



DESIGNING AGRICULTURE PLATFORM COOPERATIVES WITH WOMEN FARMERS IN GUJARAT

A Report by

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Women workers in India's informal economy lack access to decent work, social protection. The labor force participation rate of women in India also remains low—at 20.3 per cent in 2019 (World Bank, 2020). The pandemic caused the rate to fall even lower, reaching 15.5 per cent in the April-June quarter in 2020, when India was in the middle of a strict nation-wide lockdown to curb the spread of COVID-19 (Ministry of Statistics, 2020). Obstacles to women's active participation in this paid economy are structural and most are rooted in socio-cultural norms, both within the household and in the community. In the overwhelming majority of cases, men are the nominal owners of household assets, and are recognized as such by both law and custom. Men dominate marketplaces and supply chain management; moreover, informal workers and particularly women, are forced to work without wage or income security and social protections, particularly healthcare, childcare and insurance.

Women farmers are crucial stakeholders in the Indian agriculture sector, with 70 per cent of the country's rural households primarily dependent on agriculture for their livelihood (FAO, 2021). Despite 85 per cent of rural women being engaged in agriculture, they are concentrated in the low-value space of the supply chain, involved largely with manual work of farming and animal husbandry (Oxfam, 2018). The Oxfam 2018 report and recent statistics released by the University of Maryland and the National Council of Applied Economic Research (NCAER, 2018) also stated that women constitute over 42 per cent of the agricultural labor force in India, but own less than two per cent of farmland.

In the agriculture sector particularly, in recent years, India has seen an increase in outward migration, which has led to a 'feminisation of agriculture'. However, despite this, women's status as laborers has not changed, and they continue to lack land ownership, mobility and access to markets, access to credit and financial institutions, as well as bargaining power within the household, the community, particularly for agriculture-related decision-making (Sharma and Nayak, 2019).

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In this sector (and other sectors/trades as well), women's contribution to the local and national economy remains undervalued, and largely unrecognized (Beneria and Sen, 1981; Ghosh, 2016). Attempts by both the state and civil society organizations to facilitate an increase in women's entry into the paid labor market, as well as bring recognition to their contributions, have not been successful if one compares with the declining trend of labor force participation rates. As Jayati Ghosh articulated in her 2016 report for United Nations, India, "*..there has to be a focus on the quality, the recognition and the remuneration of women's work in developing countries, as well as the conditions facilitating it, such as alternative arrangements for household work and child care. All of these are critically affected by social relationships as well as economic policies and processes, which determine whether or not increased labor market activity by women is associated with genuine improvements in their economic circumstances*" (ibid).

SEWA (Self-Employed Women's Association)'s experience working with informal women workers demonstrates that cooperatives, including those offering social protection products/services, offer a unique pathway to create and sustain decent work opportunities for women.

COVID and the agriculture sector

COVID-19 has been a triple crisis for women workers of the informal economy. First, the health crisis coupled with an inadequate public health infrastructure has led to a massive loss of lives. Second, the economic crisis due to lockdowns and other restrictions has led to a loss of livelihoods. These have also increased both hunger and indebtedness amongst the most vulnerable. Third, the pandemic has created a care crisis as the burden of looking after the household and particularly the sick, the elderly and children increased manifold during the pandemic, causing a disproportionate time burden on women. A report by SEWA Cooperative Federation and SEWA Bharat that included 15 collective enterprises owned by informal women workers, across states in India, found that 60 per cent of those included in the study lost their means of livelihood and there was a 65 per cent reduction in their incomes (SEWA Cooperative Federation, 2021).

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In the agriculture sector, the lockdowns and subsequent restrictions on transport and movement caused disruptions to the supply chains. Additionally, the Agricultural Produce Market Committee (APMC)¹ remained closed in several states. Due to these reasons, farmers could not reach bigger markets and relied on middle agents and market aggregators to sell their produce. The rates offered by these agents and local traders were low, and farmers were unable to make a profit. These economic reasons, coupled with increasing health expenses, meant that their ability to purchase seed and continue the farming activities in the new season was jeopardized. It is important to note that this gap between the market and the farmer was exacerbated for women who, even traditionally, are unable to access these marketplaces (*ibid*).

The role of women-owned cooperatives/collectives, during this time of crisis, emerged strongly. Members of SEWA's agriculture cooperatives came together to reach health care resources, such as PPE (Personal Protective Equipment) and information, to their communities. The Federation, as a support system for Megha, linked the cooperative with working capital of ~INR 800,000 (~USD 10,600), which was used by the cooperative as a revolving fund for seed capital access to farmers. Megha linked ~3300 farmers to small credit, as well as with low-cost certified seed, which enabled these farmers to continue the harvest cycle, despite facing losses in the agricultural season. Moreover, these models realized a 15% decrease in cost of production, by providing better quality seeds and savings in transportation costs, through cooperative members.

The resilience demonstrated by these cooperatives reinforced the lesson that such collectives are powerful tools to bring decent work and social protection to women, which is increasingly crucial in this new digital economy. Hitakshiben, a member of Megha Cooperative, in a webinar organized by SEWA Cooperative Federation, Women in Informal Employment: Globalising and Organising (WIEGO) and International Cooperative Alliance-Asia Pacific (ICA-AP), said, "*We were not prepared for this kind of crisis. In rural villages, access to doctors and medical facilities were also limited. Because I am a member of Megha Cooperative, I am able to speak here today.*" Through the pandemic, Hitakshiben and other members of Megha Cooperative, spread crucial awareness about COVID. With support from the Federation, they were also able to access and distribute masks, sanitisers, oximeters and medicines. Hitakshiben added, "*As small farmers,*

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we together made available small loans to those most in need in our communities—especially widows and other women—so that they could buy seeds for the next harvest cycle."

Promoting women-owned cooperatives has been an approach adopted by the Self-Employed Women's Association (SEWA), since its inception. SEWA has been organizing informal women workers, including women farmers, into unions and cooperatives. SEWA is a national trade union of informal women workers, across trades, with 1.9 million workers, 100+ cooperatives/collective enterprises. The integrated approach of unions and cooperatives enables women to have voice and representation in their own trades, and access entitlements otherwise unavailable to them.

SEWA Cooperative Federation acts as an 'Enterprise Support System', providing specialized technical skills to these primary cooperatives so they are able to become viable, scale and innovate, in order to remain competitive in the market and offer sustainable livelihood options to their members (SEWA Cooperative Federation, 2021). One emerging area of work for the Federation has been digital inclusion, including increasing digital literacy of informal women workers, as well as conceptualizing and implementing tech-enabled platforms, in response to the new digital economy.

This paper will dive into the potential of platform cooperatives, owned and managed by women farmers. It will do this through the example of an indigenous women farmers' cooperative—Megha Cooperative—which is a member of the SEWA Cooperative Federation in Gujarat. The initial sections will explore the overall status of women's cooperatives in India; the digital gender divide; and how existing, privately-owned platforms —both in the service sector and in e-commerce—have left out women workers, including women farmers. This section will outline the main challenges women face, through research and pilots undertaken by SEWA Cooperative Federation and SEWA Bharat. The next section includes early learnings emerging out of co-design with Megha Cooperative, and the Cooperative Federation. These learnings have been enmeshed with SEWA Cooperative Federation's experience working with women's cooperatives. The final section puts together key recommendations that worker cooperatives, cooperative federations, government, the private sector, funding agencies and other civil society organizations must consider, if the goal is to sustainably include informal women workers into this new economy.

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With this context, it is also important to note that this work being pioneered at the SEWA Cooperative Federation, is extremely nascent in the country. An article in Bot Populi, which analyzed examples of platform cooperatives in the Global South, outlined one example from India—of a transport app called Yatri being developed in Kerala, supported by the State Metropolitan Transport Authority (Krishnakumar & Korjan, 2021). There are few other examples that have been documented, fewer of womens' cooperatively owned platforms. While there is a strong push from civil society organizations and government agencies on digital literacy, particularly through the COVID-19 pandemic, there is little to no imagination of linking these digital trainings with sustainable livelihood, through worker-owned models. If successful, the agriculture platform owned by women's cooperatives and their federation, would be a first.



An overview of women's cooperatives in India

The cooperative sector in India has largely excluded women. While the available data is limited, according to NCUI reports from 2010, women's cooperatives are less than 2 per cent of the total share of India cooperatives, and their membership is less than half per cent of the total membership in cooperatives (NCUI, 2010). Even when women are in cooperatives, their presence in decision-making roles is limited (Jayalakshmi, 2003).

Gender-disaggregated data for women's cooperatives in agriculture is hard to come by, but the state of women Farmer Producer Organisations (FPOs) can be used as grounds for estimations. An Azim Premji University report suggested that only 3 per cent² of the FPOs in India are owned solely by women farmers (APU, 2020). This trend also follows in the data on representation in decision-making. According to an ICA-AP report, women are largely absent in both state and national leadership in cooperatives and cooperative federations (ICA-AP, 2016).³

Yet, the cooperative model is a powerful tool for the emancipation of poor, marginalized informal women workers. When individual workers, both producers and service-providers, come together in cooperatives, they begin seeing themselves as owners and managers of their trade. Together, they are able to intervene directly in the supply chains and the value chains, cutting out exploitative middle agents (Webster, 2010).

Megha Cooperative: collectivizing indigenous women for sustainable farming

Megha Indigenous Women Farmers' Cooperative (henceforth, Megha) in Tapi district, south Gujarat, is a cooperative of 1001 women farmers (ILO, 2018). Megha's history is linked with SEWA's joint strategy of struggle (through the union) and development (through women's cooperatives). The women farmers collectivized to demand payment of wages guaranteed by the Indian state under its National Rural Employment Guarantee Act (NREGA). Through this collective action, they realized the power of collectivizing and in 2014, Megha was established as a cooperative, linking women farmers to agriculture inputs - seed, fertilizer, tools, information and training; as well as market linkages locally and outside the district. The cooperative also works on linking members to health awareness and resources, insurance, banking institutions, and credit (SEWA Cooperative Federation, 2020). Special emphasis is

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given to training and capacity-building of members through leadership training, exposure visits to field sites of other organizations, and non-farm based skill training (ILO, 2018).

This strategy of struggle and development emerged in SEWA when the need for sustainable enterprises came out of the Union's struggle for minimum wages, particularly for urban garment workers and rural agriculture laborers. Worker-owned cooperatives of informal women workers became an effective intervention in the labor market, offering an alternative means of work to these women, where they were decision makers, with collective strength.

Over the past few years, the Federation and Megha have increasingly been exploring ideas of digital inclusion in agriculture, starting with digital literacy for members. Towards digital literacy, the Megha and the Cooperative Federation have implemented a programme, which includes skill-building in the use of technologies. The training programme includes sessions on: using a feature phone (how to receive calls, make calls, send SMSs); using smartphones including the knowledge and use of various applications, such as Whatsapp. These trainings allow both individual-level and cooperative-level capacity-building, since the use of these tools increases the interconnectedness of members, as well as increases the efficiency in cooperative management through tools such as the Google Suite. Consequent to the digital literacy programme, the members have begun to view mobile technologies as productive assets, rather than just means of communication.

Apart from digital literacy, which is a crucial aspect of meaningful digital inclusion, the cooperative and Cooperative Federation have been co-designing a platform, which would sustainably link women farmers across the supply chain and value chain of agriculture, enabling work and income security, decision-making and governance and market access through a platform. This work has become increasingly crucial, as the past decade has seen an emergence and spurt of digital platforms in agriculture, or agri-tech platforms. The next part of this article details how these digital platforms in general, and agri-tech platforms specifically, function, utilizing a gender lens.

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DIGITAL PLATFORMS AND INFORMAL WOMEN WORKERS: ENABLERS AND BARRIERS

2. DIGITAL PLATFORMS AND INFORMAL WOMEN WORKERS: ENABLERS AND BARRIERS

India is currently experiencing a rapid growth in digitalization, with 8 per cent of global online web-based and location-based platforms being concentrated in the country (ILO, 2021). This growth, while massive, has not been inclusive, leaving out informal women workers, and others with little to no access to both technology and the capacity/knowledge to use such platforms productively (Singh, 2010).

Women's access to mobile phones and other digital tools has been limited--only 30 per cent of women in India use the internet (Kantar, 2021). As digital platforms grow, this digital gender divide will continue to leave women out of the digital economy, affecting their work and income, access to information and knowledge.

Apart from access to technology, digital platforms are not attuned to respond to women farmers' unique realities. They are designed for individuals with continuous, personal access to digital technologies and with the know-how to use them productively. Worker-owned platforms, which are self-governed, would mitigate risks and offer the opportunities that digital technologies could bring to the sector, responding to the needs of women workers.

This section outlines SEWA's experience with digital platforms, across sectors/trades, and the challenges faced, barriers felt by women workers when trying to use these platforms for work. The main sector explored, with respect to private-sector platforms, is the domestic work sector and manufacturing. For the Government's e-Marketplace (GeM), we have had experience with the manufacturing sector, domestic work and handicrafts.

Private-sector platforms

In 2018, a one-year pilot study was initiated between the SEWA Delhi Union with Helpers Near Me, wherein SEWA Delhi shared data of 25% members (10,000 women workers) of their union with Helpers Near Me. The objectives of this study, from the Union's perspective were (Hiriyur et al, forthcoming):

- To study the onboarding processes, with respect to their ease of access for informal economy workers
- To study the pipeline and feedback system of such aggregator platforms and utilize those learnings to map the journey of a worker on such a platform
- To understand the opportunities and challenges that women workers face in the gig economy/online platforms, with respect to service-sector work
- To understand opportunities and challenges of operating an online platform
- To understand if and how effective customer acquisition can take place through such platforms

The process was iterative, beginning with multiple strategies to onboard workers onto platforms. These included card distribution through union mobilisers and organizers, information and onboarding support through SEWA's centers, proactive telecalling, as well as support from full-time professional staff for registration. Through the work, there was a consolidation of insights around all aforementioned research questions (Hiriyur, et al., forthcoming, 2022):

- Challenge in getting onto the platform: Much data is invalid due to manual error or in most cases workers change their mobile SIM cards very often so the calling details get invalid every few months. For women, most don't own a mobile phone so when calls are made they are usually received by family members—largely husbands or sons.

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- Registrations were largely of younger, relatively inexperienced workers or those unemployed at the time of registration: 40% of registered members were between 30-35 years of age, which is not representative of membership of SEWA Delhi. 70% of those registered on the platform were not employed at the time of registration. Most SEWA members who took the cards didn't register themselves on the platform due to mistrust. As expressed by one worker, "*we get told a lot of times to call on a number for work, but such numbers usually end up taking money from us*".
- SEWA Members are looking for more income, closer to home, when they register on such platforms: Most members desire an interest to get work within 4-5 kilometers of their home when asked by the platform to set their preferences for work location. This geographical definition is misleading in densely populated urban areas, where workers use distances as a proxy to define the counters of their hyperlocal areas, most aptly defined by selection of localities. Sadhnaben, the first worker who was matched with a work opportunity on the platform, declined to go because she did not want to travel outside her locality. Many are motivated by the idea of being matched with work, which pays more and reduces the workload of multiple households to just one.
- The journey of getting matched with employers has many steps which may add fear for women workers: The platform made police verification to establish worker identity as mandatory for getting work opportunities. Most SEWA Delhi's domestic workers in the New Ashok Nagar area are migrants, from West Bengal, India or from Bangladesh and are extremely hesitant to go to the police for fear of harassment. For some women workers who did get matched to an opportunity, the first visit to an unknown locality and to a stranger's house is uncomfortable and they travel along with their husbands or friends for the first visit. These visits may not convert into confirming the job and is an added out of pocket expense. The platform also does not play any role post matching the customer and worker.
- Customers on the platform were mostly young professionals, without children, living in affluent neighborhoods: In India, this demographic was still the primary user of smartphones in 2019 who looked to avail services through app-matching. They were primarily looking for easy matching with service providers, trained/experienced workers, good service quality, fixed prices, and getting services when needed at home.

- Many customers on the platform expressed interest in being matched with workers of a certain gender or religion: Customers at many times reached out to the platform's customer care to express dissonance with the workers matched with on the platform, and expressed interest in being matched with workers of a certain gender or religion.

It is pertinent to note that only 3 out of 100 registered SEWA members ever received work opportunities through Helpers Near Me, and none of these workers took them up.

In the e-commerce sector, SEWA's health cooperative—Lok Swasthya Cooperative—explored two platforms: Amazon and PharmEasy, to increase its B2C (Business-to-Consumer) market linkages. The main challenges, as stated by managers of Lok Swasthya Cooperative were:

- Hidden costs charged by the platform, which made pricing of the products difficult for the cooperative
- Lack of visibility, as the cooperative's Ayurveda products were listed under Amazon's Saheli page, and not showcased to any customer on the main sales page. For a customer to view these products, they would have to navigate specifically to this page. Even when under the main page, unless the cooperative spent money on promoting its products, they were listed towards the bottom of pages, decreasing visibility
- Particularly on PharmEasy, Lok Swasthya Cooperative was expected to maintain a minimum stock at the PharmEasy storage facility, which given no guarantee of sales, was not something the cooperative wanted to risk with their FMCG products

Substantiating these challenges, Ilaben, manager of Lok Swasthya Cooperative said, *'to successfully use the platform, our cooperative will need a full-time, professional marketing employee that can help navigate through different platforms and their requirements. The nuances of the platform are not accessible directly to informal workers as they require knowledge and expertise in digital marketing. As a collective enterprise, we have been able to hire professionals to support us, but informal workers would not have the capacity to do it on their own, nor hire marketing personnel'* (CIS and SEWA Cooperative Federation, forthcoming, 2022).

Through these linkages, it became evident that there were a number of platform design and policy hurdles, which had not accounted for the realities of informal women workers. In fact, contrary to the overly optimistic picture presented in mainstream and corporate endorsements of digitalization as a harbinger of development, such platforms are unlikely to be a force for 'formalizing informal work'⁵ or 'bringing the marginalized back into the workforce.'⁶ The study and its results go a long way in clarifying why this is the case. As it shows, the principal target audience and consumer market that such platforms seek to capitalize on is India's middle and upper classes, who possess the disposable income to pay for the convenience of such digitally-mediated services. As a result, the design of these digital apps are entirely tailored to the tastes (and notably, even the religious and caste biases) of their consumers with little regard for the needs and demands of their potential workforce. While these platforms can incentivize informal women workers with the potential of higher wages and a large pool of potential consumers, these are often shallow and unattractive propositions when compared to the disruption and lack of control over their work process that these platforms also introduce.

Despite their lack of formal regulation and the associated problems that this brings, informal livelihoods—such as those of domestic workers in India—are still erected upon community networks that have their own mechanisms for vetting customers, dealing with conflicts, negotiating rates, and finding opportunities that are suited to the constraints and circumstances of these informal workers. It is these networks and mechanisms that provide - in the absence of formal institutions—a basic regulating framework for how these economic practices are conducted, and a way for informal workers to understand and navigate the terrain. While they are certainly rife with problems, it is important to acknowledge that they provide a sense of ease and safety to workers who have become used to operating within them. While the

younger and more ambitious members in informal communities may be willing to leave these networks for the prospect of a higher income through platform labor, for many others, digital platforms may work to erect more barriers than they break down. Those who are older, or who cannot make long commutes due to domestic responsibilities, or who lack digital literacy, or access to smartphones and formal financial services; all of these will find it much harder to come within a landscape that has been overturned by digitalization.

Moreover, the study also brought into focus the deep distrust that persists amongst informal workers when it comes to new technologies, one that is rooted in a history of witnessing the abuse of such technologies—from scams to predatory finance to government surveillance and coercion. Coupled with a general lack of literacy and first-hand with these new technologies, this distrust is a significant barrier in itself. But it is further exacerbated because of the anxious and ambivalent relationship that informal populations have with the state and local authorities. Often lacking paperwork and unable to navigate India's complex legal bureaucracies on their own, these workers feel all the more vulnerable in entering into private contracts with large technology firms, because they do not feel that they genuinely have recourse to the law in cases where they feel their rights may be breached.

Remaining in informal networks and localities where they feel like they have some collective sway in being able to protest and raise issues remains a strong point of attachment for such workers. In contrast to this, the alienating and atomizing tendencies that are embedded in the design of most private platforms are likely to puncture such collective solidarities and leave individual workers to fend for themselves. This is especially dangerous when it comes to prejudices along religious and caste lines, which are prevalent in Indian culture, and can often only be opposed or contested by organizing larger groups of particular marginalized religious or caste communities. The prospect of having such prejudices institutionalized in digital apps catering to the preferences of consumers seems likely to bolster discrimination against particular minorities, with little recourse to challenging the logic of the system.

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All of these problems ultimately convey a basic truth—the disruption and economic reorganization that digital platforms have brought to economic sectors—from ride-hailing, to tourism, to retail and others—and which is often hailed as a positive jolt of dynamism, is particularly ill-suited and violent a process to blindly apply to informal economic arrangements. Such a top-down imposition of a new order, particularly one that relies solely on market forces and the maximization of profit as its guiding design principles, is already destroying livelihoods and subjecting many to new forms of precarity, and this is a trend that will only accelerate as these platforms grow in scale.

That said, while it seems clear that informal workers are not voluntarily deciding to migrate to such platforms on their own, they may not be left with much choice if consumers start to use these platforms en masse in order to procure the services that these workers offer. This is already the direction in which things are starting to move, and as these technologies become more and more prevalent, it is very unlikely that measures will be taken to constrain the expansion of the digital economy. Nor is this necessarily a policy stance that ought to be adopted. The informal sector is rife with problems, forms of exploitation and its own conditions of deep precarity—and trying to transition these economic arrangements into more formalized, productive and better regulated ones is a genuine development goal that could raise the living standards and wages of these populations. Moreover, while current iterations of digital platforms are certainly unsuited, digital technologies and platforms in themselves could harbor the potential to contribute to this goal. The picture that the SEWA study paints can also be used to glean the ways in which alternatively designed digital platforms - those which accommodate the interests and needs of workers as well as consumers - could function. Given that platforms are likely to become a big part of how economic activity is increasingly going to be organized, it is crucial that there is a debate around how these ought to be shaped. This requires a fleshing out of alternative models, as well as pilot programs that try and put this into action so that such models can be tweaked and improved to become viable over time.

Public procurement - Government e-Marketplace (GeM)

Public-sector procurement has been centralized, through a digital marketplace—the Government e-Marketplace (GeM). This has opened a huge opportunity for micro and small enterprises to participate in tendering and contracting processes, transparently, through an online portal. GeM also mandated a 3 per cent procurement quote from women's enterprises. For the agriculture sector in particular, the government has launched an e-National Agriculture Market (e-NAM) portal - a nation-wide electronic trading portal, which unifies all existing APMCs into a marketplace for agricultural commodities.

The move to these digital platforms was implemented with an objective to increase transparency in public procurement, as well as facilitate ease of use. However, informal women workers and their cooperative/collectives still face challenges accessing these platforms. These challenges are summarized herewith:

- Complex onboarding and registration processes: The onboarding process for GeM is often difficult for informal workers to access, as they may not hold the requisite documents. Moreover, each product uploaded also needs to have individual certifications. Overall, these processes are long and tedious, and women workers are unable to fulfill these without support.
- Difficult UI/UX and user-friendliness of these platforms, including language facilitation: The user interface for the platform could be optimized, keeping in mind women workers. Currently, it requires more than a basic understanding of digital platforms. Moreover, the standard language for the platform is English. While some pages have been made available in regional languages, various training modules, terms and conditions and bid documents are only available in English.
- Unclear criteria for categorisation of products and services: The available categories on which workers and enterprises can onboard their products and services are still limited. Category managers have, in SEWA's case, miscategorised products with unclear processes for rectification.

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- Lack of synergies with various government departments: There is a scope for government procurement platforms to link with relevant departments and services, such as subsidies or financial products. Enabling this cross-cutting, holistic information would be a useful leverage point for women's cooperatives/collectives.
- Low focus on cooperatives/collective enterprises, particularly those owned by women: Despite the mandate of 3 per cent procurement from women's enterprises, in FY 2019-2020, GeM only procured 9.67 per cent of total procurement from women. This number fell to 0.5 per cent in FY 2020-2021 (MSME Sambandh, 2021).

While it is beyond the scope of this article to delve deeper into these private and public platforms, it can be concluded that neither public nor private digital platforms—either in the e-commerce space or in the service sector—have effectively managed to include informal women workers. Infact, research suggests that private platforms exacerbate the precarious conditions faced by informal women workers, excluding them further from decent work.

The above outlined challenges also provide a basis to understand the agri-tech sector—its enablers and barriers—and also allow for early design ideas to emerge, as many of these are a direct response to the challenges women workers and their cooperatives/collectives continue to face on these existing platforms.



Specificities of agri-tech platforms vis-a-vis women farmers

Over the last decade (2010-19), the cumulative capital flow into the agri-tech sector in India has reached about USD 1.9 billion. The rate of growth of start-ups in this space increased significantly after 2014 (Narayanan and Dublish, 2021). The current government has been pushing big money into this space, signing MOUs recently with Amazon, Microsoft and Cisco to drive India's agriculture growth, by enabling their access to all government-owned data and information on the sector, since 2014. Similar agreements have been signed with Indian private-sector companies as well, and estimates suggest the revenue growth of these platforms will reach USD 24 billion by 2025 (Mint, 2021).

Largely, these tech-driven platforms work in areas including: supply chain management, agri-retailers selling inputs to farmers, e-commerce and other digital marketplaces and finance-related platforms linking farmers to credit. There are no examples of worker-owned platforms, particularly those owned by women farmers.

There are some innovations that are farmer-facing, information-based platforms that provide workers with information on crops, weather, soil health and other technical advisory. There are two examples of agri-tech, which show some promise, but have not been able to successfully include women:

1. In an interview with a representative of Krishi Vigyan Kendra (KVK) in Vyara, Tapi district, the author was introduced to an audio conferencing pilot that was funded by Reliance Industries and rolled out by KVK during the first wave of COVID-19. In this example, agri-related information was shared with farmers through one-way conference calling. Several farmers were onboarded, but a majority were men. The pilot was stopped when the partner stopped funding.

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2. Precision Development (PxD)—a global Non-Profit Organization working in sustainable technology and agriculture—has been working on a similar pilot across India. Through a ‘two-way IVR [Interactive Voice Response] service’, they are reaching customized messages, with relevant and timely information to farmers on crops, soil, disease management, weather, as well as government subsidies and other relevant topics. Farmers are also able to contact experts, through this platform, seeking specific inputs. PxD’s pilot, too, has seen limited success with women farmers.

Co-designing a low-cost, useful and accessible platform would keep in mind both the agricultural realities of Megha, as well as the digital realities of its members. In Megha’s context, access to mobile phones (particularly smartphones) is limited, availability of the internet in remote villages is still low, and the capacity or knowledge to use such technologies is still limited. While the challenge of internet access is infrastructural and can be solved at a policy-level, Megha is actively linking women to financial institutions, encouraging savings and investment, particularly that of digital tools. Finally, recognition of the value that data and tech brings, and its potential to increase both productivity and market linkages, is still low, and a component of the capacity-building training.

3.

ENVISIONING AND CREATING A VIABLE FEMINIST PLATFORM CO-OP: FIRST LEARNINGS

3. ENVISIONING AND CREATING A VIABLE FEMINIST PLATFORM CO-OP

Jayati Ghosh's analysis on the exclusion and devaluation of women's work pointed out that' ..capitalism has proved adept at causing patterns of labor supply to change in accordance with demand, and this is particularly so in the case of female labor..' The case of digital platforms and their current trajectory, with respect to women workers, is a mirror to this reflection.

The questions then are: What does an inclusive digital platform look like? How can the gig economy, the e-commerce industry and others realise feminist principles? The straight answer to this is that design and policies of such platforms must be co-created with those it seeks to include and benefit. In the language of SEWA— women must be at the center of all decision-making. Women's cooperatives offer up a pathway to achieve this, while keeping realities of the market in mind and the vision of achieving sustainability, viability and profitability, simultaneously.

With this problem statement in mind, SEWA Cooperative Federation has been developing and implementing pilot platforms with women's cooperatives in the agriculture sector. Currently, through a 'Solutions Network', which is composed of global researchers and technologists, Megha and the SEWA Cooperative Federation are actively working on digital solutions that bridge the divide between tech-driven platforms and women farmers. The group uses co-design as their main methodology to co-create a blueprint for the digital platform.

The first tool for effective co-design, and therefore for an effective platform, is trust. It was demonstrated in earlier parts of the report how there is a sense, among women in particular, of mistrust around new technologies. Here, the power of solidarity systems like cooperatives becomes important. It is because the farmer trusts her sisters and her cooperative, and the cooperative trusts the Federation, she is able to trust (or build trust) and utilize new ideas and innovations being introduced through this route.

Methodology

Co-design is an iterative process, enmeshed with the language and experience of the designers—in this case women farmers. The dynamism offered by this method resonates with the principles of cooperativism, as well as aligns with ideas outlined within the 2021 white paper published by the Platform Cooperativism Consortium and the Berggruen Institute - *"Platform cooperatives don't follow a single "model" of success—instead, they employ iterative processes that build on small successes"* (Scholz, et al., 2021, p14).

SEWA Cooperative Federation, with support from the Inclusive Design Research Centre (IDRC) and the Platform Cooperative Consortium (PCC) conducted multiple co-design workshops with members of Megha Cooperative.

These co-design sessions were participatory, involving worker-members of Megha Cooperative, alongside managers of the cooperative and participants from the Cooperative Federation. The topics were identified by the Cooperative Federation, and included:

- Creating scenarios of use for the platform
- Identifying key elements of the platform
- Journey mapping: visualize what member-owners would utilize; visualize what the market would need
- Identify pathways of communication within and outside the platform
- Identify infrastructure, personnel and finance needs to create the platform

The next section outlines the main design elements, which were identified and articulated through co-design, with and by the members of Megha Cooperative.

Our learnings: including women farmers in agri-tech

The learnings that emerged from the co-design processes, both directly and indirectly, were a response to the challenges that women have faced on current digital platforms—public and private. The main challenge that arose was that a majority of women farmers did not have smartphones. They used simple feature phones, with no internet access. There were a limited number of farmers who did not own phones at all. Through co-design, it became clear that if the goal was to include these farmers in the digital platform, which was the fundamental idea, then the platform needed to be low-tech, and employ a hybrid model of operations that included a robust ‘offline’ system. The cooperative model allowed leaders and other members to act as ‘bridges’ or ‘conduits’ in this hybrid model, linking between the digital platform and those who could not directly access it due to infrastructural challenges.

Alongside a hybrid and low-tech model, it was also vital that the platform increase cooperative efficiency. A large number of outlined features included management tools, including: meeting scheduling and intimations; integration of Management Information Systems and communication with the Board of Directors (BOD) and members. The worker-members stressed on integrating existing platforms, like Whatsapp, which members were either already using or were more likely to learn due to the other functions that Whatsapp played. The cooperative had already begun use of Whatsapp Groups to bring together the BOD and other leaders for easy communication. Furthermore, the members expressed a specific interest in integrating with social media platforms for marketing and to attract younger members into the cooperative.

The business model of Megha Cooperative relied partly on marketing and sales of agriculture inputs to farmers. For this reason, they discussed the platform being used to aggregate information from worker-members and other farmers on their seed, fertilizer requirements; as well as information on their produce/harvest including type (grade A, B or C) and quantity. This would enable the cooperative to plan their purchase, develop business projections and strengthen their marketing and sales efforts. Apart from this, the cooperative and members also wanted the platform to work for them, bringing them information on two aspects:

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- Agriculture-linked data: crop and disease control, soil health, weather predictions, and other such information to improve the farming practices
- Market-linked data: crop price, information on logistics such as delivery, customer information (preferences, geography, etc.)

Diving into the micro-aspects of the platform, which emerged through codesign, there were several features that were discussed and iterated. The first of these was an easy-to-use interface, with a UI/UX that was accessible by those who could not read and write. Such an interface would utilize iconography and other visual tools, rather than relying on written cues solely. Secondly, following an easy-to-use interface was the integration of various languages, rather than a platform that wholly or substantially used English. In fact, for the farmers, English was the last language preference. The platform would also allow customers to toggle between their preferred language, thereby facilitating ease-of-use from end-to-end. Finally, the platform would allow financial transactions to happen digitally. This would be coupled with financial literacy for women farmers, including building their capacity and access to use digital finance.

The overarching design of the platform would bring together SEWA Cooperative Federation, and individual cooperatives. This, as expressed by members of Megha Cooperative, would allow for a scale of the platform through the onboarding and interlinking of more worker-cooperatives, more sectors/trades of work, creating an umbrella digital platform that leveraged on the strength of each cooperative. It was also vital that the platform itself slowly become financially viable, generating enough surplus for its own maintenance and upkeep.

Finally, each step of the way—from design to development to implementation—would need to be underlined with continuous and close capacity-building for members and their cooperatives. This was a key point, which emerged in all co-design sessions and ensuing discussions. This capacity-building included training on the technicalities of platform usage for both individuals and cooperative managers, but also included training on leadership, basic information and sensitisation on data informatics and Artificial Intelligence.

What we need to create a feminist digital platform: key elements

Women's ownership and leadership

The initial learnings from this co-design have become the foundation upon which a digital platform and a toolkit will emerge in the following years. The first critical learning comes from SEWA's experience of working with women-owned cooperatives. It is crucial to place technology-driven platforms in the hands of women-owned cooperatives, if the gains are to reach other women workers. These cooperatives need to be owned, managed and governed only by women workers, ensuring their voice, representation and participation in decision-making.

This learning has also been echoed in the aforementioned white paper, which states in a section detailing the platform cooperative movement in Kerala, "*As a downside, we found that new initiatives like platform co-ops tend to be implemented as 'top-down,' state-run projects. Cooperatives should receive state funding at the startup stage but eventually need to be autonomous and self-governed*" (ibid, P29).

Bottom-up design approach

Digital platforms need to be rooted in the local context, responding to the specificities of the women and their communities. This bottom-up approach is the heart of co-design, because it enables the creation of a platform that is responsive and, therefore, sustainable. One such specificity that emerged in the case of Megha was the lack of access to mobile technologies. The co-designed platform will, therefore, need to be low-tech and utilize tools that are either already available to women farmers, easily accessible, or can be made available in a sustainable manner.

Further, as access to digital tools remains one of the first stumbling blocks, a hybrid model of ensuring access to the platform has been envisioned, where cooperative leaders (aagewans) act as key levers, bringing members from their village clusters onto the platform, through offline linkages. App-based systems assume that all users, owners have access to smartphone technology or internet connectivity or are digitally literate, which may not be true in the case of informal women workers.

Investments into women workers and early-stage platform design

Informal women workers often face obstacles in accessing capital or investment for their cooperatives. If their platform cooperatives need to be able to compete with venture-capital funded platform companies in the private sector, there needs to be a substantial rethinking and reprioritising of investments and capital going into these early-stage pilots.

Enabling universal social protection

Women's access to social protection remains low, as outlined briefly in previous sections, while remaining a critical lever in their access to the labor market (including digital economies). The integration of social protection, either through direct access or through linkages, will allow for the participation of more women and keep the platform inclusive. In SEWA's experience, social protection vitally includes access to healthcare (both information, no-cost or low-cost medicines and access to doctors), childcare (full day, quality services) and insurance (for self: health, accident, others, and for their trade: crop insurance, animal insurance, asset insurance, and others).

Creating an ecosystem of support

Finally, women-owned cooperatives at SEWA have existed and survived in an ecosystem, anchored by the SEWA Cooperative Federation. The Federation, a secondary-level cooperative, is owned and governed by these worker-owned primary cooperatives. The Federation enables access of these cooperatives to business development services: marketing, capacity-building and training, ensuring compliance to regulation, research, communications, working capital; and creates evidence to advocate for more, similar models of women's ownership. An important function realized by the Federation, aligned with the cooperative principles, is cooperation among cooperatives. Through cross-learning, peer platforms, the Federation is able to create links within the ecosystem of cooperatives. This mesh of cooperatives and their Federations is vital to ensure the sustainability of platform cooperatives, such that cooperatives can remain rooted and sustainable in the local context, while also gaining scale through their federation.

4.

CONCLUSION AND EMERGING RECOMMENDATIONS

4. CONCLUSION AND EMERGING RECOMMENDATIONS

The platform cooperative movement in India is still nascent, and largely led by men in the ride-sharing and delivery sectors. The role and participation of women, while low, is also slowly emerging. A recent strike by urban beauty-sector workers against a VC-funded platform, called for a decrease in commissions retained by the platform, among other demands and was able to extract these concessions successfully. That said, as the experiences of many of SEWA's members have borne out - and as this paper has tried to convey—the imperative for women to be at the forefront of this movement is vital. The current form and organization of dominant digital platforms and their business models are ill-suited to the needs and circumstances of women generally, but gravely ill-suited to those of informal women workers in particular. Moreover, as current trends suggest, the growth of the digital economy is only increasing and it is likely to continue to disrupt older informal arrangements across domains such as the beauty sector, domestic and care work, agriculture; all of which comprise a significant part of the livelihoods of informal women workers.

That said, the glimmer of hope lies in the fact that alternative models of harnessing digital technology—as represented, for instance, in the platform cooperative movement—seem to present a genuine opportunity for improving the living standards and labor arrangements of these workers. What remains crucial is the project of discovering the forms of such alternative platforms that would be most financially sound, sustainable and tailored to the exigencies of local contexts and markets. It is hoped that this paper can serve as a preliminary contribution to this effort.

As we have tried to show, the need and demand of SEWA Cooperative Federation and active member cooperatives—88 per cent of which are viable (SEWA Cooperative Federation, 2021)—using, creating platforms is high with future organizational plans pointing in the direction of digital inclusion, youth inclusion.

While this paper looked closely at the agriculture sector, the emerging lessons can be translated across trades and industries, as the struggles of women workers remain similar. Through such women-owned and women-led platforms, there are multiple benefits, which could accrue to informal women workers and their communities: a robust, inclusive local economy where digital platforms are attuned to the specific needs of the area; the recognition of women as decision-makers,

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equipped with digital tools and data to support with governance, and the potential to reach scale sustainably, through the cooperative and its federation.

In order to take forward this movement of feminist digital platforms, that are owned and controlled by the workers, there are some key recommendations to consider:

Organizing and mobilizing workers is key to any sustainable, viable livelihood generation. Worker cooperatives/collective enterprises act as conduits that link workers with decent work, social protection, as well as knowledge and technology transfers. They give workers decision-making powers, which have historically been denied to domestic workers and other workers of the informal economy.

Meaningful digital inclusion, including: access to technologies, access to internet, capacity-building in the productive use of technology through digital literacy programmes

There is a need to lower the wall on current platforms, including those created by the State for public procurement. Some definitive policy enablers include:

- Preferential purchase from women-owned enterprises
- Easy-to-use platforms, with simplified interface and language portability. This needs to be coupled with constant handholding to onboard onto and utilize these platforms effectively
- Elimination of hidden costs on private platforms and increased visibility for women's enterprises

Research and evidence-building on the role of women-owned enterprise in creating strong local economies, contributions to the national economy and reducing inequalities

Voice and representation of women workers in policy-spaces to ensure that their voices are centered in the design and implementation of programmes

These initial sets of design elements and recommendations come from SEWA's experience working with women workers of the informal economy, particularly

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cooperatives. They can be a blueprint for: policy makers (locally, nationally and internationally) as well as for workers' cooperatives and civil society organizations that support such cooperative ventures.



ENDNOTES

ENDNOTES

1. The Agricultural Produce Market Committee, or the APMC, is a marketing board constituted by State governments under the Agriculture Produce Marketing Regulation Act. The Act mandates that the sale and purchase of all agriculture-related produce is carried out, through auctions, in a specified marketplace, and all users (sellers and traders) pay the requisite fee and commissions. The Act has been a move to eliminate middle agents in the agriculture supply chain, and safeguard farmers from large retailers.
2. The authors of the report identified women-owned FPOs by the appearance of words like 'mahila', 'women', 'naari' etc. If a woman-owned FPO did not use these in their names, they would not appear in this data set. This method of identification leaves a large gap for variance to emerge.
3. <https://icaap.coop/sites/ica-ap.coop/files/Women%20in%20Cooperative%20Sector%28%202016%29.pdf>
4. Helpers Near Me is a government-recognised start-up, which connects blue-collar workers with local employment opportunities through a digital platform. The trades/sectors include: domestic workers, drivers, salon workers, store workers, restaurant workers, construction workers, etc. The company was founded in 2016, and according to its website, has connected over 51,500 workers with local employers currently.
5. <http://livemint.com/Opinion/4kxau3CejBat9uAIeakIKK/Formalizing-Indias-informal-economy.html>
6. <https://www.news18.com/news/opinion/indias-biggest-worry-is-jobs-and-e-commerce-can-play-a-key-role-here-3965036.html>

BIBLIOGRAPHY

BIBLIOGRAPHY

Beneria, Lourdes and Gita Sen (1981) 'Accumulation, Reproduction and "Women's Role in Economic Development": Boserup Revisited', *Signs, Vol. 7, No. 2, Development and the Sexual Division of Labor* (Winter, 1981), pp.279-298

Ghosh, Jayati (2016) 'Women's work in India in the early 21st century'. *UN India Office.* <https://in.one.un.org/wp-content/uploads/2016/09/jayati.pdf> Accessed: December 2021

Govil, Richa, Annapurna, Neti and Madhushree R. Rao (2020). 'Farmer Producer Companies: Past, Present and Future'. Azim Premji University, Bangalore. <http://publications.azimpromjifoundation.org/2268/1/Farmer%20Producer%20Companies.pdf>. Accessed October 2021

Hiriyur, Salonie, Nangalia, Nitya and Mullagee Fairuz (forthcoming, 2022). 'Domestic work and platformization in India and South Africa: A look at enablers and barriers'. *Digital Future Society*

ILO (2018) 'Advancing cooperation among women workers in the informal economy: The SEWA Way'. International Labour Office, Geneva.

ILO (2021) 'World Employment and Social Outlook: The role of digital labour platforms in transforming the world of work'. International Labour Office - Geneva.

Jayalakshmi, R (2003) 'Gender in Cooperatives', Institute of Cooperative Management, Thiruvananthapuram, India

Kantar (2021) 'Internet Adoption in India', *ICUBE*

Krishnakumar, S. and Korjan, A. (2021) 'Worker-Led Alternatives: A Line of Hope for New Platform Futures'. <https://botpopuli.net/worker-led-alternatives-a-line-of-hope-for-new-platform-futures/>

Mint (2021) 'You've heard of infotech. Now, it's time for agritech'. <https://www.livemint.com/industry/agriculture/youve-heard-of-infotech-now-it-s-time-for->

BIBLIOGRAPHY

[agritech-11632481317387.html](https://www.lakshmisri.com/insights/articles/investments-in-agritech-sector-an-analysis-of-the-last-decade/#). Accessed July 2021

Narayanan and Dublish (2021) '*Investments in Agritech Sector: an Analysis of the Last Decade*' <https://www.lakshmisri.com/insights/articles/investments-in-agritech-sector-an-analysis-of-the-last-decade/#> Accessed August 2021

NCAER (2018) *Gender Gap in Land Ownership*. https://www.ncaer.org/news_details.php?nID=252&nID=252. Accessed Oct, 2021

Scholz, Trebor (2016) *Platform cooperativism: challenging the corporate sharing economy*. Rosa Luxemburg Stiftung, New York Office

Scholz, Trebor., Mannan, Morshed., Pentzien, Jonas and Plotkin, Hal (2021). *Policies for Cooperative Ownership in the Digital Economy*. Platform Cooperativism Consortium and Berggruen Institute

SEWA Cooperative Federation, 2020. '*Women's Cooperatives and COVID-19*'. India

SEWA Cooperative Federation, 2021. '*Building Resilience and Strengthening our Solidarity: A Study on Women's Collective Enterprises during COVID-19*'. India

Sharma, P. and Nayak, S. (2019). 'The dynamics and status of feminisation in Indian agriculture'. *Journal of Rural Development*, Vol. 38 No. (2) pp. 159 -176

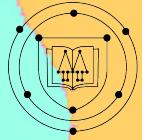
Webster, E. (2010). '*Work and Economic Security in the 21st century: What can we learn from Ela Bhatt?*'. https://www.wiego.org/sites/default/files/publications/files/Webster_Learn_from_Ela_Bhatt.pdf. Accessed November 2021

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