybrid seeds and the FPF (2020) on social cohesion and ties must be studied to get a comprehensive understanding of the dynamics of agriculture market liberalisation. A reduction in the ability to accumulate and maintain social capital might create a further divide between relatively well-off and poor rural households, where the former might have access to other sources to accumulate social capital (like SOE).

2. Women and Autonomy in Seed Selection

The autonomy of labour in industrial production is of significance in the context of the Farm Laws. Ivan Illich (1978) discusses the processes wherein marketisation results in disenfranchising individual autonomy and alienating them from the commodities they produce. Here, autonomy is interpreted as possessing positive liberty, in opposition to having negative liberty (Schmidtz & Brennan, 2010). Positive liberty is the kind of liberty where individuals have the freedom to act autonomously, without facing any internal constraints like deprivation of wealth. A free market draws a more rigid line between the two forms of liberty. Once a farmer gains an opportunity for increasing their income, the choice to engage with agribusiness and firms who decide their production inputs and structure becomes more prominent. This liberalisation, then, comes in the domain of negative and positive liberty: farmers, in a sense, are free to choose between corporate farming and their current method of farming. No one is forcing them to choose between either. This is the negative liberty of the farmer. However, if the farmer views corporate farming as financially beneficial, their positive liberty is constricted: the farmer interests align with the market's interests. Indeed, while the trade-off between earning a higher income at the cost of positive liberty is the farmer's individual choice, this choice has unintended consequences on the liberty and autonomy of women farmers. In the process of farming, household members have differentiated roles (FAO, 2011). As discussed earlier, women farmers of the household handle

an essential role of selecting seeds for sowing (Pionetti, 2006) and how marketisation of seed genotypes undermines the autonomy of women farmers.

The Farmers (Empowerment and Protection) agreement on Price Assurance and Farm Services Act, 2020 allows firms to select farming inputs and methods, and in turn, utilises the land and labour of the farmer. The choice of inputs also includes the choice of seeds. Firms would prefer hybrid seeds over pure-bred seeds that are managed by women. However, the choice between GMO/hybrid seeds and pure-bred seeds is analysed solely in terms of the economic benefit to the farming household, while the impact on the autonomy of women farm-managers is seldom analysed. The decision-making power is passed down to firms, while women (and men) are utilised only for their labour. Thus, by taking away the decision to select seeds from women (and farmers in general), the FPC (2020) would have unintended consequences on aspects of life that women farmers value.

Conclusion

The above examples exemplify the need for a new lens to analyse the Farm Laws (and other development policies). Economic, social, and cultural spheres constantly interact with one another and change in any one can produce a change in others. The economic and socio-cultural equilibrium gives a better understanding of the effects of development policies. Merely analysing changes in economic equilibria gives an incomplete understanding of what development is ultimately intended for - human development. The three lenses provided above are:

1) Examining the impact of changes in income and linking them with Social Occasion Expenditure and linking that with the creation and maintenance of identity in rural India; 2) analysing how the Farm Laws would impact the practice of seed exchange, and how that impact would translate into looser (or denser) social ties; and 3) how the second Act – the FPF (2020) – would impact the autonomy of women farmers. These additional lenses offer a more complete picture, but definitely not the entire one. Adopting such lenses of evaluating policies would equip analysts with additional non-monetary variables that people want to maximize (or preserve), thus finally improving human wellbeing.

Author Bio

Sattva Vasavada is a second-year student at Ashoka University majoring in Economics and minoring in Mathematics. His current academic interests lie in health and development economics. He wishes to pursue a career in quantitative economics and health policy.

Appendix

Table 1: Percentage of crop sold to trader/APMC/other agencies.

Crop	Private Trader	APMC	Input Trader	Coop & Govt Agency	Processors	Others	Total
paddy	58.94%	20.15%	9.32%	9.82%	1.76%	7.05%	100.00%
jowar	71.43%	25.00%	2.50%	1.07%	0.00%	7.50%	100.00%
bajra	48.55%	47.30%	3.73%	0.41%	0.00%	2.90%	100.00%
maize	62.89%	29.75%	6.52%	0.57%	0.28%	2.27%	100.00%
ragi	83.15%	14.61%	2.25%	0.00%	0.00%	8.99%	100.00%
arhar(tur)	42.79%	48.42%	8.56%	0.23%	0.00%	1.35%	100.00%
urad	68.06%	25.40%	5.75%	0.79%	0.00%	2.38%	100.00%
moong	50.00%	45.69%	3.83%	0.48%	0.00%	2.39%	100.00%
sugarcane	22.59%	6.94%	1.65%	44.24%	24.59%	5.29%	100.00%
potato	64.92%	22.89%	11.26%	0.75%	0.19%	4.13%	100.00%
groundnut	58.24%	28.57%	9.26%	3.92%	0.00%	4.40%	100.00%
coconut	84.41%	11.14%	1.34%	3.12%	0.00%	8.24%	100.00%
soyabean	46.90%	46.56%	5.07%	1.35%	0.11%	0.56%	100.00%
cotton	53.79%	24.78%	13.39%	6.03%	2.01%	1.23%	100.00%
jute	72.92%	21.11%	4.90%	0.00%	1.07%	0.11%	100.00%
Average	59.30%	27.89%	5.96%	4.85%	2.00%	3.92%	100.00%

Source: NSSO Situation Assessment Survey of Agricultural Households, January - December (2013).

Table 2: Income distribution in rural India, decile wise.

Decile	Household Income
1	1000
2	2500
3	3558
4	4500
5	5500
6	6667
7	8333
8	11000
9	17000
10	48833

Source: NABARD All India Rural Financial Inclusion Survey 2016-17.

Table 3: Expenditure on social occasions (SOE), class wise.

Class	Festival Expenses by Households (Rs)
Upper Middle Class	10234
Middle Class	7431
Lower Middle Class	5234
Lower Class	4479

Source: Festival Spending Pattern: Its Impact on Financial Vulnerability of Rural Households (Sachin, Rajashekar, & Ramesh, 2017).

Table 4: Credit sources according to Farm Size

Land Size (Hectare)	Govt	Co-op	Bank	Landlord	Agri/Profss Moneylender	Shopkeeper/Trader	Relatives/Friend	Others
< 0.01	0.40%	1.60%	12.90%	0.60%	63.70%	1.40%	17.50%	1.80%
0.01 - 0.40	1.30%	14.60%	31.00%	0.80%	32.40%	2.50%	14.20%	3.10%
0.41 - 1.00	1.70%	13.90%	37.60%	0.80%	27.40%	6.60%	10.60%	1.40%
1.01 - 2.00	2.60%	14.70%	47.50%	0.70%	23.30%	1.50%	7.60%	2.00%
2.01 - 4.00	1.90%	15.60%	50.00%	1.40%	23.80%	1.20%	5.80%	0.30%
4.01 -10.00	3.80%	17.50%	50.20%	0.40%	18.70%	1.40%	6.50%	1.50%
10.01 +	1.10%	14.30%	63.50%	0.00%	16.10%	0.50%	3.80%	0.60%
Average	1.83%	13.17%	41.81%	0.67%	29.34%	2.16%	9.43%	1.53%

Source: India - Situation Assessment Survey of Agricultural Households, January - December 2013, NSS 70th Round, 2013

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The Role of Time Poverty in Exacerbating Gender Inequalities in Rural India

Yashasvini Gupta



Abstract

The article investigates the role of time poverty in India and its role in exacerbating gender disparities in rural regions. The article analyses the considerable socio-economic impact of time poverty on women, especially in rural India, and the significant risks it poses to women's health and socio-economic upliftment. Furthermore, the article considers the need to account for the role of time poverty in policies designed for female economic empowerment.

The pandemic has exacerbated gender inequalities in rural India. A study by economist Ashwini Deshpande revealed that approximately 4 out of 10 women lost their jobs last year during the lockdown, with rural women's employment suffering the maximum relative loss (Deshpande 2021). This has been accompanied by an increase in female time poverty, with an IWWAGE study revealing that 54% of women reported an increase in workload, with tasks including "cooking more food (both at home as well as at the community kitchen centre), washing more clothes, cleaning more utensils, going further to fetch more water, selling vegetables door to door, picking cow-dung for fuelwood, and boiling water regularly" (Tankha, 2020).

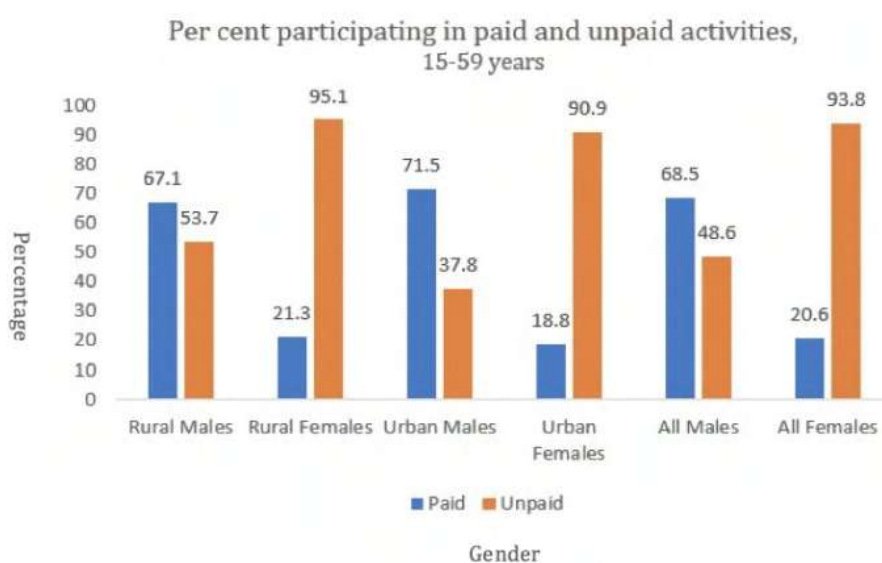
Women in rural India contend with various social and institutional constraints that exacerbate these inequalities. A significant constraint to their livelihoods is time poverty or the lack of discretionary time available to them due to the unequal gender distribution of unpaid labour. In recent years, the work of feminist economists has drawn attention to women's disproportionate participation in unpaid activities, such as childcare and domestic labour, that may impede their temporal autonomy, leaving them time-poor.

According to a paper by the economist Jayati Ghosh, since certain goods and services are unavailable to low-income women due to financial constraints or deficiencies in public policy, their only alternative is to produce these goods and services themselves, mostly involving household work and care of other family members. Thereby, in addition to low-wage paid work, many rural women engage in unpaid labour to meet their family's essential needs (Ghosh, 2016). The frequency of unpaid labour thereby increases with a loss in household income. Ghosh further argues that in cases when long working hours prevent women from completing such activities, time poverty may lead to the material deprivation of that family. Time poverty thereby poses tangible risks for the entire household.

Time poverty is also shown to carry considerable health risks for women, including significant mental stress and increased delays in seeking medical care due to insufficient time (Hyde et al., 2020). In addition, time poverty restricts educational opportunities for women and limits their participation in the workforce. A 2011 study by the OECD revealed Indian women spend 4.3-5 hours more per day on unpaid work than men. Domestic labour, including tasks like cooking and house

cleaning, remain highly gendered, dictated by deep-rooted social norms which relegate household tasks to women. These norms restrict rural women's job opportunities to paid labour.

This is substantiated by the recent Time Use Survey (TUS) conducted by the National Statistical Office from January to December 2019, which surveyed over 1,38,799 households on their participation in paid and unpaid activities. The TUS revealed that females from the ages of 15-59 spent 337 minutes (5.6 hours) in unpaid activity, compared to 41 minutes spent by men. Similarly, while males spent 305 (5.08 hours) minutes in paid activities, it was only 68 minutes for females. Research has revealed that married women often substituted their own economic participation to fulfil household responsibilities.



Source: Time-Use Survey, 2019

The TUS survey revealed that only 20.6% of rural women were engaged in paid labour in 2019, in contrast with 68.5% of rural men. Furthermore, 93.8% of all female respondents were engaged in unpaid labour, compared to only 48.6% of male respondents.

A shift to clean energy applications in cooking, like LPG and solar cookers, may be useful in alleviating time poverty amongst rural women. Biomass fuels, such as firewood and agricultural waste, are still used by 80% of rural women. A study by the International Institute of Development found that women who cooked on LPG saved on average about three hours per day compared to cooking on biomass (Merril, 2014). The study also revealed that the availability of LPGs made men more likely to cook; 70% of households having an LPG connection said that a male

member cooked at least one meal in the last 30 days, compared to the 58% who did not have an LPG connection. Despite these advantages, however, LPG usage remains limited due to its high cost and concerns about availability.

While LPG subsidies have been provided by the Pradhan Mantri Ujjwala Yojana programme, the scheme has been unsuccessful in completely displacing the use of firewood in cooking due to the prohibitively high cost of refills and the absence of a well-established distribution system (Patnaik et al, 2019). Distribution partners in certain rural regions are either too far away or take too long for delivery. Furthermore, cash subsidies under this scheme are often irregular and inadequate. In 2020, the Federation of LPG Distributors in India claimed that since the beginning of the scheme, 22% of beneficiaries did not refill their cylinders, and 5-7% did not receive the subsidy amount for their first refill.

A popular critique of certain rural employment government schemes is their failure to incorporate a gender-specific lens in their implementation. According to an article by the India Development Review (IDR), skilling programmes such as the Pradhan Mantri Kaushal Vikas Yojana (PMKVY) are often unsuccessful in improving female workforce engagement due to their failure to account for women's time poverty; a consequence of the inequitable distribution of domestic labour and the absence of creche and childcare facilities (Kohli & Das, 2017).

As India strives for gender equality, the role of time poverty must be accounted for in policies designed for female economic empowerment, given the significant risks it poses to women's health and socio-economic upliftment. Government policies, such as working time regulations, LPG subsidies and institutional investment in childcare facilities may enable increased female labour force participation.

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Pradhan Mantri Matru Vandana Yojana (PMMVY): A Behavioural Lens

Vyoma Dadhich



Abstract

"Pradhan Mantri Matru Vandana Yojana (PMMVY)", a Maternity Benefit Programme was launched in the year 2017 under the provisions of the National Food Security Act, 2013 for Pregnant Women and Lactating Mothers (PW&LM). Its aim was to provide partial compensation for the wage loss through cash incentives with an intention to improve the health-seeking behaviour amongst women. However, previous research has identified a lot of factors responsible for the ineffective implementation of the above programme. Through the lens of behavioural sciences, this paper shall attempt to identify the root causes of the problems associated with the implementation. It further provides recommendations for addressing those policy challenges using the EAST and MINDSPACE behavioural frameworks.

Introduction

A Maternity Benefit Programme namely, "Pradhan Mantri Matru Vandana Yojana (PMMVY)" for Pregnant Women and Lactating Mothers (PW&LM) was launched in the year 2017 under the provisions of the National Food Security Act, 2013. The objectives of the scheme are:

1. to provide partial compensation for the wage loss in terms of cash incentives so that the woman can take adequate rest before and after delivery of the first living child; and
2. to provide the cash incentives that would lead to improved health-seeking behaviour amongst the Pregnant Women and Lactating Mothers (PW&LM).

The eligible beneficiaries are provided with Rs. 5,000/- under PMMVY and the remaining cash incentive is provided under Janani Suraksha Yojana (JSY) after institutional delivery so that on average, a woman gets Rs. 6000/- (Maternity Benefits Under Pradhan Mantri Matru Vandana Yojana, 2017).

However, even after almost 4 years of the programme, the objectives have still not been met. Apart from the low budget and the fact that the policy is only limited to the first living child of the mother, there are a lot of other implementation challenges that have been observed on the ground.

Broadly, the problems with respect to the policy challenges are threefold, namely, lack of awareness among the beneficiaries, on-ground implementation challenges and, a complex registration process and huge documentation work.

This analysis aims at understanding the above three policy challenges amongst others and the behavioural aspects related to them. Further, a few potential solutions based on the behavioural change frameworks are proposed that shall help in addressing the issues mentioned.

Policy Challenges

1. Awareness among the beneficiaries

The first challenge is that of awareness among the beneficiaries. For PMMVY, out of the two major listed goals, the second one aims to improve the health-seeking behaviour amongst the PW&LM. However, in the process review and concurrent monitoring of the scheme which was conducted in three states, i.e., Assam, Bihar and Maharashtra in 2018 by UNICEF, India for NITI Aayog (the nodal agency for the programme was the International Institute for Population Sciences (IIPS), Mumbai), the report mentions that for all the three states, only a few beneficiaries have spent the money received on nutritious food. Instead, women spent their money for other purposes which might have helped them to solve their household needs.

Cognitive dissonance, social norms, social pressure, fear and stress of not being able to work and help the household financially, could be some of the reasons why even after enrolling with the policy, women make poor decisions for their own health.

A Theoretical Domain Framework (TDF) was developed in the year 2005 by a group of health psychologists, implementation researchers and health theorists (Michie et al., 2005). This framework helped in making behaviour change theories more accessible to implementation researchers. In 2012, the same was revised and is now called the Redefined Theoretical Domain Framework. It consists of 84 constructs classified into 14 domains. One of the domains in Redefined TDF is "belief about consequences". It includes human behaviour and beliefs around acceptance of truth, reality or characteristic of outcome expectations, consequent, and anticipated regrets (Khan & Roche, 2018). Accordingly, women identifying with this attribute might feel - nothing may change if they spend the money on having a nutritious diet.

Apart from the above, most of the women even after being aware of the scheme, either did not know about the eligibility conditions nor were they aware of the benefits completely (Sekher & Alagarajan, 2019).

Hence, we observe that there has not been much improvement with regards to the behaviour change of beneficiaries, either due to a lack of knowledge about the policy or simply because women were not able to appreciate the importance of a nutritious diet during their pregnancy. Therefore, these factors need to be considered while designing any potential interventions to improve the policy.

2. On-ground Implementation

The second challenge is the on-ground implementation. This is related to the intertemporal choices that the workers and officials might encounter while implementing the policy. The Refined Theoretical Domain Framework (TDF) again helps to diagnose the behavioural insights of this policy challenge, where we find a range of factors involved in the inefficient implementation of the policy. This could either be the result of a "lack of competence" or "skill development" among the workers/officials or this could also be attributed to the factor of "belief about consequences" again, i.e., women will still make bad decisions and will not use the money for the intended purpose and hence, there is no point for the workers to efficiently work on implementing the policy. Apart from this, their "Goal priority" (mental representation of outcomes or end states that an individual wants to achieve) Khan & Roche, 2018, seems to be different when it comes to implementing the aforementioned policy.

Lastly, this is also related to the "Environmental Context and Resources", where not only they may not have enough resources, but at the same time, there is also a chance that they could already be facing barriers that hinder their work (Khan & Roche, 2018). A case from Sekher & Alagarajan, 2019 mentions that for all three states (Assam, Bihar and Maharashtra) generally, there was a delayed payment of the first instalment. The reason being that the officials were unable to complete their work because of some technical reasons. The workers state that they had reported software issues, and had pointed out the specific features that should be added/modified in the software. But their issues were never heard and resolved leading to ineffective implementation of the policy. As a result, a few of the beneficiaries received all three instalments after the birth of the child, and hence, the purpose of the policy was not met.

While in the above case the workers in the office explained the reasons for not being able to complete the work, Falcao et al., 2019 mentions that due to a highly centralised payment architecture the local on-ground workers were unable to understand the reasons for the delay. Moreover, the delay in payment to beneficiaries also affected the work of Anganwadi workers. Because of the repeated questioning by the beneficiaries on not receiving the cash transfers on time, instead of doing their part responsibly, the Anganwadi workers have become reluctant on submitting the new applications.

We observe that the software issues are not huge but have still not been resolved. The coordination problems amongst the on-ground workers and officials and the reluctance of the Anganwadi workers are all interlinked together. These are the actions that are the consequence of the behaviour of the individuals. Hence, apart from the various other challenges and issues identified in the previous research, the behavioural aspect related to these issues need to be addressed as well.

3. Complex enrolment procedure

Another major hurdle the current policy is facing is the huge and complex procedure to get enrolled in order to avail of the benefits mentioned in the policy. This is an example of sludge i.e, where excessive friction is leading to the failure of policy implementation on the ground. Chandra (2019) mentions several factors that hinder the implementation of such an important programme. Amongst many others, is the fact that the registration form in itself is an obstacle for the women who are the target beneficiaries of the policy.

Apart from linking their bank accounts with the Aadhaar card, a whole bunch of documents such as mother-child protection card, Aadhaar card, and bank passbook are required.

This was also mentioned by Sekher & Alagarajan (2019) in their report where they state that in Assam and Bihar, women mentioned a lack of documents, such as Mother and Child Protection card (MCP).

In some areas of Assam, women did not get the MCP card, while in Bihar, the information regarding immunisation was not filled on the MCP card which is needed for releasing the third instalment. Thereby creating an impediment in fulfilling the goals of the policy. Hence, in order to achieve the desired policy outcomes, we are required to deal with the problem of sludge.

Therefore, along with the behaviour of beneficiaries, workers and officials, we also need to deal with the excessive friction that is preventing the effective implementation of this policy. Consequently, to solve the above-mentioned issues and design interventions, behavioural science must be included in the potential solutions if we aim to achieve the desired policy objectives. This can be done by using the EAST and MINDSPACE behavioural change frameworks.

Policy Recommendations

Using the EAST framework:

The EAST framework was developed by the Behavioural Insights Team in early 2012 based on their own work and the wider academic literature. The framework includes four simple principles of making it Easy, Attractive, Social and Timely (EAST) ("EAST: Four Simple Ways to Apply Behavioural Insights", 2014). EAST provides a simple, accessible and memorable framework that can be used for effective policymaking by incorporating behavioural approaches. The framework can be applied as below.

1. Make it Easy

We begin by making the process of enrolling and registration Easy for the beneficiaries. This can be done by using the power of defaults and simplifying the information, education and communication (IEC) part of the policy.

For all the PW&LM who are a part of the institutional delivery service, we shall make these schemes (PMMVY and Janani Suraksha Yojana) a default option. So, instead of women enrolling themselves, we can get them auto-enrolled. The women who are not eligible shall be using the opt-out option.

In order to validate that only eligible women are enrolled in the scheme, ASHA workers would visit each house - collect, scan and submit the documents on a digital platform/ database of the eligible women. They shall further help the beneficiaries open up their bank accounts (in case of no bank accounts), link their Aadhaar cards with the bank, and shall be responsible for all the necessary updates that are required to be done to ensure that each PW&LM receives their benefits and cash incentive on time. Hence, the responsibility of registering and submitting the documents shall not only be the responsibility of the pregnant women but they shall be supported by the ASHA workers at each stage.

Secondly, in order to improve the IEC, the benefits and eligibility of the policy shall be clearly laid out not only in English or Hindi but in the local language of the district as well. This shall help in raising awareness and in informing the eligible women of the benefits they are entitled to. Hence, all the policy outcomes, objectives, goals, messages, and eligibility criteria shall be created in a manner where it is brief, clear, precise, easily understandable and is advertised in the local language that is spoken in the district.

2. Make it Attractive

The next solution being proposed is to make the scheme and benefits attractive for all the beneficiaries. Once, the registration is done, all the eligible women shall receive a kit either by post or directly, at the same time as receiving the instalments. The kit shall include pictures (of healthy babies, for instance), messages in local languages on how and why they need to spend the money being transferred on their health, the significance of having a nutritious diet, among other things. A lottery system can also be included in the scheme. For this, each month an eligible PW&LM from the district shall be provided with an additional amount of money (say, Rs. 2000 – Rs. 3000) with a condition that once a woman wins the lottery, she cannot participate again. This shall help in making the policy more attractive for the beneficiaries.

3. Make it Social

The third intervention is based on making the scheme more social. Here, we shall use positive social descriptive norms. The beneficiaries apart from the kit shall receive frequent text messages on their phones stating for example, *"70 per cent of pregnant women registered under PMMVY in your locality delivered healthy babies in the last 10 months"*.

Apart from text messages, these messages can also be delivered in the form of letters by post to the eligible beneficiaries. These can even be displayed as video messages in the form of stories on local television channels, radio channels, and could also be put up as posters in PHCs, government and private hospitals and even graffiti could be drawn on the walls to convey the message.

Moreover, the Anganwadi and ASHA workers along with local governments shall help to organise fairs and seminars for PW&LM to increase awareness among the women. This will also help in providing them with a space, where they can discuss their issues with one another and shall help in encouraging and motivating the PW&LM to improve their health-seeking behaviour and utilize the benefits of the policy in an intended manner.

4. Make it Timely

The fourth solution is based on making it timely. This is based on helping the ASHA, Anganwadi workers, medical practitioners, local government officials, everyone responsible for the implementation of the policy in a district to be able to plan their responses to events. Since there is a substantial gap between intentions and actual behaviours. A proven solution is to prompt people to identify the barriers to action and develop a specific plan to address them. This shall help in addressing the second policy challenge of ineffective implementation, specifically.

Hence, here, each worker and official involved in the implementation shall be registered on an online platform. They shall be required to continuously update their work on the platform that shall help in tracking the progress with respect to each of their beneficiaries. The system will also generate text messages for the workers, for example, in a case where the beneficiary has received the first instalment, and after 5 months (1 month before becoming eligible for the second instalment) the worker shall be notified with a message - *"Your x beneficiary is due with the Ante-Natal check-up"*. If there is an issue regarding any such instance, timely action can then be taken.

Using the MINDSPACE framework:

The MINDSPACE framework helps policymakers to study the factors that influence our behaviour and in turn, helps them to develop effective policies. It presents the nine most powerful influences that are non-coercive and can be used as a checklist while developing any policy. The mnemonic, MINDSPACE stands for Messenger, Incentives, Norms, Defaults, Saliency, Priming, Affect, Commitments and Ego ("MindSpace - Influencing behaviour through public policy", 2010). Hence, apart from the above four solutions, we can further use the MINDSPACE framework to address the policy challenges mentioned earlier.

To begin with, we can use the influence of the Ego. The rationale behind using the same is that generally, we tend to act in ways that make us feel better about ourselves. One of the ways to do the same is by making small nudges in the form of push notifications. For instance, messages about the successful registration and payment of a successful instalment to the beneficiary shall be sent to the officials and workers on a continuous basis to keep them motivated. Messages such as "Congratulations, you have helped 'n' number of PW&LM last month to deliver healthy babies!" could be used for the same.

A second way is to upload pictures of the workers with their beneficiaries on the platform mentioned earlier after all three successful timely payments. The same can also be advertised while promoting the scheme in newspapers on Youtube and social media.

Affect (influence from the MINDSPACE framework) shall be used to influence both beneficiaries as well as workers involved in the implementation. Timely seminars/ workshops shall be conducted for the workers and video messages shall be sent to them to inform how unhealthy pregnancy can be life-threatening for the mother as well as for the child. This can help shape their actions for the better. The same messages shall also be sent in the kit in the form of pictures that beneficiaries receive (as mentioned earlier).

Providing a Feedback Mechanism

Last but not the least, a strong feedback/redressal mechanism needs to be included in the system. It shall be the duty of the ASHA worker to teach the eligible beneficiary how to use the digital platform (website/mobile application) for providing feedback and information regarding all the helpline numbers should also be given to women during their first home visit itself. The workers will also have to update the same on the system through their IDs. Once the mobile number of a beneficiary is registered with the system, dedicated calls before and after each instalment shall be made to track the progress of each beneficiary. The calls shall also be made to guide them on how to make efficient use of the transferred money.

Conclusion

The proposed interventions based on behavioural sciences (using EAST and MINDSPACE frameworks) will not only help in improving the IEC of the policy but will also help the workers and officials involved in the system work more efficiently, thereby leading to effective implementation of the policy. Further, the ASHA workers being made responsible for the collection and submission of the required documents, auto-enrollment and digitization of the process will help in addressing the problem of sludge. Thus, the solutions proposed shall not only help in achieving the policy objectives of providing rest and care to the PW&LM, apart from providing partial compensation for their wage loss to an extent but shall help in improving the health-seeking behaviour of PW&LM as well.

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Analysis of Women's Participation in the Indian Workforce: Trends, Factors and Solutions

Swati Solanki and Kristal Yadav



Abstract

This paper focuses on analysing the patterns and trends in the Female Labour/Workforce Participation (FLWP) rate in India from the year 2000 onwards. The data used for the study is taken from the National Family Health Survey (NFHS), National Sample Survey Organisation (NSSO), Census of India, and other official government sites. The paper then highlights the reasons and factors associated with the decline of FLWP in India, ranging from the deep-rooted social norms, gendering of occupations to wage differentials between men and women. The paper goes on to explore how these factors lead to women having little choice in their employment and work decisions including care and domestic work. Furthermore, based on the trends and factors, this paper studies the policy approach needed with respect to health and education as well as measures to increase self-employment through self-help groups and more recently, increase capacity building through skill training programmes. Finally, the paper also talks about the impact of the COVID-19 pandemic on the FLWP rate and the steps required and taken by the government.

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Introduction

India has experienced rapid economic growth with improved performance in many indicators over time such as the decline in fertility rate, the introduction of employment generation programs and policy shifts towards women empowerment in recent years. In labour economics, “human capital corresponds to any stock of knowledge or characteristics the worker has (either innate or acquired) that contributes to his or her productivity” (Pischke, LSE). India has a high proportion of working-age people and is passing through a phase of ‘demographic dividend’ (Thakur, 2019). This can boost per capita growth rates through savings and investment effects along with labour force participation.

Development policies in India, as shown by the investment in population and family planning programmes, have created a positive impact on women’s employment. An increase in Female Labour/Workforce Participation (FLWP) rate and earning can lead to rapid growth, reduction in poverty and increase in prosperity. It is evident that women’s earnings will have a positive impact, not only on them but on the health and education of their children as well. However, if women are largely not participating actively in the labour force, this will have a negative impact and might lead to labour shortages in key leading sectors of the Indian economy.

In recent decades, one of the striking features has been a declining trend in the female labour/workforce participation rates in both rural and urban areas. As per a study conducted by researchers at Harvard Kennedy School in 2018, a fall in female labour force participation in their early to mid-20s in urban areas, suggestive of marriage and family-related responsibilities, may specifically limit women’s labour force participation. As per the Global Gender Gap Report 2021 published by the World Economic Forum, India is ranked at 140 out of 156 countries with a score of 0.625 out of 1 (PIB, 2021). In 2011, as per the NSSO survey, the Workforce Participation Rate (proportion of labour force employed) was 25.5 % for females and 53.3 % for males at an all-India level. The Indian government has been continuously focusing on labour market policies to increase the FLWP rate in India for several decades.

The challenges of growth and inclusion are interlinked, with one necessary for the other. Growth involves giving women the opportunities they need, and their participation in the labour market is an integral part of the growth equation. The objective of the paper is to propose policy solutions that can help reduce the different barriers that restrict female labour force participation. The paper first describes key employment trends in India, from the year 2000 onwards. Then, it goes on to identify the potential causes of declining female labour force participation on the basis of secondary data from various sources. Finally, the policy approach needed is outlined, encompassing educational scholarships and reservations, self-employment through self-help groups, and capacity building through skill training programmes.

Literature Review

The literature on female participation in labour/workforce can be reviewed in terms of both theoretical predictions as well as empirical findings. Labour force participation is generally seen as a labour supply issue, reflecting on the decision to participate in the labour market as opposed to remaining inactive (for example, attending domestic duties or education.).

Chaudhary and Verick (2014) found that the process of development, as witnessed during the Industrial Revolution and more recently in East and South-East Asia, has embarked on two key transitions; the shift of workers from agriculture to manufacturing and services, and the migration of people from rural to urban areas. These transitions are associated with many factors including increasing education, falling fertility rates, and other socio-economic indicators and thus have major implications for the role of women in society, especially in the context of the labour market. While female labour force participation rates across South Asian countries like Pakistan and Bangladesh have increased, India displays a declining trend despite its strong economic growth.

Dasgupta and Verick's (2016) study focuses on four key drivers responsible for the decline in women's labour force participation rate: (a) increased enrolment in secondary schooling, (b) rising household incomes, which pulled women out of the drudgery of agricultural labour, (c) mismeasurement of women's participation in the

labour force, and (d) the lack of employment opportunities for women in the non-farm sector. Further, the mechanization of agriculture has reduced the demand for female agricultural labour. They also observed how the nature (increase in capital goods, technological improvement, growth of labour force, increase in human capital) and spatial distribution (local, state and national level) of economic growth and job creation will help determine whether women can access jobs, especially when social norms dictate how and where women can work.

Mehrotra and Sinha (2017, 2019) in their study suggest that job growth needs to become a higher policy priority, for a larger number of educated youth (male, female, and others) to join the labour force. Otherwise, this also means that more educated people with a particular set of knowledge and skills won't be able to find the right job, and thus will look for low-paid works or remain unemployed, which may pose a huge challenge to policy-makers. Without faster job growth as compared to the recent five years, the demographic dividend could risk becoming a demographic disaster. Despite India being committed to supporting women's economic empowerment, including the Convention on the Elimination of All Forms of Discrimination against Women and ILOs conventions on gender equality, gender disparity in the labour market in India is still widespread. Gender equality in the labour market is a key means to achieve wider human development goals that include poverty reduction, increased productivity and aggregate output, reduced fertility, infant mortality, and child labour; and greater decision making and bargaining power for women within households and outside.

Trends and Factors

While there is a strong consensus in the available literature that the FLWP rate has fallen significantly, the magnitude of the fall has been estimated differently by different authors based on the operational definition of employment used, years of reference and construction of metrics. They have very limited choices for employment across sectors, be it rural or urban areas.

Using more recent data from the Labour Bureau's Employment-Unemployment Surveys, a similar trend of falling FLWP has been established for the last half-decade. As per estimates, around 7.3 million women have left the workforce between 2013-14 and 2015-16 and 79.4 % of this drop took place in rural India. The share of women-led companies in India has also stagnated. In 2019, only 3.7% of CEOs and Managing Directors

of the National Stock Exchange of India listed companies were women as compared to 3.2% in 2014. Only 8.9% of firms have women in top management positions, and as of 2019, just 29 companies (5.8%) on the Fortune India 500 list had women in executive roles.

State-level Employment Scenario (1992/93 – 2011/12)

The table from Employment and Unemployment Surveys (2011-12) of the National Sample Survey Office (NSSO), reveals that the states like Assam, Bihar and Uttar Pradesh, have low performance in terms of the participation of rural and urban women in the workforce while on the other hand Tamil Nadu, Kerala, Andhra and Maharashtra display a good performance with respect to FLWP. In the case of Kerala, Punjab and Haryana, the FLWP of rural women is similar to the all-India average. Gujarat and Rajasthan emerge as the two states where rural FLWP is higher than urban FLWP. The reason for the above trend cannot be narrowed down to a few, due to different complex social and economic factors across different regions.

Table 1: Declining Labour Force Participation Rate

State-Wise Female Workforce Participation Rates										
States/ Rounds	Urban Females					Rural Females				
	50th	55th	61st	66th	68th	50th	55th	61st	66th	68th
Andhra Pradesh	19.9	17.8	22.4	17.6	24	52.1	47.8	48.3	44.3	62.2
Assam	9.2	11.2	10.9	9.3	12.2	15.9	15.1	20.9	15.8	17.8
Bihar	6.9	7.5	6.5	4.7	7.1	17.2	17.3	13.8	6.5	8.5
Gujarat	14.2	13.5	15.1	14.3	19.3	39.6	41.3	42.7	32	40.3
Haryana	15.2	9.8	13.2	13	14.4	27.1	20.2	31.7	25	23.4
Karnataka	18.1	17.8	18.1	17	23.5	43	38	45.9	37	40.6
Kerala	20.3	20.3	20	19.4	27.8	23.8	23.8	25.6	21.8	30.8
Madhya Pradesh	14.2	13.4	15.4	13.1	17	41	38.2	36.6	28.2	38
Maharashtra	16.9	13.7	19	15.9	23.6	47.7	43.4	47.4	39.6	56.5
Orissa	15.1	14.5	14.8	11.9	21.6	31.7	29.9	32.2	24.3	36.1
Punjab	9.3	12.5	13.3	12.4	19.4	22	28	32.2	24	32.9
Rajasthan	16.3	13.8	18.2	12	20.6	45.7	38.8	40.7	35.7	53
Tamil	23	21.5	24.1	19.1	27.9	47.8	43	46.1	40.5	51.9
Uttar Pradesh	10.2	9.4	11.7	8	14.5	21.9	20.1	24	17.4	28.1
West Bengal	14.3	11.7	15.5	14.1	23.8	18.5	16	17.8	15.2	27.9
All India	15.5	13.9	16.6	13.8	21	32.8	29.9	32.7	26.1	37.2

Source: Employment and Unemployment surveys of NSS

The Employment and Unemployment Survey of the NSSO 2009-10 (66th Round) reveals that the labour force comprises 23% of women as compared to 55.6% of men. The NSSO 2011 Survey reveals that from 2004-05 to 2009-10, women's labour force participation declined from 33.3% to 26.5% in rural areas and from 17.8% to 14.6% in urban areas. The male workforce participation rate has improved in the urban areas and remained almost the same in the rural areas, which is highlighted in Table 2.

Table 2: Workforce Participation Rates

Gender wise Workforce Participation Rates				
	Female WPR		Male WPR	
Round	Urban	Rural	Urban	Rural
43rd	15.2	32.3	50.6	53.9
50th	15.5	32.8	52.1	55.3
55th	13.9	29.9	51.8	53.1
61st	16.6	32.7	54.9	54.6
66th	13.8	26.1	54.3	54.7
68th	14.7	24.8	54.6	54.3

Source: NSSO Surveys

Sectoral Distribution of Female Workforce

In 2011-12, the secondary sector accounted for 16.8% and tertiary for 8.4% of the rural female workforce in India and exhibited an increasing trend as shown in table 3. In urban areas in 2011-12, the secondary sector accounted for 34% of the female workforce and the service sector for 55.1%, both showing a rising trend since 2004-05.

Agriculture accommodates most of the women workforce in rural areas with the highest numbers in the farm sector. However, the share of women in the workforce in agriculture has declined over the years, down from 86.2% in 1993-94 to 74.9% in 2011-12 in rural areas. Similarly, in urban areas with 10.9% in 2011-12 with a declining trend since 1993-94. The reason for the same is increased mechanisation and automation in the agriculture sector.

In urban areas, the female workforce increased only marginally (by 1.3 million) over the period 2011-12, yet, the total female work participation rate witnessed a decline. While women's share in non-agricultural work has increased, which is a positive development, the agriculture sector still employs more than 75% of women.

Non-agricultural employment among women in rural areas increased in absolute employment opportunities in the **construction sector** (Mehrotra & Sinha, 2017). After 2005, with various initiatives like the Mahatma Gandhi National Rural Employment Programme, Pradhan Mantri Gramin Sadak Yojana, Pradhan Mantri Awas Yojana, and Swachh Bharat Abhiyan gearing up and private investments in the construction sector pouring in along with the real estate boom, demand for wage workers in the construction sector increased, boosting female employment in this sector.

In **manufacturing**, 68% of the women workers are engaged in only 3 sub-sectors - tobacco, textiles and related apparel industries, and others which include non-metallic mineral products, chemicals and toys. From 2009-10 to 2011-12, female employment in manufacturing increased by 3.5 million, attributing mainly to the rise in these three major sectors, wherein female employment rose by 2.7 million. However, vulnerable employment, which is an important indicator of job quality, is very high in these sectors. This means that the majority of women engaged in the manufacturing sector are less likely to have formal work arrangements and adequate social security.

Women's employment in the **service sector** has witnessed a remarkable increase over the years (3.5 million during 2010- 2012) after a dip during 2005-2010. However, the characteristics of female employment reveal informality, low pay, segregation and vulnerable employment. Based upon NSSO data (68th Round EUS), 55% of the regular female workers in the service sector do not receive any social security like PF, pension, or gratuity.

Domestic work, a major source of women's labour, increased from 1.15 million in 1999- 2000 to 2.79 million in 2011-12 (Mehrotra & Sinha,2019). This rise in domestic workers explains the rise in female regular employment in urban areas to a large extent, both due to an increase in demand from the newly affluent middle class who can now afford domestic help as a combination of both necessities as well as status and at the same time low employment generation in other activities. Although they have recently been included in the Unorganised Workers' Social Security Act, 2008, there is hardly any monitoring or any effective initiative to ensure minimum wages and basic rights of workers.

Retail trade subsumes a large number of women workers in both rural and urban India, with 41% of these being unpaid family workers, including those engaged in preparatory activities, cleaning and sorting, maintenance and other related operations (Mehrotra & Sinha, 2019). The own account workers are largely street traders often operating from open spaces on a daily basis as they lack fixed capital due to lack of resources and thus their work means only survival and not capital accumulation.

Table 3: Female Workforce Participation Rate in India by Industry and Location

Sector/Industry	Rural					Urban				
	1993-94	1999-00	2004-05	2009-10	2011-12	1993-94	1999-00	2004-05	2009-10	2011-12
Agriculture	86.2	85.4	83.3	79.4	74.9	24.7	17.7	18.1	13.9	10.9
<i>Primary -</i>	86.2	85.4	83.3	79.4	74.9	24.7	17.7	18.1	13.9	10.9
Mining & Quarrying	0.4	0.3	0.3	0.3	0.3	0.6	0.4	0.2	0.3	0.3
Manufacturing	7.0	7.6	8.4	7.5	9.8	24.1	24.0	28.2	27.9	28.7
Electricity, Gas & Water Supply	0.1	0.0	0.0	0.0	0.1	0.3	0.2	0.2	0.4	1.0
Construction	0.9	1.1	1.5	5.2	6.6	4.1	4.8	3.8	4.7	4.0
<i>Secondary -</i>	8.4	9.0	10.2	13.0	16.8	29.1	29.4	32.4	33.3	34.0
Wholesale/Retail/Trade etc	2.1	2.0	2.5	2.8	3.0	10.0	16.9	12.2	12.1	12.8
Transport, Storage & Commn.	0.1	0.1	0.2	0.2	0.2	1.3	1.8	1.4	1.4	2.7
Financial, Insurance Services etc.	0.1	0.1	0.1	0.2	0.2	1.9	2.5	3.2	4.7	4.5
Public Adm./Community Services	3.3	3.6	3.8	4.4	5.0	33.1	31.7	32.7	34.6	35.1
<i>Tertiary -</i>	5.6	5.8	6.6	7.6	8.4	46.3	52.9	49.5	52.8	55.1
All Non-Agriculture-	14.0	14.8	16.8	20.6	25.2	75.4	82.3	81.9	86.1	89.1

Source: Niti Ayog

Apart from the trends and reasons discussed above, several other factors are also associated that can help us better understand the drop in FLWP in India. The following section summarises these key factors and the role they play.

Factors Responsible for Low FLWP

Since the 1991 economic reforms, India's GDP growth has been accompanied by a rise in the education of Indian women and decreasing fertility rates (RBI, 2019). However, as per data released by NSSO in its Periodic Labour Force Survey, the share of working-age women who report either being employed or being available for work, has fallen from 42.7% in 2004-05 to 23.3% in 2017-18.

Demand-side Factors

- **Increased Mechanisation and Automation**

Decreased demand for labour in capital-intensive tasks across sectors, and automation in the services sector lead to women's reduced participation. Mechanization of agriculture is increasing, thereby replacing manual labour done by women. According to a McKinsey Global Institute (2019) report, up to 12 million Indian women could lose their jobs by 2030 owing to automation in agriculture, forestry, fisheries, and various other sectors. Besides, common job requirements of higher education and technical skills add to this problem.

- **Jobless Growth**

Even with rising GDP, the Indian economy is unable to absorb the rising working-age population. And this trend affects women participation more than men. Since the year 2000, a large proportion of the rising female labour force has not been able to secure jobs, with most of them being taken up by men. A similar reduction in the rural female workforce was due to the shift away from agriculture and towards manufacturing and service sectors. Especially the women lacking required sector-specific skills are not absorbed simultaneously with the growth in these sectors.

- **Rising Education**

More and more women continue to pursue higher education leading to a reduction in workforce participation. In India, the most educated women are more likely to participate in subsistence activities and informal employment, while those with high school education stay out of the labour force. Also, increased investments in children's education have emerged as a major impetus driving family decisions in India. Intense maternal employment also has the potential for influencing children's academic performance, such as by reducing their involvement in school-related activities like supervision of homework and participation in the parent-teacher association. The women's FLWP rate is highest among illiterates and college graduates in both rural and urban areas.

Supply-side Factors

- **Cultural and Social Norms**

Despite various women's rights movements, deep-rooted prejudices about working women continue to play a significant role in influencing FLWP. A study of rural south India by M.N. Srinivas in 1977 documented the widespread belief of how working women's wages are an indicator of low family status, and how families gain social status by encouraging women's seclusion. Women with 10 - 12 years of schooling actually withdraw from the labour force after marrying into richer families since they do not need to engage in paid work to support their families. 10-12 years of schooling for women is also seen as the minimum schooling required to manage domestic tasks such as schooling children.

On the other hand, as highlighted by the International Labour Organisation report, widespread occupational segregation in India based on gender norms favours jobs for men over women even with the same years of schooling. Here, jobs such as drivers, sales agents, among others are neither socially acceptable nor easily available for women. The socially acceptable employment options for women expand only with graduate degrees. Various other factors in the workplace like inflexible working conditions, gender biases in hiring and promotions, wage differentials, the absence of child-care facilities at work, mothers having fewer chances of getting employment than non-mothers (all these factors point towards the 'Motherhood Penalty') and low female representation at leadership levels worsen the situation. Caste also has an impact on the educational opportunities available to women. For instance, part of the higher rates of labour force participation among illiterate women may be a result of their lower caste status. Among women, Muslim women have the lowest FLWP rate while among Hindu women; upper-caste women have the lowest FLWP rate (Rukmini S, 2019). This also implies social norms and religious conservatism might play a role in women being "allowed" to work. Also, the prevalence of patrilocal marriages in which married couples live with the man's parents further reduces women's agency. Rural societies are divided rigidly on gender basis ruled by patriarchal norms that are further perpetuated by religious taboos and cultural biases.

In 2016, India passed an amendment to the Maternity Benefit Act, providing 26 weeks of paid leave for mothers, but placed the entire cost burden on employers. This further disincentivized the hiring of young women.

- **Rising Household Incomes**

Increased household wealth has moved women to the title of “Secondary Income earners” leading to wage differentials. That is, a rise in household income reduces the FLWP rate of Indian women (Nikore, 2019). The reason being the continued perception of taking pride in demonstrating male superiority. The decision to join the labour force is primarily influenced by the economic stability of families rather than other factors such as social norms, educational attainment and age.

- **Wage Differential**

FLWP is also influenced by the wage differentials that women face. Fewer women work today, and those who do, work long hours with lower pay than their male counterparts. The difference in the earnings of men and women in regular, salaried jobs, neglecting the differences in hours worked and educational qualifications—is significant. In rural areas, the salary earned by a male was nearly 1.4 to 1.7 times that of a female employee, while in urban areas, salaried men earned 1.2 to 1.3 times more than salaried women (Rukmini S, 2019). The Monster Salary Index, released in 2018, revealed that between 2015 and 2017 the gender pay in India remained at 24.3% on average in the man’s favour; as long as there exist norms against women’s labour market engagement, we expect to see gender wage gaps that cannot be explained.

- **Mobility Restrictions**

According to the National Family and Health Survey (2015-16), only 54% of women were allowed to go to a nearby market alone. Only 48% could visit places outside their village or community by themselves. And now, the Covid-19 outbreak has further intensified the situation with women requiring more strong reasons to move out of the house. Here, the major problem is physical security – the ease of getting to the workplace and getting back. As a consequence, girls are not sent to school after a certain age in rural areas because they are limited by how far they can travel. It is also a matter of control that girls cannot move out without the permission of the household. Hence, mobility is a big element in controlling the participation of women.

Policy Recommendations

After looking at the gaps identified from the data, and identifying various factors that explain the falling FLWP rate, we believe the following policy recommendations and measures can help improve the female labour/workforce force participation rate and drive a positive change.

- **Skill development and vocational training**

To improve the quality of human capital, there is a strong need to back up education with technical knowledge. In the past few years, there has been a visible policy thrust on skilling initiatives - Pradhan Mantri Kaushal Vikas Yojana (PMKVY), Skill India campaign, Skills Acquisition and Knowledge Awareness for Livelihood Promotion (SANKALP). These initiatives have seen substantial investments since they have great potential to bring about significant change through increased mobility from education to the labour market as well as the facilitation of the transition from unpaid to paid work. But training programmes are not sufficient by themselves. There has to be a link between the training programmes and industry needs. More importantly, they need to be linked with the needs of the growing number of girls who have just completed secondary school, especially in rural areas. Skill training must be provided to these girls close to where they live. If this skill training was provided at or near clusters of manufacturing activity, it would result in employment being available for these girls in the micro, small and medium enterprises in these clusters. This requires over 6000 clusters of modern and traditional manufacturing activity that exist in India to also have well-funded cluster development programmes where skills are provided (Mehrotra, 2019).

- **Strengthen Health and Education**

Expenditure on basic services like education and health impacts human capital development, as well as employment outcomes in both rural and urban areas, where the share of women employed in health and education is considerably large. Expansion of these two sectors will increase employment opportunities and will have long term implications on the quality of the labour force. This will have a positive consequence on the female labour force since women face more discrimination. The impact of the RTE Act, Sarva Shiksha Abhiyan, Rashtriya Madhyamik Shiksha Abhiyan and other similar schemes is reflected in an increase in enrolment and retention, particularly among girls.

However, the changes in the Centre-State fund sharing pattern of these programmes (recommended by the 14th Finance Commission with more devolution towards the States) may change the anticipated outcomes, but will also depend on how states decide to use the net increase in spending capacity and how they prioritise their resources. The expansion of Integrated Child Development Services (ICDS) and the National Health Mission, between 2006 and 2013, have created many employment opportunities among women, particularly in rural areas. ICDS has also helped in providing daycare and could release women to participate in the labour market. Both the Centre and the State need to complement each other and ensure that health, education, and child development are strengthened. In the public sector, they have provided employment opportunities to women locally in rural areas close to their homes.

- **Transformation in agriculture**

About half of India's workforce, of which about 35.5% are women, are engaged in agriculture. Women tend to operate at a significant disadvantage as most of them work as unpaid family workers; performing more manual work than men. Gender differences in access to land and credit affect the relative ability of female and male farmers and entrepreneurs to invest, operate to scale and benefit from new economic opportunities. While women in India have the legal right to own land (Hindu Succession Amendment Act, 2005), very few do own land in reality. For those who do own land, ownership rarely translates into control of the land, decision making or of the assets flowing from the land. Whenever agriculture gets mechanized, it is the men who replace the women. But there is no reason why a woman cannot run a tractor or use a mechanised weeder. They need skills to run them and they need a say regarding the land they cultivate. Decisions about changes in the farming contracts, experimentation, and cash crop production are mainly taken by men. Women's employment in animal husbandry has fallen drastically after 2004-5 (Mehrotra and Sinha, 2017). Transformation of allied activities like dairy, animal husbandry, and agro-based processing along with the removal of gender-based labour market imperfections can help to transform agricultural employment from a low end to a high end one and thus accelerate and redistribute growth.

- **Encourage entrepreneurship**

In terms of entrepreneurship, only 8.05 million (13.7% of all Indian enterprises) were owned by women, 82% of which are micro-units run as sole proprietors (6th Economic Census, 2013-14) like small manufacturing units, petty shops, fruits/vegetable vendors, food-service units, repair shops, dairy, and poultry. Encouraging female entrepreneurship can promote a broader dynamic economy, boost economic growth, elevate the economic role of women, and therefore distribute the benefits of growth more equitably. In manufacturing, more than 70% of the women are self-employed and more than half are unpaid family helpers (Mehrotra & Sinha, 2019). In the Micro, Small and Medium Enterprises (MSME) sector, only 13% of the enterprises were managed by women. Even though several policy initiatives, in terms of regulatory, promotional, credit and representational policies, have been taken by the government, most of them follow a piecemeal approach rather than a comprehensive one. There are multiple barriers like marketing, access to finance, lack of productive assets, operational problems, social dependence, dual responsibility, infrastructural bottlenecks, relevant counselling or guidance that compound together, restricting women in starting or maintaining a remunerative business. Even though the majority of women in India are self-employed, it is largely vulnerable employment with women working as either unpaid family workers or in petty shops or vendors. Access, ownership and control of productive resources are crucial in determining the potential of women to produce marketable products and services.

- **Strengthening the role of SHGs**

For women, engaging in off-farm economic activities as members of self-help groups has proven benefits. Studies show that in many cases, women in SHGs are better off than other women in terms of employment opportunities, income, decision making, access to finance, awareness and social status (Reji, 2013). It is true that microcredit schemes cannot by themselves lift women out of abject poverty completely as there are other social relations and structural causes for poverty, but these are some ways of bringing about social and economic change. Through SHG clusters, women gain experience of relevant processes (regular meetings, taking decisions, allocating money, awareness of policies), they become more 'visible' in a village and are often synergised with local politics.

The SHG-Bank Linkage programme initiated by NABARD in 1992 has enabled women from hitherto unreached poor households to efficiently use credits and productively use their skills and collective power, thus connecting about 12 million SHGs with banks. There are issues of rising non-performing assets, use of loans for purposes other than income generation, and others for which strategic and time-bound interventions are needed. NABARD has started a pilot project in Jharkhand in 2015 for the digitisation of women's self-help groups to improve the quality of the interface between SHGs and banks for hassle-free delivery of banking services. Such initiatives should be expanded to foster financial inclusion. Now, with the 'Digital India' campaign, the potential for inclusion of women in programme design could be positive. Entrepreneurial training in skills (e.g., basic book-keeping, accounting and business planning) is required in setting up a small business. However, training alone is not enough to ensure their economic success; it depends on markets for the services and goods produced. Further, including women SHGs, especially the better-educated girls, as banking correspondents of this scheme can also break the social norm that they can only take up activities related to health, education, care, and domestic duties.

Covid-19 Impact

As we deal with the devastating impacts of the COVID-19 pandemic and its regressive impact on the Indian economy, we cannot ignore its effect on girls and women. Even prior to COVID-19, India's female workforce was largely invisible, underpaid, and under-protected. They constituted the largest segment of the informal workforce, among the worst-hit during this pandemic. Women employed as domestic help in cities, at construction sites, call centres, handicraft and retail units, have lost their jobs, experiencing time-poverty. Women continue to work in large numbers in the informal sector with no written job contract or defined benefits. They form a large part of the labour force in industries like fashion and the beauty industry which have been severely dented due to social distancing regulations. This was followed by job losses, reduction in wages and financial insecurity. According to data released by the Employees' Provident Fund Organisation (EPFO), even in the formal workforce, women's share in payroll additions decreased in the immediate months of June to August, post lockdown. According to Centre for Monitoring Indian Economy (CMIE) data, in November 2020, eight months after the lockdown began and five months after the phased reopening, 13% of women had dropped out of the labour force i.e., they were

neither employed nor looking for a job. In this context, urban women saw the deepest losses with a labour force contraction of 27.2%. Inadequate mobility, safety and lack of childcare options restricted women in urban centres from seeking work.

In the case of rural women, returning migrant men replaced them in rural work. Apart from comparatively less pay and a greater rate of job loss, there has been an alarming rise in domestic violence against women during the lockdown period. Women's collectives and SHGs proved to be of great help during this pandemic, producing a large number of face masks, PPE kits and sanitisers, and running community kitchens to feed food-insecure households during the lockdown. But now the new normal of embracing technology further puts women with unequal access to these resources at a disadvantage. Lack of knowledge prevents them from acquiring new skills and advancing on new opportunities, like e-commerce.

However, even with the slow opening up of the economy following the end of lockdown restrictions, low demand by consumers is contributing to low revenues and profitability. This has led to the sluggish recovery in labour activity and employment, especially those concerning women's employment, effectively reversing the progress made in gender equality. But what matters, in the end, are the government policies and economic trends, as opposed to just the social norms. The measures to combat COVID-19 did not take into account gender disparities. Steps that could reduce this impact include: Strengthening Self-Help groups (SHGs) and women's collectives through institutional and financial support, increasing opportunities that train women with efficient skills and prepare them for non-traditional jobs, investing in infrastructure and childcare services to reduce unpaid work; increasing access to banking, internet, education and employment opportunities; and using the new-found acceptance of flexible and remote work to increase the number of women in the labour force. Also, employment in the formal sector will help women get access to benefits. Further, improving the digital literacy of women and promoting women entrepreneurship can be very effective in bringing women back to the labour workforce and generating income for them.

Conclusion

Female labour supply is both a driver and an outcome of development. It is driven by multifaceted factors such as social and cultural norms, the nature of job creation, education attainment among others. It has long been known that Indian women's education has a U-shaped relationship with LFPR. As the level of education increases, it makes one more productive and hence, there is a rise in potential earnings followed by a greater incentive to join the labour force. But, the case is totally different when it comes to Indian women's workforce participation.

The focus of this paper has been to understand the problem of low FLWP for women in India despite massive investments in employment and skill-building initiatives. The study also suggests that the decline in FLWP for rural women is associated with the crowding out of women in agriculture because of reasons like land fragmentation, and automation. This decline is mostly reported for the least educated and poorest women. ILO estimates suggest that the female LFPR will continue to fall reaching a low of 45.9% in 2030 unless the trends are reversed through various policy measures that improve outcomes for women in the labour market. Where different job opportunities are available to women, either through government programmes or through an increased ability to travel, women's participation in paid work seems to increase. Also, an improvement in transportation networks and increase in work opportunities through government programmes, like MGNREGS, has resulted in women responding by increasing their participation in wage work. Policymakers have to take into consideration that labour force surveys underestimate women's participation.

Thus, India needs to focus not only on increasing women's participation but also on access to quality employment so as to reap the gender dividend. Expanding access to secondary and higher education matched by the creation of jobs that can be accessed by women is the need. Efforts are needed for better allocation to support services and benefits so as to amplify the gender-sensitivity of programmes. Measures to ease the burden of domestic duties, enhance safety for women, and encourage private sector development in industries and regions would increase job opportunities for women in developing countries. If the skills training is provided to women and girls near their homes, and if skill centres emerge where manufacturing clusters are located, it can increase employment after skilling.

Basic social norms such as “women are equal to men ” and “it is equally important to share domestic duties” should be encouraged. This requires a comprehensive strategy for cluster development. If these issues are included in a gendered form of budget and policy making, female labour/workforce participation in India can become a more hopeful aspiration.

Author Bios

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Inclusion and Safeguarding of Women Workers against Occupational Threats - A Narrative from the Platform Economy in the Developing World

Ann Mary Biju



Source: Money Sharma / AFP

Abstract

The dialogue and debate for increased participation of women for the advancement of socio-political and economic growth of nations need no introduction. Many world economies have been witnessing increased participation of women in areas that were previously considered inappropriate due to patriarchal sanctions. However, the prevalence of violence and exposure to threats faced by women workers in the phase of development within the labour structure needs specific analysis. The case of platform economy workers and their gendered experience of work and associated violence is an arena that hasn't been explored enough globally. These risks associated with employment have been particularly noted to be higher for women workers of the platform economy. This paper evaluates how inclusive and holistic our labour policies are for women workers to obtain remunerative employment and sustain them meaningfully.

Introduction

The platform economy and employment opportunities associated with it have been lauded for its ability to provide a low-cost entry, flexibility, and ability to earn decent wages. This flexible work structure has been viewed to open the economy with a number of jobs and hence boost economic growth in real terms. From a historical viewpoint and emancipation of the labour force, the ability to self-determine one's work is a progressive move that accommodates flexible imaginations of work and the growing desire for individual self-actualization. However, these enabling benefits of the platform economy aren't completely accessible to workers when workers are exposed to the issues of discrimination, surveillance, violence, and diminishing wages.

Platforms afford workers the flexibility and choice to monetize assets when and where they want and augment asset ownership, dual benefits unavailable in traditional employment forms. This avenue of work has grown substantially in India with studies indicating that 56% of new employment in India is being created by the gig economy.

Operationalising the platform economy meant that existing organisational structures, practices, notions about the workplace and related conventional employment structures had to be reimaged. Platform-based work is often seen as an element that neither interferes with existing labour patterns nor creates a new world of labour. The addition of technological inputs or digital interfacing that is a critical part of the platform economy is a crucial element in its functioning. The role of an employer, intermediary, channel of communication, and so on is essentially handled by technology. In this scenario, the case of workers' safety with a particular focus on the safety frameworks and provisions accessible to women workers of the platform economy needs to be evaluated at a policy level in the light of on-ground realities.

Gender-based violence reportage faced by platform economy workers

The flexibility and freedom of choice to employ one's own financial resources as per the need to choose personal work choices have been major factors attracting women workers to various streams of platform economy work. The societally vulnerable groups such as women, migrants, and ethnic minorities are the personnel who take up the lower rank jobs within the platform economy that is often labelled as 'unskilled labour'. The employment-related discrimination and identity-targeted discrimination they face are further escalated or uncontrolled. The marginalised workforce is said to face a 'decent work deficit' and has been denied access to labour rights or even awareness about the same.

The platform economy has attracted a considerable number of women workers owing to the flexibility of work it offers and associated empowerment. However, the exposure to various forms of abuse and safety concerns particularly faced by women that come with working in private homes, unfixed workplaces, or having no stipulated workplace is a cause of concern. By exposing workers to such undefined scenarios and labour conditions, workers are further marginalised in an already precarious low-skilled labour force that tends to occupy the lower rank positions within the gig economy. Gender-based violence has effects on the earning potential and decision-making power enjoyed by women. Violence at home and the workplace often act as causes for womens' absenteeism in their jobs which is applicable to platform-based work as well.

Contradicting mainstream portrayal of the benefits for women entering jobs in the platform economy, a recent global study in the International Journal of Labour Research found that underpaid and unstable jobs within the platform economy often expose women to threats of abuse, psychological threats and sexual harassment (International Labour Organization, 2016). A European Union (EU) study on the regulatory and policy developments in the EU also indicated the need for specifically looking at the psychological and physical risks associated with various streams of platform economy work (Garben, 2017).

Code on Social Security, 2020

In 2002, the second National Commission of labour found that the labour laws in the country were not suited for the complex conditions of labour in the country and were rather archaic. A consolidation of central labour laws was suggested. The Ministry of Labor and Employment in 2019 introduced four bills that consolidated the existing central labour laws in order to better regulate labour conditions, improving the coverage of social security, wages and so on as the Code on Social security (2020).

The code is significant for platform economy workers as it is the first attempt at formally defining gig work and saw the setting up of a social security fund for platform economy workers and unorganised sector workers. It is also proposed that platform workers must mandatorily register themselves in an online portal (e-SHRAM) to avail of benefits specified by the central government. However, as most progressive policies are delayed in India, the bill is yet to come into effect.

Inclusive policy for women platform economy workers?

The Code on Social security also contains social security provisions for unorganised sector workers, again a first. The central government is given the authority to create welfare policies for workers with respect to maternity, health benefits, life insurance, creche facilities, accident insurance, and so on. The sole responsibility of creating these provisions is not with the central government. The code calls for the state governments and even beneficiaries of the scheme to contribute towards these funds.

However, the policy lacks holistic addressing of solutions to problems of women platform economy workers. The promise of maternity or health benefits and creche facilities remain at the preliminary level of the promise of material benefits which will prove to be futile without the understanding of a workplace in case of diverse work scenarios that the platform economy hosts. Sectors such as food/product delivery and ride-sharing services and specific platforms providing services have been found to be increasing the scope of abuse of workers and particularly women in various forms. Policy initiatives should be sensitive to such sectoral and generic differentials of work and communities involved to holistically benefit workers.

Towards building inclusive policies for women platform economy workers

The growing relevance of gig work and platformization of labour reflects the changing nature of the existing workplace of work imagination. This also calls for a close analysis of the nature of threats and safe labour conditions of workers in the context of technology playing a crucial role in work. The workers who often engage directly with technology to deliver their services are often new entrants towards the technological domain with limited digital literacy skills. This also introduces them to cyber-attacks and cyberbullying, forms of violence that again affect a larger share of women globally.

All these lead to crucial policy questions that specifically target women, their gendered experiences of work within the platform economy, and threats they face. As the developing work has slowly transitioned towards accommodating various global platforms to operate in their countries thus absorbing a large percentage of their workforce, it is essential to gain a more well-rounded and sector-specific analysis of the conditions of the most vulnerable sections occupying various roles within the platform economy.

The way forward calls for policy actors and labour researchers to undertake comprehensive studies on the lived experiences of platform economy workers and the nature of threats they face. Often, the safety threats they are exposed to are occupational threats that can be resolved by policy-level interventions mandating better labour conditions such as mandatory training, awareness about redressal mechanisms when faced with issues, and legally mandated accountability from the side of platforms. A sectoral analysis considering the nature of particular gig works, the client interactions that come under it, and potential safety threats that workers could be exposed to could warrant more strategic policy level measures to ensure the safety of workers and women workers in particular. A class analysis of workers in addition to separately looking at the case of women occupying precarious online and offline labour opportunities within the platform economy should shed light on specifically listing out how the nature of work and safety threats have transitioned conventional labour understandings and guide policy actors towards pushing for holistic labour policies for women and precariously employed workers of the platform economy. Hence, the policy has to be inclusive, holistic sector-specific, and relevant to the realities of developing nations and the subsequent effect on propelling urbanisation.

Author Bio

Ann Mary Biju works as a Program Manager for a Finland-based social enterprise. She completed her Masters in Development Studies from Azim Premji University, Bangalore. She is a Research fellow under IT for Change, Bangalore as part of the National Gender fellowship funded by the European Commission. She is an independent researcher who frequently writes about urban livelihoods, gender and culture for various publishing forms. Ann Mary is also an active volunteer and gender equality project lead for the Global Shapers community's Kochi hub.

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The Paradox of Low PTR and High Teacher Vacancies in India – An analysis of the systemic gaps in the Teacher Management System

Mallika Arora



Abstract

In 2019-20 India reported a Pupil-Teacher Ratio of 24:1 and 21:1 for the primary and upper primary levels, which is well within the RTE Act (2009) mandated norms. At the same time, India recorded as high as 11.16 lakh teacher vacancies. This paradox of high vacancies in the country despite the low PTR shows that teacher vacancies are not just an issue of teacher shortage. It is also an issue of inefficient allocation of teachers due to systemic gaps in the teacher recruitment, deployment and redeployment practices of every state. Barring a few states, there is a lack of long-term policies to guide these processes. In the coming year, states need to strengthen policies that streamline the existing gaps responsible for this mismanagement. While developing the policies, a specific focus needs to be paid to developing explicit teacher rationalization norms. These norms have been missing in all policies and guidelines issued by states to date. Well defined policies would help ensure that the states efficiently utilize the existing resources as they are crunched for financial resources due to the pandemic.

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Introduction

The impact of the pandemic on India's education system has revealed one thing clearly - the quality of education envisioned in our policy documents cannot be successfully implemented unless efforts are made towards building an equitable system. One of the foremost steps towards executing this insurmountable task would be to equip the system with sufficient teachers. In 2019-20, the Ministry of Education reported a Pupil-Teacher Ratio of 24:1 and 21:1 for the primary and upper primary levels. These figures are well within the RTE Act (2009) mandated norms, suggesting more than sufficient teachers for children were enrolled in public schools. However, analysing the national and state-wise trends on teacher vacancies paints a different story with innumerable schools reporting a deficit of teachers. UNESCO's annual State of the Education Report (2021) reported 11.16 lakh teacher vacancies in the country with 69% in rural areas. These puzzling figures reveal that the issue of vacancies cannot reductively be seen as only an issue of teacher shortage in the system. It is also an issue of inefficient allocation of teachers due to systemic gaps in the teacher recruitment, deployment and redeployment practices of every state. In the coming year, states need to strengthen long-term policies that streamline the existing gaps responsible for this mismanagement. As the states are crunched for financial resources, it is imperative that they efficiently utilise the existing resources. Explicit rationalisation norms for teachers need to be incorporated in the state's transfer policy to transfer surplus teachers to teacher deficit schools efficiently

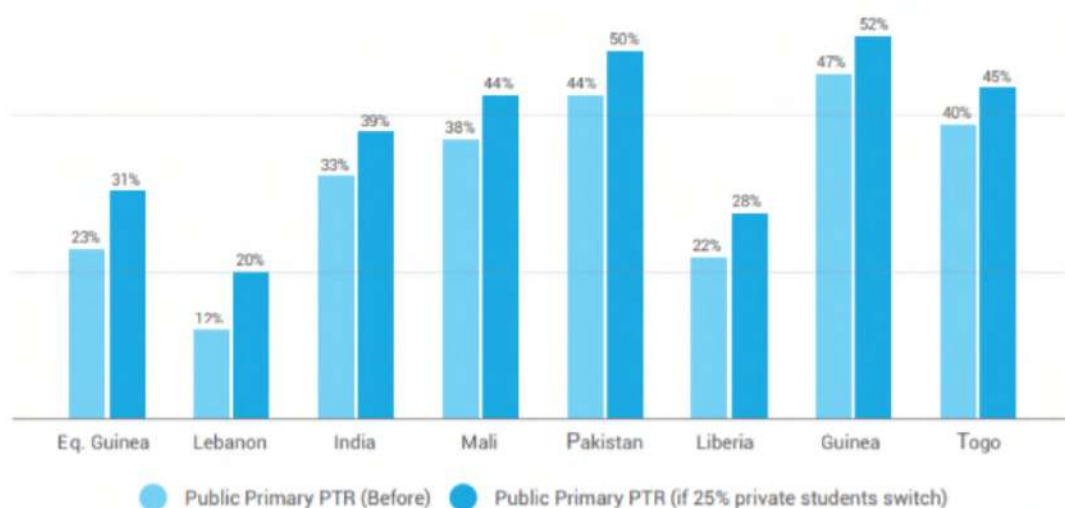
Table 1: Teacher Vacancies and Surplus – For Rural and Urban Areas. (Source: RISE Working Paper, December 2021)

States	All (rural + urban)			Rural			Urban		
	Teacher vacancies	Excess teachers	Net surplus teachers	Teacher vacancies	Excess teachers	Net surplus teachers	Teacher vacancies	Excess teacher	Net surplus teachers
	(a=d+g)	(b=e+h)	(c=b-a) (c=f+i)	(d)	(e)	(f=e-d)	(g)	(h)	(i=h-g)
West Bengal	43816	82271	38455	36349	65301	28952	7467	16970	9503
Tamil Nadu	6965	42566	35601	5535	31725	26190	1430	10841	9411
Andhra Pradesh**	38391	73379	34988	32939	59489	26550	5452	13890	8438
Rajasthan	26216	45740	19524	23007	42919	19912	3209	2821	-388
Assam	26815	41691	14876	25842	35890	10048	973	5801	4828
Haryana	3930	17586	13656	3424	14954	11530	506	2632	2126
Kerala	1959	12338	10379	1386	10062	8676	573	2276	1703
Himachal Pradesh	3025	10752	7727	2953	10202	7249	72	550	478
Punjab	10328	15941	5613	9059	12440	3381	1269	3501	2232
Jammu And Kashmir	9848	14613	4765	9239	11512	2273	609	3101	2492
Odisha	21400	23901	2501	20116	20434	318	1284	3467	2183
Chhattisgarh	17034	16181	-853	15756	14017	-1739	1278	2164	886
Uttarakhand	9496	3304	-6192	8674	3023	-5651	822	281	-541
Gujarat	18918	6196	-12722	16150	5006	-11144	2768	1190	-1578
Maharashtra	29815	9041	-20774	24268	6056	-18212	5547	2985	-2562
Karnataka	43914	6546	-37368	38164	4653	-33511	5750	1893	-3857
Jharkhand	54557	2596	-51961	51792	2285	-49507	2765	311	-2454
Madhya Pradesh	80053	17456	-62597	76827	12163	-64664	3226	5293	2067
Uttar Pradesh	129988	64225	-65763	119718	62528	-57190	10270	1697	-8573
Bihar	190019	13818	-176201	181824	12413	-169411	8195	1405	-6790
Total	766,487	520,141	-246,346	703,022	437,072	-265,950	63,465	83,069	19,604

Impact of the Pandemic

When UNESCO's annual report was released, several news articles interpreted the results merely as an issue of acute shortage of teachers available. However, there are significant inter-state variations in teacher shortage, as shown in Table 1. Of the 20 states, only nine states report a net shortage. The remaining states have more than sufficient teachers to fill all vacancies. The table also hints towards an overall urban-rural gap in teaching staff numbers, with significant net deficits in rural areas compared to their urban counterparts in many states (Datta and Kingdon, 2021, pp 6-8). This urban-rural gap in vacancies is bound to be amplified as enrolments in rural public schools spike in response to the impact of the pandemic. According to the Annual Status of Education Report (ASER) survey report (2021), the proportion of students studying in government schools has increased. For example, in the 6-14 age group, enrolments have climbed from 64.3 per cent in 2018 to 70.3 per cent in 2021. The pandemic induced income loss and job loss, reverse migration, and an inability to pay private school fees have pushed children in rural India to government schools. Further, the pandemic has also induced the closure of many low-cost private schools, not just in India but across the globe. This closure has increased enrolment numbers and PTR in public schools, as shown in Figure 1 (Alam and Tiwari, 2021). On the other hand, the budget to fund the increasing vacancies has been reduced for the education sector. In the 2021 budget, funds for education were slashed by Rs. 6,076 crores with school education taking the most significant blow of almost Rs 5,000 crores. The increase in teacher vacancies resulting from the rise in enrolments poses a challenge that the inefficient allocation system in its current form is incapable of dealing with. There is an urgent need to revamp the existing channels of teacher allotment if vacancies have to be filled efficiently with limited financial resources.

Fig. 1: Increasing PTR in Public Schools due to Closure of Low-Cost Private Schools (Source: UNICEF Issue Brief No.8, March 2021)



Analyzing Existing Gaps in Teacher Management Processes

Any well-planned strategy to address the vacancy issue would require streamlining gaps in all three processes - recruitment, initial deployment and redeployment/transfer. These processes are interconnected, and gaps in any one process would affect the efficiency of the other two. In a well-managed system, filling vacancies would start with rationalising teachers to correct existing distortions of teacher surplus, followed by other categories of transfers. Recruitment would take place to fill the remaining vacancies. In reality, these exercises are rarely coordinated, the exception being a few states like Karnataka. There are significant delays in the recruitment and appointment of teachers due to pending court cases related to these issues. A study conducted by the Center for Law and Policy Research (2014) reported that 33.2% of all the teacher-related grievances in High Courts were related to appointments. There are considerable variations in the disposal period of these cases across states. For example, Jharkhand took over five years to dispose of 52% of the cases. Often requirements change by the time appointments are made. Delays in judgments appeared to stem from confusion in the interpretation of the education and service rules in the state concerned due to a lack of clear guidelines. Adding to that, most states do not have transparent offline or online channels for calculating recruitment requirements based on the status of teacher availability. Calculation of vacancies is an opaque procedure in states like Uttar Pradesh and Rajasthan, which is often dictated by political interests and not based on the current requirements of the system. There is a lack of guidelines on how data must be sourced and maintained through teachers, headteachers, and block officials (Ramachandran et al., 2018, p.83).

After recruitment, initial deployment to different cadres is initiated. A teacher's cadre circumscribes the geographical area over which he/she can be transferred when the state is undertaking a rationalisation exercise. When a teacher's cadre is at the block level, a teacher can only be moved from one school to another within that block, but they can be transferred to any part of the state at the state level cadre. As Table 2 shows, there are multiple cadres of teachers teaching at the same level. The multiplicity of cadres complicates the transfer procedure, further causing inaccuracies and mismanagement in transfer-related decisions (ibid, pp. 86-87).

Table 2: Distribution of teachers in different cadre post-deployment
(Source: Ramachandran et al., 2018)

	Elementary teachers			Secondary teachers			
	Block or municipal cadre	District or Zillah cadre	State cadre	Block cadre	District or divisional cadre	State cadre	Specific to state
Jharkhand		All regular teachers are district cadre				All regular teachers in a state cadre	Contract teachers assigned to a specific school ^a
Karnataka	Block-level cadre for elementary teachers				Divisional-level cadre for secondary teachers		Seniority list for elementary maintained in district
Madhya Pradesh	Samvida and Adhyapak are Janpad cadre	Shikshak are district cadre		Samvida and Adhyapak are Janpad cadre	Shikshak are divisional cadre		No transfers when they are Samvida or Adhyapak
Mizoram			Regular and non-regular elementary teachers are state cadre			Regular and non-regular secondary teachers are state cadre	
Odisha	Elementary cadre (regular)				Secondary cadre (regular)		All categories of non-regular teachers are appointed to a school
Punjab		Zillah Parishad teachers	SSA teachers and regular teachers		Zillah Parishad teachers	Secondary regular teachers and RMSA teachers	No clarity on who belongs to which cadre, fluid situation
Rajasthan		Elementary teachers			Divisional-level cadre for secondary teachers		School-level cadre for contract teachers when they existed
Tamil Nadu	Elementary teachers are block cadre				Secondary teachers are district cadre		
Uttar Pradesh		Elementary teachers are district cadre				Secondary teachers are divisional cadre	Shiksha Mitra are school cadre

Teacher transfers in many states, except a few like Karnataka and Tamil Nadu, have not been guided by long term policies. States issue annual guidelines to conduct the process. However, these guidelines cannot pass off as policies. Each new notification has set different norms on the number of years all teachers must spend in rural areas, the number of teachers that can be transferred in a given year, and the prioritisation rules for the transfer of different groups of teachers. Immediate pressures working on political leaders/administrators dictate these norms. Redeployment exercise that could have played an important role in correcting the distortions in initial deployment has been seen as a source of collecting bribes, paying rewards to politically helpful teachers, and punishing uncooperative teachers. (ibid, pp. 88-94) In recent years few other states like Haryana have released long term transfer policies. However, one thing that has been missing consistently in all policies and annual guidelines issued by state governments are norms defining

how rationalisation will take place. Rationalisation is an integral part of the transfer process for correcting the existing allocation distortions, and well-defined guidelines need to be incorporated into the policy.

The Way Forward

Analysing the current gaps in recruitment, deployment and transfer procedures makes it evident that states need to move beyond releasing annual guidelines towards adopting long-term policies. Clear guidelines on recruitment and appointment would help courts address the grievances speedily, reducing delays in teachers' appointments. The policies should also streamline the deployment process of teachers to different cadres to simplify the transfer procedure. A section in these policies should focus on guidelines on how the rationalisation process will be conducted. NITI Aayog's report titled, 'Systemic Transformation of School Education - The SATH-E Experience' contained a list of recommendations on the guidelines which can be incorporated:

1. **Develop guidelines and variables** that will be used to identify schools that have vacancies or surpluses. The standard PTR metric for calculating vacancies is less relevant for secondary schools, as students choose streams, and advanced subject content requires teachers specialising in the subject concerned. Relevant strategies need to be developed on how accurate calculations will occur at these levels.
2. **Identifying variables** such as seniority or length of posting that will be used to identify surplus teachers need to be defined.
3. **State the criteria** for developing a prioritised list of vacancies. Prioritisation is essential to ensure that teachers are meaningfully deployed to the most required posts. (ibid, p.186)

Developing a well-defined policy would undoubtedly be a step forward in increasing transparency in the system. At the same time, we have also seen the extreme political interference that influences the current processes of teacher management. Effective implementation of any policy will not be possible unless necessary steps are taken to develop the political will to execute the tasks. (Ramachandran et al., 2018, p. 178) Strategies need to be developed to obtain this political will to revamp the teacher management system.

Author Bio

Mallika is a former Young India Fellow and is currently working as a Research Associate with Group Ignus. The organisation working towards developing the education system's capacity for the implementation of large-scale state programs. Her interest lies in exploring the inefficiencies in the current education system and its role in escalating the learning crisis faced by the country.

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How to Stop Painting the Town Red: Using Behavioural Insights to Curb Spitting Behaviour

Tanaya Ramani



Abstract

Spitting is a commonplace occurrence in India, with roads and walls in public spaces often stained red. However, the act of spitting has become an acceptable lifestyle practice and the adverse health outcomes associated with it lack the recognition they need. Present government policies are inadequate and do not help in effectively curbing spitting behaviour. This paper outlines the current situation in India with regards to spitting behaviour by analysing present government policies and their inadequacies through the lens of behavioural science. It then goes on to propose policy measures using behavioural insights that have the potential to curb spitting behaviour.

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Introduction

It is not a normal day in India without seeing someone open their car door to spit at a traffic signal, or without passing a red-stained wall in a public space. Seeing people spit in public in India is about as commonplace as seeing cars on the road – spitting has been normalised to an extent that it ceases to be seen as the challenge that it really is. In addition to dirtying and ruining the aesthetics of public spaces, spitting in public also poses a serious health hazard, one that is often overlooked. Akin to contagious diseases spreading through droplets arising out of coughing or sneezing by an infected person, spitting also releases droplets with the potential of contagion. These include diseases such as the common cold and influenza, but also more severe diseases such as TB, SARS, and most recently, Covid-19 (Josephine M, 2020).

Behavioural Aspects to Spitting

Despite hazards, spitting is prevalent, making it important to delve into the reasons behind this prevalence. Lack of awareness could potentially be a factor, but there are other behavioural aspects at play as well.

Firstly, there is a cultural aspect to spitting, with it being associated with warding off the evil eye or keeping bad luck away. The practice has evolved over the ages and has become an almost accepted practice today (Kar et al., 2020). A survey conducted by a professor at Plymouth University about spitting behaviour in six Asian countries, including India, found that spitting was an acceptable lifestyle practice (Coomber et al., 2018, pp. 493–520).

The second factor could be a simple herd mentality or bandwagon effect, that is, people believe that it is alright to spit in public spaces, simply because they see, or have previously encountered, a large number of people spitting in public (The Decision Lab, n.d.). This diffuses the responsibility of the act, which means that no singular individual would be responsible for the health hazard or dirtying of public spaces. It allows for the shifting of the blame onto unknown others (Mukherjee, 2020).

A third factor is that people are affected by a commitment bias. This is defined as the tendency of humans to stay committed to prior behaviours committed, especially those in public, even if presented with evidence that they are wrong (The Decision Lab, n.d.). Thus, even if people are presented with evidence that spitting poses a serious health hazard, they are unlikely to take it seriously, since they are now committed to the practice of spitting in public.

Another factor is confirmation bias, which is defined as the human tendency to selectively focus on the evidence that supports their point of view. An article in the Hindustan Times, an interview with the same Plymouth professor that carried out the study on spitting practices in Asian countries, said that spitting is a public nuisance that has been inflated to become a public health issue. That is, the claim that spitting could cause disease is overstated and overexaggerated (Sharma, 2020). Articles such as these undermine messaging against spitting, and also reinforce the confirmation bias – that is, people could potentially use an article such as this to justify spitting, by laying greater emphasis on one article that supports their perspective.

Another aspect is the lack of governmental attention to spitting as a public challenge. It was only when Covid-19 hit that a ban on spitting was undertaken at the national level, even though some states had already instituted a ban (PTI, 2020). There is also no investment in mechanisms to induce the reduction of spitting, other than walls painted with ‘no spitting’ signages, which are extremely easy to ignore. This is a form of hyperbolic discounting on part of the government which does not value the long-term rewards from investing in anti-spitting mechanisms, as opposed to saving and reallocating that money elsewhere in the short term (The Decision Lab, n.d.).

Present Government Policies

Currently, the Indian policy against spitting has been framed in the form of punishment for non-compliance and is also relatively new. While many states and the municipal organisations of cities have had bans and punishments for spitting, it was only after the Covid-19 pandemic broke out that the Union Home Ministry made spitting a punishable offence under the Disaster Management Act. The punishment includes a fine, jail time or both depending on the severity of the offence (PTI, 2020).

This, however, is not the most optimum policy for combatting spitting behaviour. This is because punishments are only effective when they are meted out in a consistent manner (Cherry, 2021). In the case of spitting, it is extremely difficult for policemen on duty to catch every single offender or catch a repeat offender every time they spit in public. This reduces the importance and seriousness associated with the punishment in the mind of the public. This leads to the public falling prey to a hot-hand fallacy (The Decision Lab, n.d.), where they believe that if they have not been caught by the police for spitting yet, it is unlikely that they will be caught in the future.

Secondly, punishments are not the best way to reduce spitting behaviour and need to be accompanied by other mechanisms as well. The post-punishment good behaviour is very temporary and combined with the first drawback of reduced seriousness of the punishment, results in pre-punishment behaviour returning very quickly (Cherry, 2021). This is also illustrated by a study in Israel, among parents who were often late to pick their children up from daycare. A team of economists decided to conduct an experiment wherein a fine was instituted for parents that came late. The results revealed how instead of reducing late-comings, the fine actually led to an increase in parents coming late (Levitt and Dubner, 2005).

Behavioural Interventions

1. Installation of Spittoons in Public Areas

First, there needs to be an investment in installing spittoons in public areas on part of the government, accompanied by arrows and signages directing people to their location (Dhoop & Dhoop, 2020). This needs to be accompanied by messaging that leads to the playing out of an endowment effect in the public consciousness. The endowment effect refers to people's tendency to value things more if they belong to them (The Decision Lab, n.d.). Thus, it is necessary to create an endowment effect around public spaces by making people believe that they have a stake in that space – that is, to make them feel like it belongs to them.

This can be accomplished, to some extent, by municipal corporations or the local governing body sending text messages to people – for example, “*We are proud to say that a person like you is a citizen of city XYZ, and believe that the city is in good hands. We would like your help in keeping YOUR city pristine and beautiful. Please ensure that in case you feel the urge to spit in public areas, use the nearest spittoon installed. We would also like to enlist your help to ensure that everyone follows the rule of spitting only in the spittoon, and keeps your city clean.*” Another type of message would be one that seeks to induce a feeling of disgust about spitting behaviour – perhaps by listing out the number of bacteria/viruses spread by droplets released by spitting.

These messages could also include incentives for reporting spitting behaviour to civic bodies, such as mentions in newspapers. A message like this would ensure that the individual feels a sense of responsibility for a city that has now been posited as their own, and the incentive would play to the ego of the citizen and make them feel better about themselves. Repeated texts, such as once every fortnight, would also help in the reinforcing and retention of the message.

2. Including prominent individuals in this campaign

Second, another possible mechanism would be to combat the cultural or religious deep-rootedness of spitting. This would be by using prominent figures, such as famous celebrities or religious leaders who condemn spitting on advertisements that play on television, radio and other venues such as theatre halls (Kar et al., 2020). People trust information coming from prominent figures and would place a greater onus on what they say, as opposed to being reprimanded by the local police. Posters with these figures and information about the hazards and prohibition of spitting could also be put up on billboards, street advertisement spaces, and public spaces commonly victim to spitting behaviour. Another alternative is to use local deities worshipped, by putting up posters or tiles with pictures of these gods to discourage spitting (PTI, 2017).

Reading such information while on the road would lead to an anchoring effect, as well as increase the salience of not spitting (The Decision Lab, n.d.), which could potentially lead to a reduction in the act being carried out.

3. Sanitary Squads

A third potential solution is to induce the observer expectancy effect in people. This effect talks about how humans tend to change their behaviour when they believe they are being watched (The Decision Lab, n.d.). In order to do this, a measure implemented in the United States, a country that did eradicate the problem of public spitting, can be used. The United States created 'Sanitary Squads' which consisted of health officers who conducted random patrols and raids in public spaces in order to catch people who were public spitters (Dhoop & Dhoop, 2020).

In India, where so much onus is placed on societal standing, Sanitary Squads could be constituted with the help of residents of the particular locality, as opposed to health officers. This could be based on a random selection of 10 people per locality, which changes every 2 months. All adults in the locality would by default be included in the ballot system for the selection of Squad members, and they would have to actively unenroll if they do not want to be part of the Squad. This would induce the observer expectancy effect and also induce a risk of social downfall if caught with the potential of reducing spitting behaviour.

Conclusion

Spitting is both a public nuisance, as well as a public health hazard, and needs to be contended with, especially in the pandemic situation that India currently faces. The current policy is highly inadequate to combat the problem of spitting and needs to be expanded to include more innovative solutions if spitting behaviour has to be drastically reduced in the nation.

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How Far is the Last Mile?

Case for Empowerment of India's Artisans through Digital Interventions

Deepanshu Khandelwal, Neetika Shree and Siddharth Yadav



Image source: Catalyst AIC's field visit to Manpura, Rajasthan.

Abstract

The world is witnessing an eventful shift towards digital transformation in almost every sector. The new era of digital globalisation has changed how businesses are done across the world. As digital platforms drive the value chains, there are industries that need to narrow the gap in terms of digital readiness, to leverage digital technology solutions significantly. A new research study by Catalyst AIC offers a glimpse into the key challenges that India's artisanal communities face towards adopting digital services.

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Introduction

The Indian handicraft industry¹ has been a major source of livelihood for rural households. The sector stands as one of the major sources of foreign exchange earnings for India and yet, India loses on average 10% of its artisans every year, majorly owing to their livelihoods no longer being sustainable (State of India's livelihood report, 2019). This industry is yet to tap into the changing consumer behaviour, at a domestic as well as global level. The global handicraft industry is growing at 11%, while the share of the Indian handicraft sector in the global market is considerably low (Handicrafts Market: Global Industry Trends, Share, Size, Growth, Opportunity and Forecast 2021-2026, 2021). While the economies leverage the latest technologies for growth, the artisan community cannot be left untouched by the digitisation and technological interventions which are critical to the holistic welfare of the community. ICT tools can also act as a lever to address several issues within the supply chain, payments, access to finance, upskilling among others, that are critical for accelerating the development of artisan communities.

The research by CATALYST AIC provided insights into the influence of operational as well as behavioural challenges towards early adoption of digital services by artisans. The focus was on the building blocks of the digital ecosystem consisting of three pain points: lack of awareness, lack of access and gender divide.

Methodology used

The survey instrument was based on widely-accepted definitions of digital readiness, which stressed on the knowledge, capabilities, affordability and general behaviours of the artisans towards adopting digital solutions. Building upon the same, this study by CATALYST AIC aimed at gathering quantitative evidence on the key challenges around increasing production and enhancing the quality of products for a global market. The sample comprised 874 artisans from 22 districts across Rajasthan and Uttar Pradesh. The sample had a wide representation of women artisans.

¹Nomenclature of "handicraft" given by Development Commissioner (Handicrafts) - "items made by hand, often with the use of simple tools, and generally artistic and/or traditional in nature. They include objects of utility and objects of decoration".

Insights

The insight, which contributed as the most compelling factor towards artisans gaining access to a larger audience through digital marketplaces and financial platforms, is that 92% of the artisans in the sample showed enthusiasm towards adopting digital platforms. While access to electricity and phone network connectivity showed positive improvements, the staggering low penetration of smartphones (only 49% of the sample had access to a smartphone) was the reason for almost negligible usage of key digital applications. One of the key findings reflected that mere ownership of the mobile phone or access to the internet did not translate to higher usage of digital applications by the artisans. For instance, as low as 7% of the artisans were using and accepting payments through digital payment applications.

The researchers noted that 98% of the artisans had never made a sale online (digital platform, e-commerce websites, Facebook or WhatsApp groups). The most cited reason was their inability to understand the working of apps (this includes end consumers asking the artisans to detail and list all their products, materials used, design name and price).

Barriers to accessing the digital marketplace remained twofold. Firstly, the complexity of online platforms pertaining to navigating various features coupled with the inability of the artisans to comprehend the English language and understand registration protocols, devoid them of participating in a digital ecosystem. Secondly, with almost 90% of the artisans having a home-based setup and overall 77% businesses not registered, restricted their ability to access any state-sponsored assistance for sales.

To understand if the artisans had access to a conducive financial ecosystem, the study by CATALYST AIC gathered information around financial activities undertaken by the artisan community. A scant proportion of the respondents had taken credit from a formal source (3%). The most prominent reasons for not accessing credits from a formal source included delay in loan procedure and the formal sources not offering small recurring loans. In case of sudden loss, 83% of the respondents drew from their personal savings. While an overwhelming majority of 98% of the respondents reported having a bank account, with only 68% having their

bank accounts linked with their phone number. The fact that needs special attention is that barely 54% of the artisans with bank accounts were using their bank accounts for business purposes.²

Access to digital finance apps is a key to wider market linkage. However, a deeper understanding of the pattern of digital payment uptake revealed that of the artisans whose bank accounts were linked to mobile numbers, a paltry 0.3% of them used digital payment applications. For those with ownership of their phones, only 0.16 % of them used digital payment applications. The ownership of mobile phones or bank accounts linked with phone numbers did not significantly enhance digital payment uptake. The aforementioned insights are a precursor to the approach which should encompass addressing the other complexities faced by artisans, related to the usage of digital payment, such as financial literacy and comprehensive digital awareness campaigns, parallel to overcoming infrastructural barriers.

Need for a shift from the traditional approach towards capacity building of artisans

Artisans, with a diverse skill set characterised by informal and low-tech business setups, are potential entrepreneurs and co-creators (Business of Handmade Report, 2021). To incorporate the handicraft sector into the vibrant innovation ecosystem in India, we need to interlink the potential of artisans with entrepreneurial capabilities.

Training:

The Catalyst AIC study pointed out that amongst the artisans who had previously received any training to sell online, only 0.06% of artisans were able to navigate the digital platforms with operational ease. This statistic highlights the need to revamp current e-commerce training and capacity building mechanisms since existing methods are proving futile to accelerate e-commerce adoption by artisans. There could be a plethora of digital platforms aiming to cater to the handicraft industry but the need of the hour is capacity building of the artisans to achieve a sustained usage apart from simply onboarding. This can be achieved by means of assisted first-time use and handholding, in terms of training on using the digital

²'Business purposes' implies business transactions like receiving payment from clients, buying raw materials, buying product insurance and other related transactions.

platforms. In several cases, it was highlighted that the children of these artisans send messages on WhatsApp to the potential buyers or relatives to negotiate a sale on their behalf. Similarly, children also post pictures on social media platforms and on e-marketplaces and most importantly, help artisans with digital payments. Considering the importance of children and their role in facilitating digital transactions for their parents (the artisans), the training for capacity building of artisans can also include upskilling the children, as a part of hand-holding.

Adapting to changing consumer needs:

Artisans get limited exposure to the tastes and preferences of contemporary markets. They lacked the capacity to innovate new designs and thus were majorly dependent on handicraft organisations for mostly piecemeal work. They need guidance around market intelligence to help them understand changing consumer preferences. A critical insight gathered from the field visit during the research study was how artisans' children became the key source of familiarising artisans with newer designs, owing to the appreciable grasp of children in using digital applications. Children acted as a big linkage between exposure of artisans to the newer market-appropriate designs and actually innovating their handicraft products by incorporating those designs.

In terms of upskilling through the internet, it was observed that of the artisans using YouTube, 96% of them used the application for leisure and entertainment. With platforms like YouTube gaining popularity amongst the rural population, the focus can be on designing a landscape to encourage artisans to transition from using such applications for entertainment to business-related usage. Parallely, online design intervention training can provide flexibility in asking queries and clearing doubts. However, online training can fail to deliver the desired result owing to barriers like time constraints at home (especially in the case of women in terms of unpaid care work or labour) or the inability to understand or use the digital medium. A physical design centre in major artisan clusters, where they can be taught new designs and methods along with skills on understanding consumer preferences to replicate these, can be a relevant service.

Need for credible data:

While historically, the handicraft sector has held great importance, today, the lack of data on artisans limits the implementation of dedicated programs for skill development, market research, product enhancement, market linkage and formal financial services. To enhance the capability to provide technological interventions to this highly unorganised industry, there exists a need for reliable comprehensive data.

A framework, such as a Digital Readiness Index, for making the handicraft industry data-intelligent can be a key to opening a plethora of opportunities for artisans to integrate with the global market and expand their livelihood means, through various use cases. For instance, data trails generated through financial transactions can provide a digital footprint in the form of credit history which can be used by artisans for formal and large ticket loans. The research study by Catalyst AIC, through its artisan's database, contributed to the knowledge base required for designing appropriate training programs for the artisans based on their digital literacy levels.

Women, an invisible link in the supply chain:

The Catalyst AIC research study reflected that women-run businesses had the majority of their setups as home-based businesses (80%) as opposed to the ones owned by men, which was only 19%. The reason is likely twofold. One, home-based businesses allows women to get some earnings without stepping out of the vicinity of their homes, often a constraint due to restrictive gender norms. Two, women were mostly seen involved in the initial steps of production, while men were seen to be involved in much larger processes, which required exposure to external stakeholders, a constraint for most women in rural India. The approach towards capacity building of women artisans should begin with expanding their participation in activities apart from the production stage of the handicraft. Another approach should be to implement capacity building measures for women, that helps them gain more authority in terms of operating online marketplaces as well as financial literacy programs to make them more in control of their own business finances.

Conclusion

"We tend to overestimate the effect of a technology in the short run and underestimate the effect in the long run"- Amara's Law (Roy, A. "The Age", 2006). Building trust at the last mile in the case of digital platforms and transactions is the key to making the Indian handicraft industry achieve digital readiness. A fear around using personal details or the hard-earned money into digital space is a perception barrier, still largely left to overcome. This perception barrier is further amplified by the complexity of the digital applications faced by the artisan community.

The model for overcoming the aforementioned barriers requires repackaging the digital services offered to the artisans. The parameters like age, gender, education level, income level can be considered while designing training modules or knowledge sessions for the artisans. The entire continuum of the capacity building programs for the artisan community may require the selection of:

1. Interfaces:

In addition to providing phones and means for digital communication to the artisan community, digital applications can be curated as per the local vernacular/regional language option, basically keeping it multilingual with a User Experience that is easily identifiable with commonly accessed symbols in daily lives. There can also be audio features to keep a track of transactions and so on.

2. User experience Designs:

Given that most digital financial services fail at post-sale experience, the focus can be on assisting artisans for the entire digitised supply chain as a hand holding exercise to create a mindset for sustained usage of such digital interventions.

3. Simpler operational procedure:

There can be more provisions for carrying out transactions through QR codes to inculcate trust factors in the artisan community towards digital presence. The prerequisites to register themselves on the phone-based applications of digital platforms can be made simpler by eliminating the requirement of a lot of paperwork or avoiding an email account ownership as a primary requirement.

To conclude, while market policy interventions are required to better understand the requirements of the artisans in terms of credits, subsidies and exports, digital interventions need to be revamped and tailored as per the individual needs of the artisan community. To reach a digital revolution that caters to the livelihood and welfare of the artisans, the navigation through this nascent stage in terms of digital readiness calls for sensitivity while onboarding the artisans to achieve a smooth exposure to digitization.

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