

(IN)VISIBLE ENTREPRENEURS

Understanding the market landscape and enterprise readiness for women-led home-based businesses in Tamil Nadu and Rajasthan



ABOUT THIS PUBLICATION

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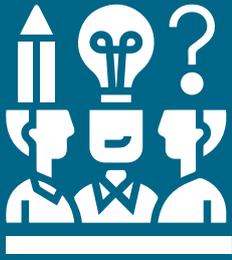
This publication was possible with the generous support of the Bill & Melinda Gates Foundation. The findings and conclusions in this publication are those of the authors and do not necessarily represent the views of the Bill & Melinda Gates Foundation.

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ACKNOWLEDGEMENTS

The research team would like to acknowledge the support of the Research Advisory Committee (RAC) for their guidance. The RAC comprised of Ashwin Chandrasekhar, Madhuri Mukherjee, Mohammed Kalam, Preethi Rao, Renana Jhabvala, Sharon Buteau, Subhalakshmi Nandi, Sona Mitra, Soumya Kapoor, V Anantha Nageswaran, Vidya Chandy, and Yamini Atmavilas. Special thanks to Shailender Swaminathan for undertaking a technical review of the report, and Sharon Buteau and Sona Mitra for their consistent support, leadership and encouragement.

The team would like to thank the state-wise partners for sharing insights and supporting the fieldwork. We would like to acknowledge our state partners for Tamil Nadu, Integrated Women Development Institute (IWDI), Small Industries Product Promotion Organisation (SIPPO) Chennai, PAASAAM Trust (Erode), Good Shepherd Health and Education Center - Coimbatore, Non-conventional Energy and Rural Development - Coimbatore, Banana Rope Company-Madurai, Handicraft Service Center Regional Offices of Chennai, Nagercoil and Salem, Commissionerate of Handlooms and Textiles Head Office in Chennai and Regional Offices in Madurai, Erode, Coimbatore, and Kanchipuram. We would also like to thank the state partners for Rajasthan, the Handicraft Service Center Regional Offices of Jaipur and Udaipur, Handicraft Development Commission in Jaipur, SEWA Bharat (Bhatta Basti), Seva Mandir Udaipur, Sadhana Foundation Udaipur, HSBC Access (CSR unit) Jaipur, Kalava Art & Crafts Private Limited Udaipur, Mewar Dharokar Udaipur, Jaipur Rugs, and Kota Mahila Bunkar Sanstha.

Executive Summary

Women entrepreneurs contribute to the Indian economy in terms of GDP and employment. Despite this, they face gender specific barriers in labour force participation, such as, market, mobility, time, and credit constraints. These factors have been the driving forces behind the emergence of home-based businesses led by women especially in the informal sector.

This formative study was undertaken by LEAD at Krea University, under its Initiative for What Works to Advance Women and Girls in the Economy (IWWAGE). As a part of IWWAGE's strategic vision to facilitate women's economic empowerment through an evidence-based approach, Part 1 of the study aims to map the market landscape for home-based handicraft and handloom enterprises led by women, and assess their readiness. The subsequent study (Part 2) will look to answer critical questions related to credit access, and alternatives to existing credit scoring mechanisms. Part 1 employed a mixed-methods approach, and was conducted in Rajasthan and Tamil Nadu. To capture a granular perspective on the state of market access and supply chain linkages, 800 home-based women entrepreneurs were surveyed across these two states and survey results and insights are captured in this report.

Highlights from the report

- **Time and mobility remain barriers to expanding business and honing entrepreneurial skills.** Mobility and time limitations pre-condition the emergence of home-based businesses, but ultimately limit business expansion and aspirations in the long-run. The study found women are able to dedicate only 5.8 hours a day on average to their home-based business that is interrupted by 6.6 hours of unpaid caregiving work.
- **Most home-based female entrepreneurs are solo entrepreneurs.** Over 70 per cent of sampled entrepreneurs are solo entrepreneurs who do not have employees on a fairly regular or temporary basis. Only about 2 per cent use unpaid family workers for support. Given most entrepreneurs are far from overcoming the limitations of their scale and crossing the threshold to become employers, their reliance on spouses and overarching institutions is prevalent in both states.
- **Sub-contracting at piece rate by collective enterprises and private companies are dominant features of the market landscape and, therefore, have a market monopoly.** Over 70 per cent of the women interviewed, function in a closed communication channel by running piece-rate businesses and working on a contractual basis primarily to overcome mobility and travel-time constraints. There seems to be greater market monopoly in Rajasthan; 90 per cent of respondents in Rajasthan show dependency on access to markets through a single market entity contractual companies, SHGs, cooperatives and so on. On

the other hand, there is greater diversity in Tamil Nadu – 61 per cent of the surveyed women sold their products to cooperatives and contractual companies; 57 per cent of handicraft artisans operated individually.

- **Business outcomes are best for women who run piece-rate businesses but are also members of seasoned collective enterprises such as Self-Help Groups (SHGs) and cooperative societies.** These businesses operate on a cost- and risk-sharing model to overcome limitations of scale and gender-related market constraints. When collective enterprises are seasoned and backed by the government, they have access to and a strong role in formulating social security policies targeting their trade leading to visibility and formalisation for their work.
- **Female home-based entrepreneurs are mostly price takers, but exhibit strong entrepreneurial aspirations.** A massive 78 per cent of the sample had aspirations to grow their business. Despite aspirations, their outreach is mostly limited to local markets and institutional affiliations, making them price takers.
- **There is a trade-off between developing entrepreneurial skills versus market access via an intermediary in the case of women leading home-based businesses.** Particularly because of the limited time female entrepreneurs can dedicate to their business, when given a choice, they choose to occupy limited space on the supply chain in favour of a consistent singular market via an intermediary. Nevertheless, with a focus only on production, the home-based female entrepreneur does not develop entrepreneurial qualities essential for business growth.

The study sheds light on the need for two approaches when designing policy interventions for improving the market landscape of female entrepreneurs. The first is the need for a facilitative and enabling ecosystem for home-based entrepreneurs because the market landscape itself lacks structure and formality with significant variations across the two states. Second, women entrepreneurs should not be approached as a singular segment but instead, need to be segmented according to their nuanced needs and strengths. A targeted approach through looking at personas or the type of entrepreneurs could be a great beginning.

Based on insights from the survey, a diagnostic policy framework ‘Business Readiness Scorecard for Women (WBRS)’ has been developed to identify priority areas for intervention. It ranks businesses based on 30 indicators across 4 key sub-indices of Agency, Market readiness, Production readiness, and Legal & Regulatory readiness and can be used as a tool for statewise benchmarking.

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Background

Contrary to the common perception about the predominance of agriculture in India's rural economy, nearly two-thirds of rural income is generated through non-agricultural activities. Over the last decade, approximately 27 million women moved out of agriculture in India. The transition might indicate movement to skilled labour opportunities, but in reality, the outcomes have been varied. Of the 27 million women who moved out of farming, only five million have joined the labour-force, while the remaining have withdrawn from the labour-force altogether, due to lack of skills, income disparity, mobility concerns, and other reasons like enrolling for education (Chand et al., 2017)¹. According to ILO², progress in girls' access to education has also accounted for women of working age to enrol in secondary schools.

Time-use surveys used in mobility research literature have found that women's space-time constraints is the key impediment to their participation in the workforce and entrepreneurial growth. Many home-based businesses, which are largely part of the informal economy, have evolved and grown as a consequence of the same constraints. According to WEIGO³, 23 per cent of non-agricultural workers in India are home-based entrepreneurs, out of which an overwhelming 67 per cent are women. The distribution of these women is concentrated at the younger spectrum of age, indicating that for women moving out of agriculture in recent decades, home-based work is a very viable option. Women prefer home-based work for reasons such as absence of child care support, social and cultural constraints, lack of qualifications and training, and lack of alternatives. Women also prefer to operate home-based businesses as this provides greater flexibility in managing their domestic and care responsibilities.

As subsistence agriculture decreases and farming becomes more commercialised, women are increasingly using traditional skills to earn cash income. The handicraft and handloom sectors provide low cost, green livelihood opportunities to millions of families. Besides providing an excellent contribution to the economy, handloom and handicraft sectors have untapped potential for poverty alleviation and support in times of agrarian distress. Over 50 per cent of workers in these sectors are women, of whom 71 per cent are not literate (NSDC, 2017)⁵. With limited technical knowledge and business expertise, women stay averse to risk and are unable to scale their businesses. However, the lack of skills and expertise is not the only barrier that stands in the way of women's economic independence.

Globally, women are over-represented in the informal economy and own not more than 25 per cent of formal sector businesses⁶. In most developing countries, including India, the informal economy is the norm. However, changing trends highlight that the formal economy is becoming more and more informal in the absence of labour laws⁷. Within the handicraft and handloom sectors, there are

¹ Changing Structure of Rural Economy of India- Implications for Employment and Growth, Niti Aayog, 2017 (Retrieved from: https://niti.gov.in/writereaddata/files/document_publication/Rural_Economy_DP_final.pdf).

² Women's labour force participation in India: Why is it so low? (Retrieved from: https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---sro-new_delhi/documents/genericdocument/wcms_342357.pdf).

³ Women, Gender and Work, Volume 2, ILO (2017) (Retrieved from: https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_488475.pdf).

⁴ Home-Based Workers in India: Statistics and Trends, Women in Informal Employment Globalizing and Organizing, 2013 (Retrieved from: <https://www.wiego.org/sites/default/files/migrated/publications/files/Raveendran-HBW-India-WIEGO-SB10.pdf>).

⁵ Human Resource and Skill Requirements in the Handlooms and Handicrafts Sector (2013-17, 2017-22), National Skill Development Corporation (Retrieved from <https://nsdcindia.org/sites/default/files/Handlooms-Handicrafts.pdf>).

⁶ Gender Issues in Entrepreneurship. Foundations and Trends in Entrepreneurship, Minniti M, 2009.

⁷ The State of Employment in India, Oxfam India, 2019 (Retrieved from: <https://www.oxfamindia.org/sites/default/files/2019-03/Full%20Report%20-%20Low-Res%20Version%20%28Single%20Pages%29.pdf>).

more women in the home-based industry than in the registered small-scale or cottage units⁸. Given the highly informal and decentralised nature of the handloom and handicrafts sectors, especially pronounced for women, individual artisans have low bargaining power in both procurement and selling activities. These are classified as own-account self-employed workers according to the ILO⁹, and they face barriers which constrain them from accessing global markets including exclusion from factor markets (lack of access to land, credit, training, technology, infrastructure, information on markets and prices); lack of organisational capacity to set up cooperatives or associations; lack of voice and representation; and lack of mobility (cultural restrictions) and time (domestic responsibilities) especially in the case of women. 61.1 per cent of artisanal workers in India are self-employed and work independently on their own account. They are the sole bearers of all the risks associated with the business of procurement, marketing, and sales (Planning Commission, GoI, 2012)¹⁰.

Major institutions providing the inputs-credits, research, technology, and market development are largely centralised and hence, unable to reach the dispersed and majority of the home-based artisans. Traditional barriers and patriarchal attitudes amplify the problems faced by women who despite possessing the skill and capacity, find it hard to navigate the market as entrepreneurs. Furthermore, according to the National Human Rights Commission of India¹¹, a growing trend amongst home-based businesses is being (sub)contracted by firms or intermediaries who connect them to the larger supply chain but also transfer them the risk of fluctuating demand. The ILO's several case studies across globe¹² have found that women resort to carrying out sub-contracted work at home because they are not allowed to go out for procurement of material or product delivery due to limits set on their mobility. WEIGO's study in India found a far higher percentage of men than women in home-based work being own-account. However, due to persistent advocacy efforts by organisations like SEWA Bharat, HomeNet, WEIGO, and others at ILO¹³ as well as India, diverse efforts across the nation have now been initiated by the Ministry of Textiles to sanction artisan clusters and, organise small and individual home-based workers and businesses into collectives and self-help groups, together with civil society organisations so that risks and costs are shared.

Home-based workers in India have more visibility now than in the past, and the government has begun the arduous journey of attempting to organise and formalise these self-employed workers in different sectors. However, even with the integration of gender-targeted schemes, this approach has its deficiencies, due to poor outreach especially in the case of women entrepreneurs who remain isolated as own-account workers or locked in subcontracted work for companies. Additionally, these standard schemes meet the basic needs of women entrepreneurs for survival, but fail to recognise the varying but critical needs that could transform home-based businesses across the diverse market landscape in India. A growing trend in the business arena is the use of 'cluster analysis' to

⁸ Indian textile & Handicrafts industry is the largest employment generator after agri (<https://www.assochem.org/newsdetail.php?id=6576>).

⁹ Women, Gender and Work, Volume 2, ILO (2017).

¹⁰ Report of the Steering Committee on Handlooms and Handicrafts Constituted for the Twelfth Five Year Plan (2012 – 2017) Planning Commission, GoI., 2012 (Retrieved from: http://handicrafts.nic.in/CmsUpload/22342016043422str_handloom0305.pdf).

¹¹ Rights of Home-based Workers, National Human Rights Commission, 2006 (Retrieved from: <http://www.ihrc.in/wp-content/uploads/2018/06/Home-based.pdf>).

¹² Home-based workers: Decent work and social protection through organization and empowerment, ILO (2015) (Retrieved from: https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilo-jakarta/documents/publication/wcms_436853.pdf).

¹³ Home-Based Workers in India: Statistics and Trends, Women in Informal Employment Globalizing and Organizing, 2013.

recognise homogenous groups known as “customer archetypes” or “personas.” While companies use this tool for targeted marketing, the tool has also proved to be powerful in the policy sphere¹⁴ and entrepreneurship research¹⁵ to tailor interventions for optimum outcomes.

Since the handicraft and handloom sectors in India are dominated by women-led enterprises working as home-based businesses, they often lack worker rights, opportunities of growth, access to credit products, and proper access to markets due to restricted mobility. There is tremendous scope to formalise these women-led home-based businesses, including access to safety nets and employment generation through growth. Given the important place this sector holds when it comes to offering employment opportunities to women while leveraging their traditional skillsets, this study examines women’s economic independence through a sectoral lens in the states of Rajasthan (private-sector dominated) and Tamil Nadu (public sector dominated). The prevalence of women in the handicraft and handloom sectors garner the need to see how women fare in terms of markers of empowerment – income, aspiration, decision making, and risk-taking ability. It is essential to understand the role of market access and mobility as a precursor to enterprise readiness as well.

Key objectives of this study are:

- Draw a sectoral landscape of market linkages for women-led home-based businesses by:
 - Mapping market access by conducting a supply-chain analysis of the sectoral business activities to understand the key market access constraints for home-based women-led businesses.
 - Identifying models of best practices to increase market access for entrepreneurs and home-based businesses (HBBs) in Tamil Nadu and Rajasthan.
- Gauge enterprise readiness of women to sustain, scale, and expand current business portfolio on economic as well as social, cultural, and behavioural parameters.
- Design a multi-dimensional index, Women Business Readiness Scorecard – Handloom and Handicrafts Sector (WBRS – HHS). This scorecard will help evaluate the current sectoral performance as well as identify the key constraints and high-performance areas.

¹⁴ OECD (1999), *Boosting Innovation: The Cluster Approach*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264174399-en>.

¹⁵ Crum, Michael. (2015). *The Use of Cluster Analysis in Entrepreneurship Research: Review of Past Research and Future Directions*.



RESEARCH DESIGN AND METHODOLOGY

Image: Ria Dutta

In order to better understand the key challenges and barriers faced by the women leading home-based businesses in the handicraft and handloom sectors, the study sought to answer the following key research questions:

- What markets do women-led businesses in the handicraft and handlooms sector have access to in Tamil Nadu and Rajasthan?
- What are some of the institutional best practices to increase market linkage for home-based women entrepreneurs in Tamil Nadu and Rajasthan?
- What are the bottlenecks faced by home-based women entrepreneurs in terms of accessing the markets in Tamil Nadu and Rajasthan?
- How can enterprise readiness be determined for home-based women entrepreneurs in the handicraft and handloom sectors?

Methodology

The study used a mixed-methods approach, including, integrative desk reviews, quantitative methods, and case study methods to answer the key research questions above on market access and enterprise readiness. The quantitative questionnaire can be referred to in Annexure A. This report starts by detailing out the landscape of the home-based businesses within the handicraft and handloom sector in Rajasthan and Tamil Nadu under Section 1. It elaborates on the type of home-based women entrepreneurs in the informal segment based on the institutional affiliations, by further giving a state-wise view of the study sample to set the foundation of the report. This section covers secondary literature and basic study sample related information.

The next section presents the state-wise analysis of markets and constraints, by covering Rajasthan in Section 2.1 and Tamil Nadu in Section 2.2. This section first illustrates the characteristics of a female home-based entrepreneur and then highlights the type of personas that emerged from data. The study deep dives into the market landscape by elaborating on market access, market linkage, mobility, and constraints of time, agency, social security nets, and skills. Please note, this report does not cover the financial access and constraints in detail because the next part of the study will exclusively focus on those aspects.

The state-wise infographic in Section 2 provides a snapshot of the key characteristics of respondents and their businesses. The next section attempts to categorise the 800 entrepreneurs into personas that emerged from the dataset. This section covers the market access and enterprise readiness among the women entrepreneurs in the handicraft and handloom sectors by mapping market access, and identifying the best practices/case studies in Tamil Nadu and Rajasthan. Some of the key questions addressed in this section include: where do entrepreneurs source the raw materials for production? How do they communicate business-related information to their customers, vendors, and other businesses? How long is the travel time to sell their products?

Social and cultural norms across India restrict women's mobility affecting their participation in education and labour force; the next section comments on the extent to which mobility dictates market access. The last sections on Business Skills and Agency aim to provide an insight into the skill-sets and capabilities of respondents. Section 2 highlights the constraints faced by women in terms of time use with the burden of unpaid caregiving work that limits their engagement in market activities. How much wage/production are women losing with each hour spent on other household activities/chores? This section aims at understanding how this is a race against time scenario for home-based women entrepreneurs. Scheme penetration by the state determines the visibility of women to access welfare schemes that help them settle for the high cost production (through rebates and subsidies), access finance, manage risks (through life insurance and pension schemes), and undertake training.

Further, section 3 describes the supply chain for both states in a combined manner due to stark similarities based on the type of entrepreneur. The section also uses a process flow and summary to visualise how women tap the supply chain, based on the type of account ownership.

Gauging business readiness in the informal sector is the key to enable policy support in terms of identifying best practices, creating market linkages, and targeting skilling initiatives as it directly links to enterprise performance. Section 4 leads to the Business Readiness Scorecard developed using Multiple Correspondence Analysis (MCA) as can be seen in Annexure C. This scorecard can help other states identify key constraints for the women entrepreneurs to expand their business. This scorecard methodology can also be adopted by stakeholders of different enterprise sectors to identify sector-specific key constraints inhibiting sustainable growth of women entrepreneurs. The scorecard assesses the readiness of women entrepreneurs, not just from the business aspect but on a holistic perspective - on their ability and preparedness to sustain, scale, and expand their current business portfolio across economic as well as social, cultural, and behavioural parameters. Section 5 provides insights on what a successful female-led home-based business does look like in our sample. Lastly, in section 6, the authors provide policy recommendations for enabling women entrepreneurs in the informal handicraft and handloom sector.

Sampling Strategy

- Key informant interviews were conducted with the relevant central and state government offices pertaining to handicraft and handloom, and with prominent private aggregators and NGOs in both states. This was done to:
 - understand the landscape differences in the two states,
 - Identify craft clusters where women are prominent, and
 - Identify partners to facilitate respondent recruitment.
-

Table 1: Sampling frame by state and sector

State	Handicrafts	Handloom	Total
Rajasthan	200	200	400
Tamil Nadu	200	200	400
TOTAL	400	400	800

Systematic random sampling was used to reach 800 women-led businesses within craft clusters in Rajasthan and Tamil Nadu. The research team acknowledges that there exists some sampling bias due to the reliance on partner organisations for respondent recruitment. However, the sampling strategy closely followed the institutional set up of how the handicraft and handloom sectors are spread out within these states, and may therefore, provide an accurate picture of the on-ground reality in each sector and state. The survey was administered in the districts of Jaipur, Sikar, Kota, and Udaipur in Rajasthan; and Erode, Coimbatore, Kanchipuram, and Madurai in Tamil Nadu. A detailed explanation of the sampling strategy is provided in Annexure B.

Rajasthan and Tamil Nadu: Craft Clusters Surveyed

Rajasthan sector

Handicraft
Handloom

Rajasthan Handloom

Saree
Durries, rugs, mats

Rajasthan Handicraft

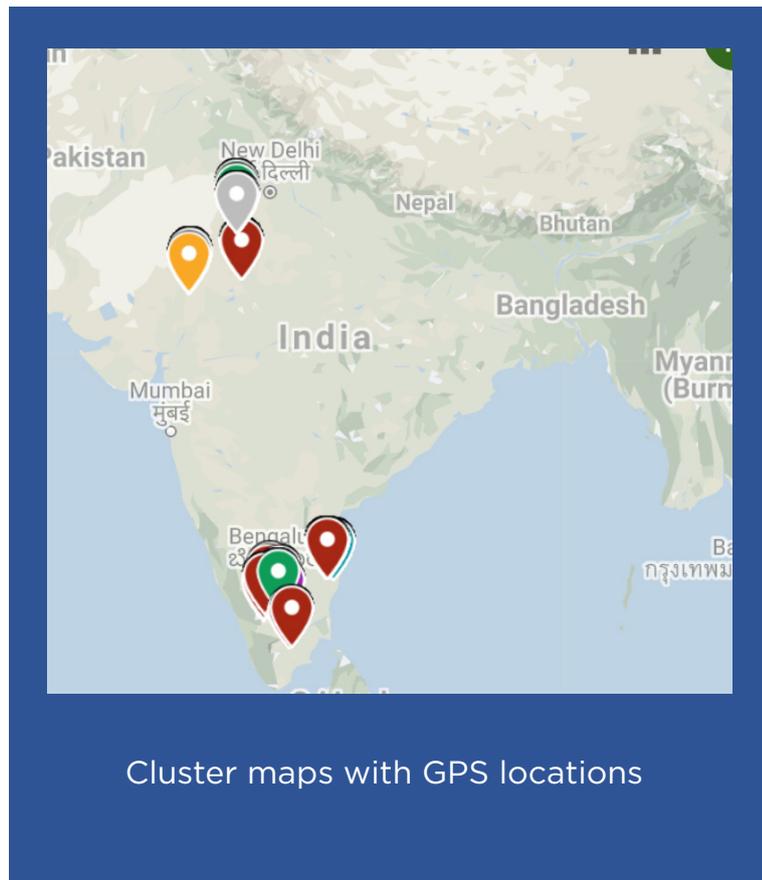
Bangle making
Zardosi
Applique
Embroidery
Jewellery (Meenakari)
Fabric Painting
Tailoring
Tie & dye
Pottery

Tamil nadu Handicraft

Toys (clay & paper mache)
Grass, leaf, reed, fiber
Plastic mats & baskets
Embroidery
Tailoring
Pottery
Cane and bamboo
Applique
Tie & dye
Fabric Painting

Tamil nadu Handloom

Saree
Durries, rugs, mats
Towel, napkin, duster, gamcha
Angavastram, dhoti, sarong, lungi
Shawls, stole, scarf, muffler





01

THE
LANDSCAPE

The Indian handicraft and handloom sectors are one of the oldest and largest cottage industries in India with a long tradition of excellent craftsmanship, representing and preserving the vibrant Indian culture. The sectors combined are an INR 243 billion industry and contribute nearly INR 100 billion annually in the export earnings¹⁶. These sectors, under the Ministry of Textiles, are recognised as the largest employment generators after agriculture employing 7.3 million and 4.33 million people, respectively. The operations in both these sectors are primarily home-based, without hired workers (own-account entrepreneurs), and involve a large number of artisans from rural and semi-urban areas. Of the total artisans engaged in handicrafts, 47.4 per cent are women, out of which 71 per cent are illiterate. Likewise, in the handloom sector traditionally, women account for 78 per cent of workers engaged in pre-loom and post-loom activities. A majority of handlooms workers have not received any form of education¹⁷. While the handicraft and handloom sectors are key employers of women, only 22 per cent of establishments are owned by females¹⁸.

The Indian handicraft and handloom sectors are highly fragmented, unorganised, and informal. These characteristics are further exacerbated in the women-owned home-based businesses, which lack mobility and access to social networks. As a result, these enterprises are not fully integrated into the mainstream economy and their contribution remains invisible. For the women who operate their business on their own account, the benefits arising from economies of scale are absent, which hampers their ability to buy quality raw material at reasonable prices. The scope of their sales is largely dependent on the scale and connectivity of the local market.

However, the emergence of subcontracting of artisans at piece-rate by companies has been the current trend in these two sectors. With the globalisation of supply chains, increased decentralisation of production, and growth of the informal economy, home-based businesses have emerged as the final link in a global or national chain of subcontractors.¹⁹ The handicraft and handloom sectors in India are no exception to this trend. The informal nature of home-based businesses in these sectors makes it possible for contracting companies to reduce their costs by taking advantage of low overheads and flexibility of informal structures.

Several policy initiatives have attempted to organise and formalise the handicraft and handloom sectors, to address these challenges and improve support since the 1970s focusing on preservation of tradition and later focusing on export. Mobilising artisans and weavers into Self Help Groups (SHGs) and cooperatives, and training the groups on various aspects of forming and running collective enterprises for self-sustainability of artisans have been integral pillars of these efforts. However, the effort to mobilise artisans has had mixed results across the country.

Our research takes the cases of Rajasthan and Tamil Nadu to explore the challenges and opportunities of female home-based entrepreneurs operating in the piece-rate and own-account organisational set-ups.

¹⁶ <https://www.thehindubusinessline.com/blink/work/this-gdp-growth-can-be-handcrafted/article21300772.ece1>

¹⁷ Human Resource and Skill Requirements in the Handlooms and Handicrafts Sector, National Skill Development Corporation (NSDC), 2015 (Retrieved from: <https://nsdcindia.org/sites/default/files/Handlooms-Handicrafts.pdf>).

¹⁸ Sixth Economic Census 2013-14, (Retrieved from: <http://www.icssrdataservice.in/datarepository/index.php/catalog/146/study-description>).

¹⁹ Sinha, 2019 (Retrieved from: <https://scroll.in/article/932355/with-supreme-court-order-on-pensions-4-crore-invisible-home-base-workers-move-closer-to-recognition>).

Rajasthan has a strong presence of non-profit and for-profit subcontracting aggregators, and Tamil Nadu receives considerable support from the state government in setting up and organising small-scale businesses. The following sections provide granular insights on market access, barriers, and opportunities of female home-based entrepreneurs in the cottage industries of Rajasthan and Tamil Nadu.

Rajasthan

Rajasthan has a historic precedence in the informal²⁰ manufacturing sector. Craftsmanship formerly patronised by the royal households find relevance in the contemporary markets which are dominated by private companies and Self-Help Groups (SHGs). The manufacturing sector is the second-highest contributor (30 per cent) to the Gross State Domestic Product (GSDP) of Rajasthan and accrues the second highest source of state revenue only to agriculture²¹. Within the manufacturing sector, rural and handicraft industries help in generating employment but do not give a significant boost to the manufacturing sector as a whole. However, the handicraft and handloom sectors account for about 9 per cent of Rajasthan's yearly exports.²² Famous for its craftsmanship, demand for Rajasthani products exist at local, domestic, and local levels. However, the quality and consistency of inputs as well as low capacity for product design and marketing have been key impediments to artisans in realising the market potential of their products. The government in Rajasthan has made efforts to bolster market access by organising haats and melas for local artisans. But the one-time market linkage cannot be sustained post these events, and are only benefitted by a handful of artisans. Aggregator companies like Jaipur Rugs, Fabindia, and Rangasutra, who source from Rajasthan, have been able to tap into and expand the demand for hand-crafted products both domestically and abroad, while simultaneously aggregating the quality of raw materials and products. The success of these aggregator businesses is an indicator of the demand potential for hand-crafted products from Rajasthan.

Craft clusters in Rajasthan have developed organically over time. Craftsmanship by product and process are found to be specific to districts, villages, and/or communities. Production of handloom and handicrafts goods like Bagru and Sangneri hand block prints, blue pottery of Jaipur, kathputlis, kota dori sarees, molela clay work, and thawa art work have been passed on from centuries. However, cash and labour-intensive crafts are spaces which are occupied by men like phad paintings, jooti making, stone and marble carving. Women are engaged in sub-sectors which do not make as much profits, like applique and bangle making, and require women to use their nimble fingers. Even in these crafts, men play consequential roles in supply and value chains, and occupy cash intensive positions as opposed to women.

²⁰ The informal sector comprises establishments with 10 workers or less that use electricity, or 20 workers or less without electricity.

²¹ Rajasthan Budget Analysis (2019-2020), PRS Legislative.

²² http://dcmsme.gov.in/dips/state_wise_dips/State%20Industrial%20Profile%202014-15_rajistan.pdf

The sectoral landscape in Rajasthan is dominated by private players and SHGs. Our sample of 400 female-led businesses in Rajasthan followed the sectorial landscape in the state. 95 per cent of respondents have market access through contractual companies and/or SHGs. The institutional affiliation by sector in Rajasthan is illustrated in Figure 2. Sale of products at local markets, melas/haats, and online platforms is minimal across sectors.

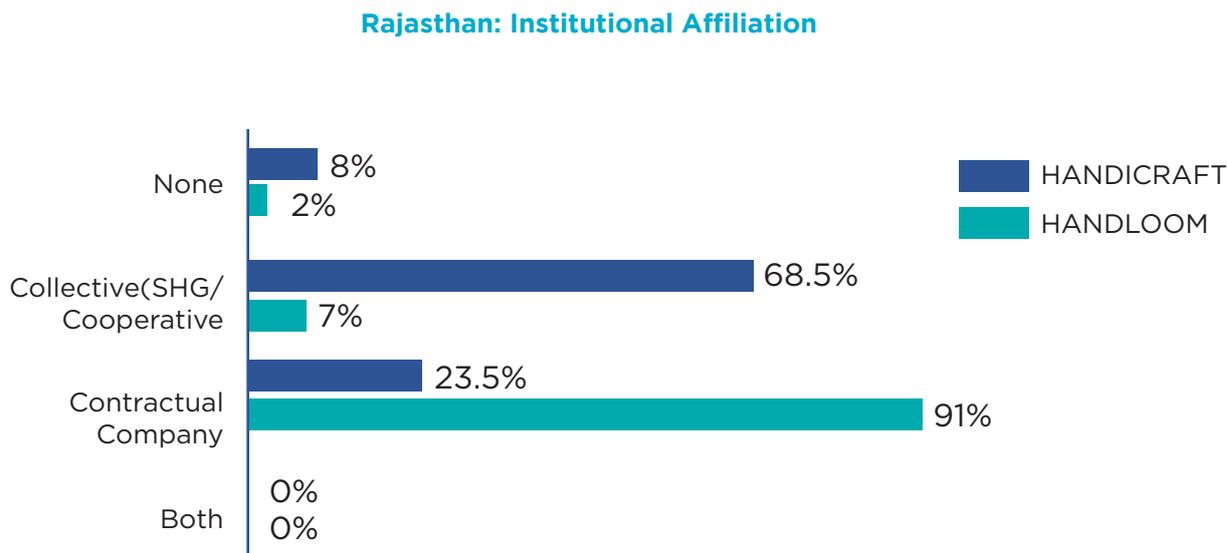
Female dominated handicraft sub-sectors with low premiums operate primarily through SHGs supported by NGOs. Certain products like bangles and zardosi are commissioned at piece-rate by contractual companies. The surveyed handicraft businesses tend to be younger – 8 years old on average. In Jaipur, 20 female entrepreneurs were interviewed who were members of SEWA Bharat²³. SEWA Bharat is the world’s largest trade union of informal workers. Within the handicraft sector, SEWA primarily is engaged in the trades of bangle-makers in Jaipur, and tie and dye artisans in Jodhpur.

Female weavers are prominent in handloom trades of rugs and sarees. Weaver women entrepreneurs interviewed for the study in Rajasthan were based out in the rural villages of Dhanota, Tigariya and Aspura as well as Kota, renowned for the kota doria sarees. Both rugs and sarees are handloom products of high market value and reach. These businesses tend to be part of supply chains beyond the local markets, both linked and managed by contractual companies.

On average, female entrepreneurs in Rajasthan were younger with no or low levels of literacy. 61 per cent of the women surveyed were 35 years or younger, and 37.75 per cent had no formal schooling. Additionally, 73.5 per cent of these home-based businesses started out of need – as primary or secondary source of income for their households, or due to lack of employment opportunities. This sheds light into Rajasthan’s gender disparity gap in education whereby families do not invest in a girls’ education and women have to resort to self-employment in order to support their families. This trend is especially stark amongst female weavers who are 35 years old on an average and have been operating handloom businesses for an average of 16 years.

Handicraft and handloom businesses are supplementary sources of incomes for women leading home-based businesses in Rajasthan. 94.75 per cent belonged to households with two or more earners including (themselves). On average, female entrepreneurs live in households with a monthly income of INR 14,469 with their home-based business contributing to a third of the household income. Together with the market potential for handicrafts and handloom products from Rajasthan, a female entrepreneur in these sectors has tremendous potential to expand her business and contribute to her family’s livelihood.

²³ SEWA Bharat is the world’s largest trade union of informal workers, all women, and has been instrumental in achieving higher wages and earnings and better working conditions for home-based workers in many industries. SEWA is one of the first organizations in the world to draw attention to home-based workers - both nationally and globally. SEWA had been working in Rajasthan since 2001 in the districts of Ajmer, Alwar, Bikaner, Dungarpur, Jaipur and Jodhpur. <http://sewabharat.org/across-india/sewa-in-rajasthan/> https://issuu.com/sainit/docs/home_based_workers

Figure 2: Institutional affiliation of respondents in Rajasthan

Tamil Nadu

Traditional crafts in Tamil Nadu developed over thousands of years are interwoven and cemented on social constructs of caste and gender. Crafts pertaining to metal work, stone carving, and woodwork have always been the speciality of men. These crafts demand more physical strength but also fetch per piece premiums in the market. Women are involved in intricate crafts of fabric like embroidery and stitching. There also exists an overlap of crafts where both men and women are seen such as leather, pottery, handloom, and weaving from bamboo, cane, and reed. But the occupancy in these supply chains is highly gendered with managerial and distribution roles being dominated by men; and women being limited to only processing and manufacturing roles.

Government presence as an enabler and facilitator for setting up businesses is very prominent across Tamil Nadu. This has helped some crafts survive competition from factory-made cheaper alternatives. However, market access remains a bottleneck for micro-businesses across the sectors, but is especially pronounced for women who are operating businesses from their homes, placing doubts on sustainability and transformational growth of women-led micro-businesses. The impact of market access and linkage will be explored through 400 female home-based entrepreneurs in handicrafts and handloom sectors in Tamil Nadu.

Handloom products from Tamil Nadu have made its place not just in the state but the entire country, and is helping the sector survive stiff competition from burgeoning power looms. Handlooms generated INR 8520 million in the state in 2017.²⁴ But more importantly, the handloom sector provides gainful employment. The handloom sector is geographically extensive, integrated, and institutionalised owing to efforts that began as early as 1935 to curb unemployment arising from the advent of powerlooms²⁵. According to the 'All India Handloom Census 2019-20²⁶,' Tamil Nadu has the fourth highest number of weavers in the country with 3.1 lakh weavers spread across 90 clusters in the state. Weavers are found in every district and many weaver communities have aggregated and evolved into brands (such as the Kanchipuram silk and Coimbatore cotton sarees). Some have even gone to obtain their place in the Geographical Indicator List²⁷. The state government is the focal agency overseeing the Cooperative Societies that help weavers organise themselves for optimal market outcomes. With the organisations that started pre-independence of India, 56 per cent of weavers in Tamil Nadu today are members of Cooperatives²⁸.

In our sample, 67 per cent of female weavers were affiliated with a cooperative or SHG, and 26 per cent with contractual companies as illustrated in Figure 3. With the handloom sector in Tamil Nadu being organised for decades, 43 per cent even had business licenses under their names. The consistent demand for handwoven sarees from Tamil Nadu extends pan India and even beyond. The supply chain is highly developed with involvement of merchants, retailers, and aggregators. On an average, profits from the female-owned handloom businesses make almost 40 per cent of the household's income. Most female weavers are supplementing their family's income with 96 per cent belonging to households with at least two or more earners.

The development of the handicraft sector in Tamil Nadu is largely dependent on the craft type. Organisation and delivery of support by the government has been diluted because of the high number of sub-sectors and localised demand for most handicraft products made by women. Supply and value chain development by private companies and the government has been focused on male dominated, high value, and export-oriented crafts such stone carving, wood carving, metal work, and leather. Handicrafts exist where women are prominent but in fringes, limited to local markets both in terms of product demand and market access. Although most female entrepreneurs were operating their businesses to supplement their family's income, they did not make any profits on average. The government in recent years has been trying to develop artisan clusters through SHGs and provide skill training, but these collective enterprises are still at the nascent stage where even the supply side factors are underdeveloped let alone the market placement. From the female handicraft entrepreneurs interviewed for the study, 22.5 per cent have SHG and 21 per cent have contractual company affiliations. An overwhelming 57 per cent neither highlighted lack of market access beyond local markets, nor

²⁴ Conserving TN's handloom legacy, 2018 (Retrieved from: <https://www.dtnext.in/News/TamilNadu/2018/06/03055827/1074684/Conserving-TNs-handloom-legacy.vpf>).

²⁵ Co-optex (Retrieved from: https://cooptex.gov.in/about_us).

²⁶ Handloom Census 2019-20 (Retrieved from: <http://handlooms.nic.in/writereaddata/3736.pdf>).

²⁷ To protect imitation of products by others, following handloom products of Tamil Nadu have been registered under Geographical Indications Act: Kanchipuram Silk, Madurai Silk, Kawai Cara Cotton, Arani Silk, Salem Venpattu Dhoti, and Bhavani Jamakkalam. Development of Handloom Weavers in Tamil Nadu, 2019 (Retrieved from: <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1595111>).

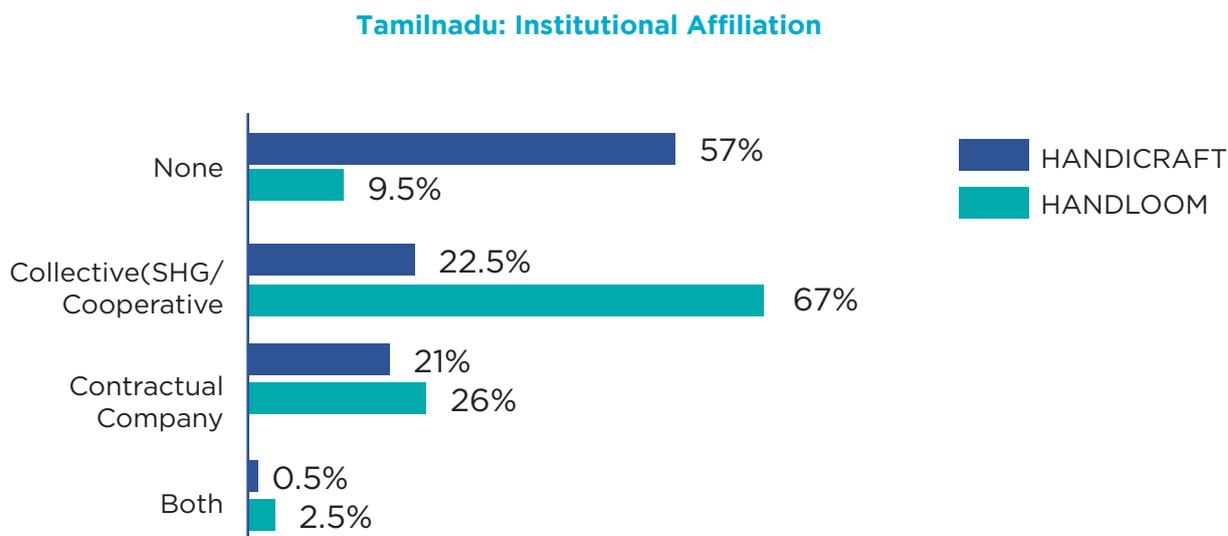
²⁸ Handloom Census 2019-20

the nascence of supply chain development. Only products with universal market demand, such as baskets and mats, have vested connections to contractual companies that link home-based businesses forward to larger supply chains.

Across both sectors in Tamil Nadu, sampled female entrepreneurs were middle-aged with 68 per cent falling between 35-54 years with most having completed at least primary school. Only 11.5 per cent of respondents in Tamil Nadu had no formal schooling. However, the trend of inheriting businesses and weaving skills from elders was observed within the handloom sector in Tamil Nadu. 42 per cent of the surveyed weavers had inherited their handloom business therefore, increasing the average age of business to 21 years. This also resulted in a higher number of weavers dropping out of school (45 percent) before completing primary school in comparison to women operating handicraft businesses (26 percent).

The sectoral differences in Tamil Nadu aid in identifying market and business models that work for female-led home-based business, and provide insights into possible policy and market interventions for the handicrafts sector where some crafts find market access through SHGs and contractual companies but are largely limited to local markets; and the handloom sector where weavers have market linkage through cooperatives and contractual companies.

Figure 3: Institutional affiliation of respondents in Tamil Nadu





02

STATE-WISE ANALYSIS OF MARKET ON AND CONSTRAINTS

Image: Ria Dutta

2.1 Rajasthan

Characteristics of Female Home-based Entrepreneur in Rajasthan

Demography

Age

Average age = 35 years

18-34	50.0%
35-54	43.75%
55+	6.25%

Marital status

Never married	8.25%
Married	84.75%
Divorced/ Widowed	7.0%

Average household size = 5.19 members

Household size

1 person	1.0%
2 people	4.50%
3 people	9.50%
4+ people	85.0%

Average monthly household income = INR 14,500

Monthly household Income

<10k	41.5%
10k-25k	51.0%
25k-50k	5.75%
50k and above	1.75%

Table 2: Sector-wise Business Characteristics

	Handicrafts	Handloom
Average business age	7.77 years	15.49 years
Are registered ²⁹	77.5%	99%
Own-account enterprises	89.5%	94%
Have unpaid family help	10.5%	5.5%
Average investment ³⁰	NIL ³¹	INR 9,479 ³²
Average household monthly income ³³	INR 15,263	INR 13,675
Average monthly revenue	INR 5,459	INR 6,263
Monthly expenditure	INR 1,377	INR 330

²⁹ Artisans who had only one customer (contractual company) and if that contractual company was registered with the GOI, have been categorised as having a registered business. The slight difference between registration and licensing was followed in Rajasthan to differentiate if the individual artisans were selling products which were recognised by the government or not. Licensing would give the artisans the discretion to diversify and independently operate in the market. They were categorised as registered with the Development Commission (Rajasthan) under the Ministry of Textiles.

³⁰ Weighted average. Excluded 3 respondents who either refused or did not know.

³¹ 89.5% of data reported refused or don't know.

³² 28% of data reported refused or don't know.

³³ Weighted average.

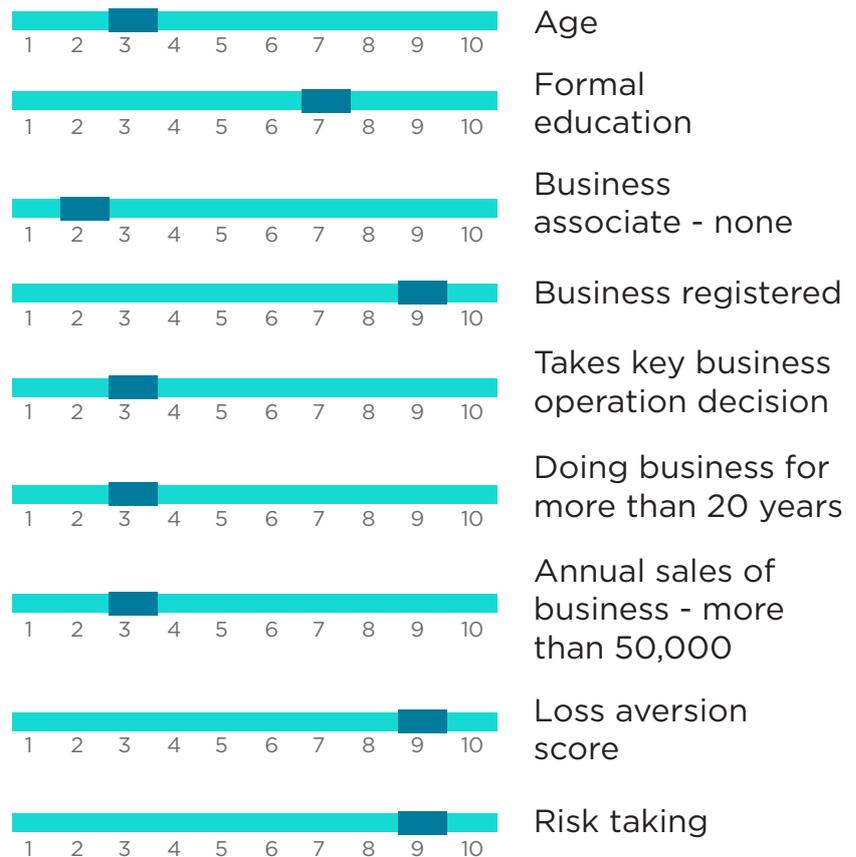
Personas

Hierarchical clustering³⁴ was used to identify personas with similar characteristics from our data. While clustering, three similar personas emerged across the two states. The performance of these personas on some criteria varies in Tamil Nadu and Rajasthan due to the market and sectoral differences in these states. These three personas are the Millennial Entrepreneur, the Striving Entrepreneur, and the Latent Entrepreneur.

The personas were measured on a scale of 1-10. The study captured the risk and loss taking preference³⁵ of the respondents by playing a game with hypothetical scenarios. Two situations with monetary incentives were presented to understand risk tolerance/averseness and loss tolerance/averseness of the respondents. This exercise was used to understand how the participants may respond to stressful or risky business decisions.

The Millennial Entrepreneur

- Educated, relatively young (upto 30 years of age) and works solely without relying on an overarching institution like a contractual company or an SHG.
- Reluctant to make decisions for the business or often seeks advice.
- Risk and loss tolerant, and have help for household chores

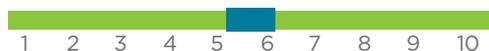


³⁴ The technique of hierarchical clustering is an algorithm that groups similar objects into groups called clusters where each cluster is distinct from each other, and the respondents within each cluster are broadly similar to each other.

³⁵ Risk aversion is the tendency of individuals, who, when exposed to uncertainty, attempt to lower that uncertainty. It is the hesitation of a person to agree to a situation with an unknown payoff rather than another situation with a more predictable payoff but possibly lower expected payoff. Risk averse individuals, with risk score 1, are those who do not like to take risk. Risk tolerant individuals, with risk score 8, are those who are willing to take risk in the tradeoff for higher returns. Loss aversion refers to people's tendency to prefer avoiding losses to acquiring equivalent gains. For example, it is better to not lose INR 100 than to find INR 100. What distinguishes loss aversion from risk aversion is that the utility of a monetary payoff depends on what was previously experienced or was expected to happen. Loss averse individuals, with a loss score 1, are those who avoid loss. Loss tolerant individuals, with a loss score 8, are those who are willing to take a loss in the trade-off for higher returns.

The Striving Entrepreneur

- Typically in her forties, and makes all the business and financial decisions on her own.
- Keeps a regular inventory of stock and her business is mature.
- Hesitant to take risks and is loss averse, and does not have anyone to help with household chores.



Age



Formal education



Business associate - none



Business registered



Takes key business operation decision



Doing business for more than 20 years



Annual sales of business - more than 50,000



Loss aversion score



Risk taking

The Latent Entrepreneur

- Engaged in the business for more than 20 years and has over Rs. 1 lakh annual sales from her business.
- Takes the onus of making decisions regarding business operations but relies heavily on an external source of decision-making for financial issues.
- Has a high risk and loss tolerance, and plans ahead by keeping an inventory of stock.



Market Landscape

Market Access

Private aggregators and intermediaries operating in Rajasthan have tried to mitigate the cultural and mobility restrictions imposed on women by establishing a model and social network which allows entrepreneurs to operate under such circumstances. Piece-rate entrepreneurs in Rajasthan work with aggregators and private companies who provide all raw materials and take the finished products from the home premises of the entrepreneurs which enables doorstep entrepreneurship. This reduces the time, effort and money that women need for marketing their finished goods, and conforms with prevailing social norms and mobility constraints.

In comparison, a female entrepreneur who has no affiliation to any contractual company or SHGs, typically has to source all the raw materials, arrange credit, and expenses like carriage inward and outward, and marketing. . In this setup mobility constraints are taken care of by the aggregators, and the task of finding a market for their finished products is looked after by the private companies. This business model is prevalent in the handloom sector. While conducting home-based business with a private company is a preferred model for women in Rajasthan, it restricts the pathway for business expansion and revenue generation. Home-based entrepreneurs rely heavily on a middle man or point of contact and have limited decision-making power for business and financial operations.

Restrictions on female freedom of movement have significant effects on the likelihood of women becoming ‘high aspiration entrepreneurs.’ Travel in India can be restrictive and unpredictable, and women face more significant constraints in geographic mobility imposed by safety concerns and social norms.

Handicraft sector is unorganised and has 17 per cent penetration of contractual companies. This paves the way for own account entrepreneurs to emerge in the handicraft sector. Prevalence of collective business models like SHGs and cooperative societies indicates that the market landscape is more diversified in comparison to the handloom sector. Eight per cent of women artisans operate independently, accruing raw materials and selling their finished goods on their own. Own-account entrepreneurs do not have the bandwidth to employ more people, and neither do they have any institutional affiliation which will help in market access. The trend of own-account entrepreneurship is prevalent in the handicraft sector since it is more unorganised in comparison to the handloom sector and the bandwidth to hire employees is limited.

Figure 4: Prominent supply channels by sector

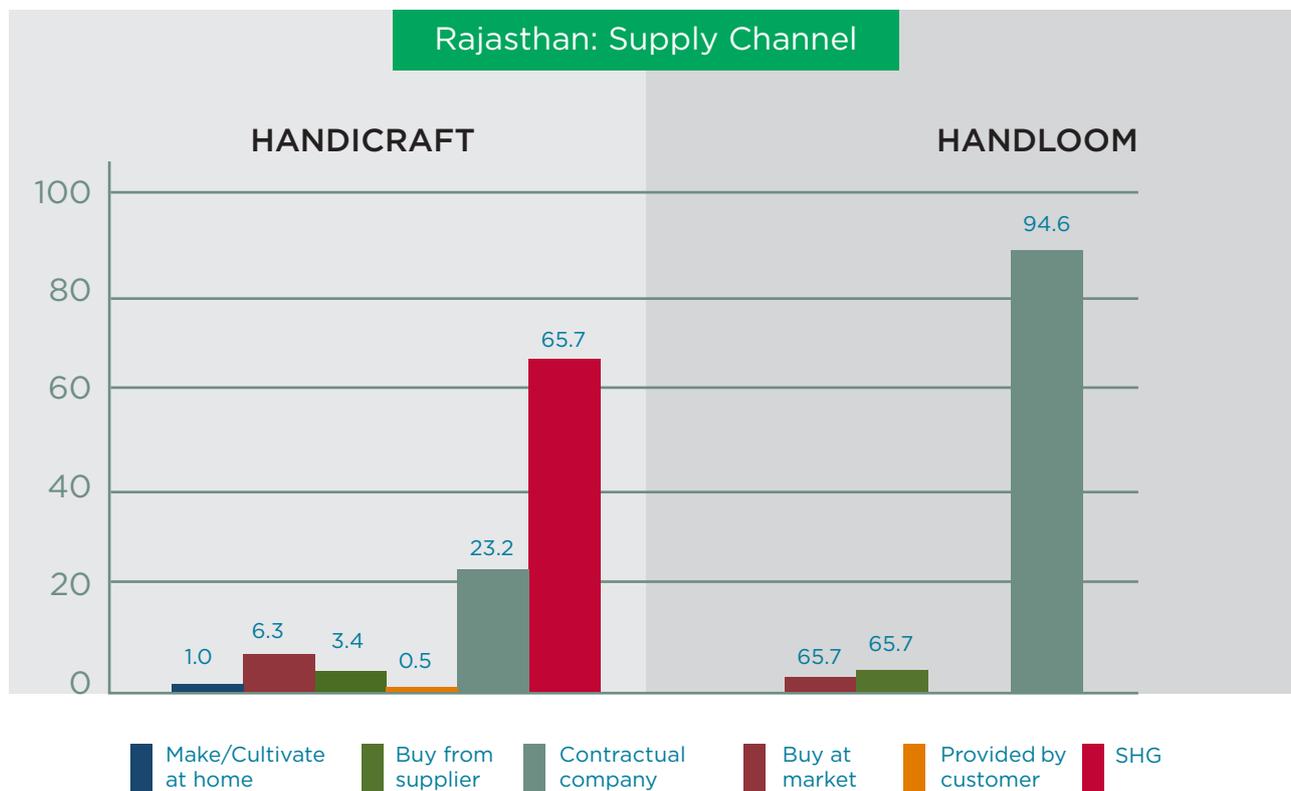
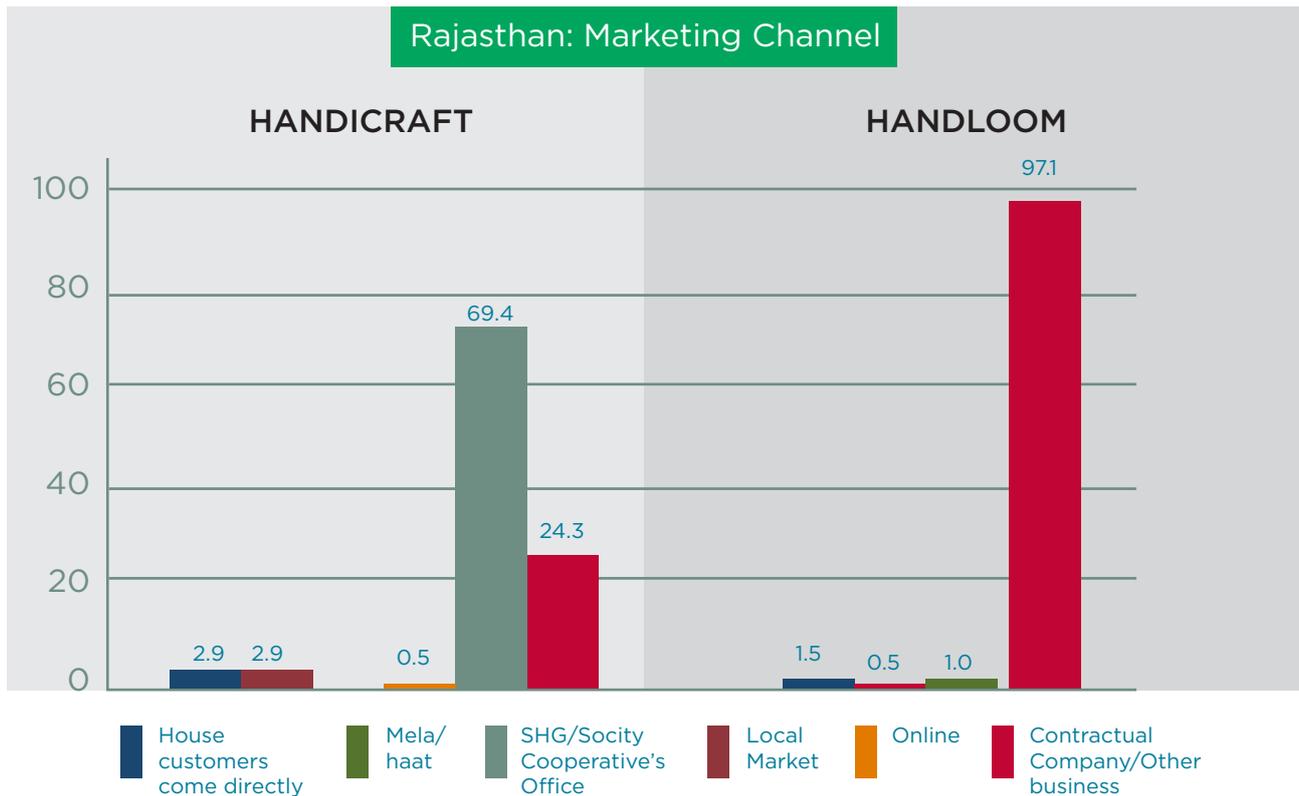


Figure 5: Prominent marketing channels by sector

Market Linkage

From the 400 respondents in Rajasthan, more than 90 per cent of them are affiliated with a contractual company or an SHG. One of the benefits of working with such institutions is that sourcing raw materials for production becomes easier, since they provide the raw materials and necessary utilities. This factory-less supply chain covers up for the mobility constraints faced by women and facilitates the production process. There is a flip side to working with an SHG/contractual company. Due to a tied procurement and sale process and a locked supply chain, businesses are more vulnerable to economic and market shock.

On the contrary, in the handicraft sector, the SHG ensures a little less insulation from market shocks and higher bargaining power when it comes to prices. While there are benefits to such a business model, women are kept out of the marketing and price-setting process. After the production process, the finished goods are collected by the aggregator/SHG at a price predetermined by the contractor. In the handicraft sector, besides collectives and contractual companies being important in the selling channel, 23 per cent of the sale of the finished goods happens from home premises. With limited avenues to market the products and expand their customer base the communication channel, for business-related information to vendors/customers, happens either through word of mouth or through the contractual company.



Rugs to Riches

Women in India own and run far fewer enterprises than in any other countries. This trend is confirmed by the steady decline in women's labour force participation rates in India. Conventional social and cultural norms result in a skewed burden of care responsibilities and often restrict women's mobility as well.

Home-based work provides the flexibility to women entrepreneurs to juggle work and home care duties. They can manage domestic and caregiving

responsibilities while also trying to run a business and earn a sustainable livelihood in the vicinity of home premises.

Yet women in small pockets have managed to spend a part of their day running a home-based nano- enterprise to earn their livelihoods. Business models of private companies have adapted to socio-cultural restrictions and homecare duties that need to be taken care of by women.

Background

Established in 1978, Jaipur Rugs is one of India's leading manufacturers and exporters of hand-knotted rugs. The social enterprise works with a network of 40,000 artisans, spread across 600 villages in remote regions of India. It has a global supply chain which is manned from the US office. The US office facilitates linkages with global supply chains, and facilitates market access.

Facilitating Sustainable Livelihoods

The model is a use case for doorstep entrepreneurship, which provides sustainable livelihood opportunities and skill training to women in rural India.

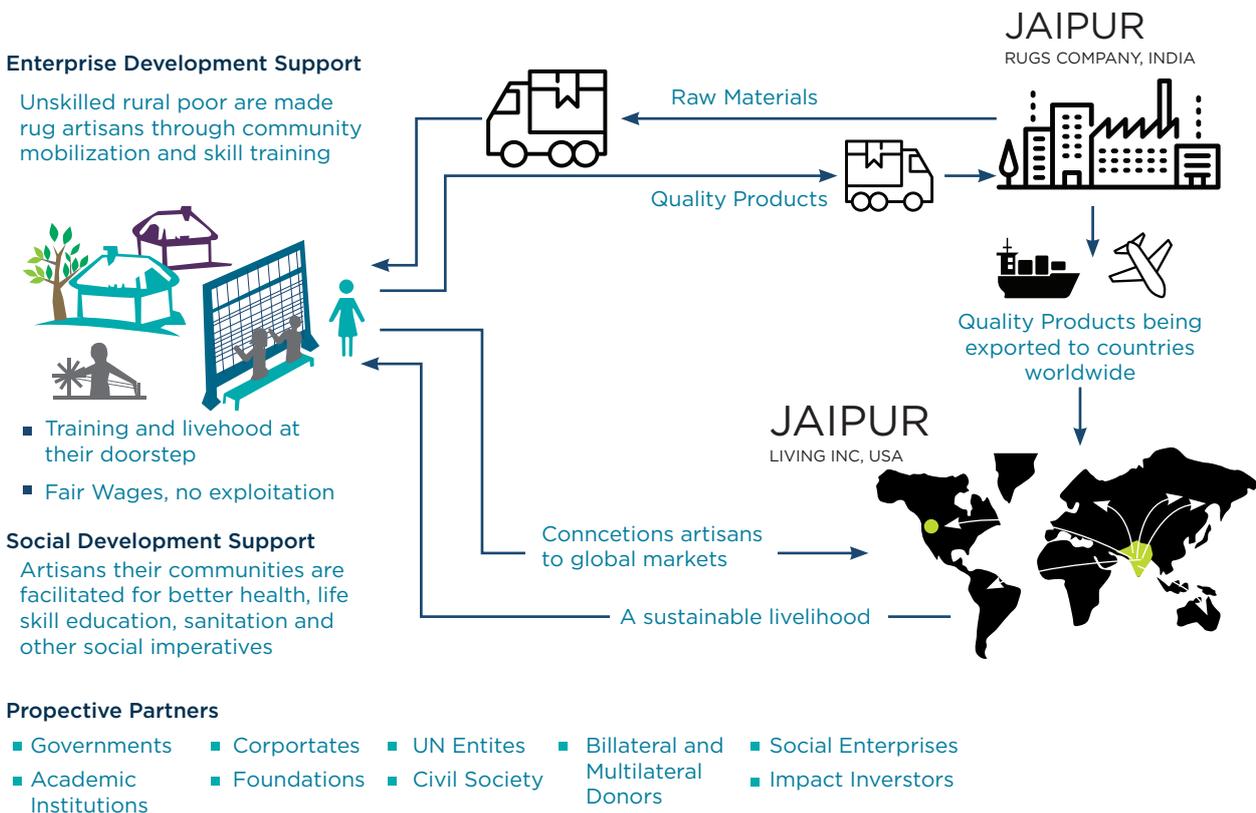
The company installs looms at individual artisan's household or in the community. Villages like Aspura, Tigariya and Dhanota lack good mobility options but have skilled women weavers who rely solely on the company's logistical support. Agriculture and rock construction related businesses are the predominant labour choice in the area. However, reliance on agriculture does not guarantee a steady flow of income. As a result, weaving becomes an important source of income, and these handlooms become centres of dissemination of the skill training, thereby offering an alternative to seasonal farming and breaking rocks for construction. Travel time to get raw materials and selling finished products in the market are easily overcome since the company provides the required logistical support and consistent supply of raw materials to all weavers at their doorstep. Weavers decide on their working hours which enables them to work around their family's schedules.

Bunkar Sakhis (quality assurance officers) monitor the quality of the product and look into the needs of the weavers, which can be non- financial and financial in nature. The company conducts leadership programme training that focuses on confidence-building activities which help these women take on leadership roles in their village. As a result of these leadership programmes, bunkar sakhis are chosen to monitor the quality of the products. This is how a tally of raw materials, monitoring the weaving quality and making sure women are attending awareness campaigns are all organised by the government. The young women social development programme subverts traditional gender imbalances within rural societies.

The flip side of working with a private aggregator is that an entrepreneur essentially becomes a piece-rate worker. This implies that the entrepreneur gets paid on a unit basis and often weavers overexert themselves without abiding by a quality work-life balance or a limit in the working hours.

Figure 6: Jaipur Rugs' business model

(Source: Jaipur Rugs)



The average monthly income of a weaver ranges from INR 8,000 to 10,000 with no expenditure on raw materials and mobility. Women entrepreneurs work on a piece-rate basis and on how efficiently they can get their orders made, but they do not earn any profit.

The company gives out loans at reasonable interest rates, removing the dependence on informal lenders who typically charge an obnoxious rate of interest. These loans typically are non-business loans and pertain to health or matrimony related loans. Since the company provides a robust system of logistical support, the middlemen involved in each step of making the rugs are eliminated.

This business model is preferred by women in Rajasthan since it addresses their mobility concerns and works around their care-giving commitments. Restoring labour rights, human rights and providing a sustainable development model are some of the things which Jaipur Rugs has successfully been able to set up in the community.

However, it limits their access to high-growth opportunities. Women earn a wage and have no access to profit margins. Moreover, since the home-based entrepreneurs function in a closed communication channel, their direct interaction to the market or risk/loss taking temperament is missing, and they tend to not negotiate a fair price.

Mobility

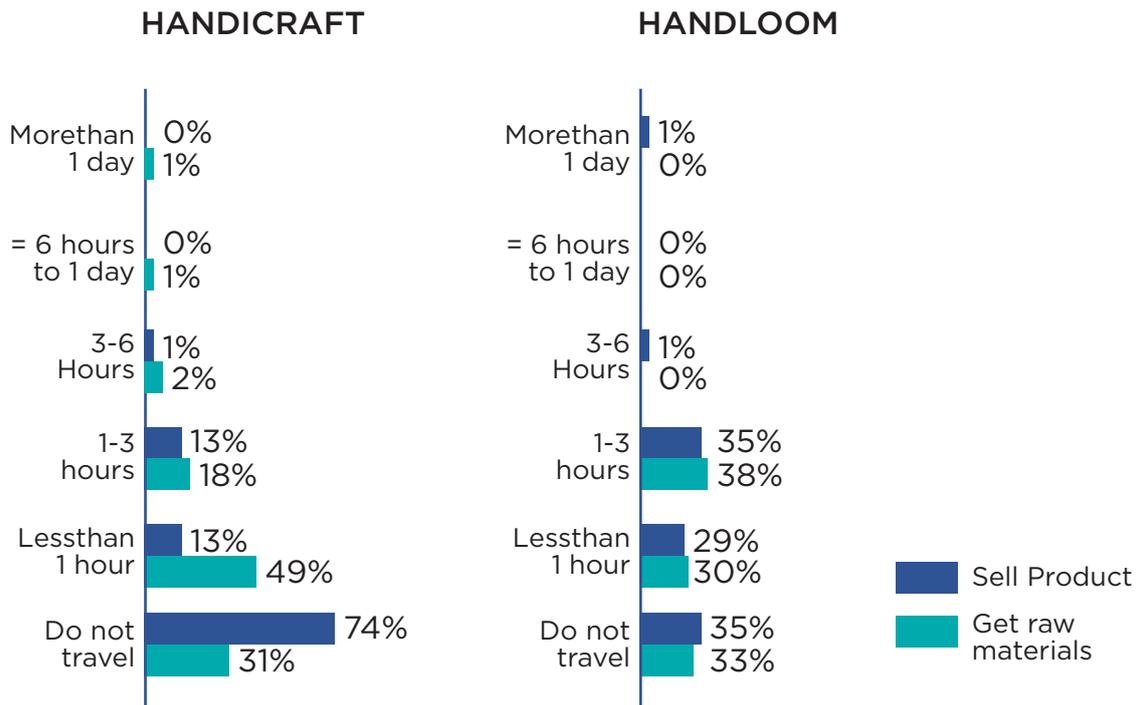
The operations of the handloom industry are primarily home-based and involve large number of artisans from rural and semi-urban areas most of which are women and people from economically backward groups³⁶. Women constitute 72.3 per cent of handloom workers in India, out of which 74.5 per cent women come from rural areas³⁷. Handloom weavers for the study were found in clusters in Aspura, Dhanota, Tigariya which are rural parts of Rajasthan. Mobility in rural parts of India is a considerable challenge, due to lack of infrastructure and safety issues for women. As a result, female artisans rely on contractual companies and SHGs. These institutions provide a way around the mobility constraints. Since over 90 per cent of respondents in our sample are piece-rate entrepreneurs, they do not need to travel to procure raw materials or market their products.

There are sectoral similarities in travel time for procuring raw materials and selling finished products. Most women artisans in handicraft do not travel to sell their products. This is due to indirect market access through SHG or contractual company with the market. In the handloom sector, about 60 per cent of women travel for less than 3 hours to sell their products even with direct market access via contractual companies and cooperatives. Mobility is also linked to the business models that are being followed in Rajasthan.

³⁶ Indian Handloom Industry (position paper), FICCI FLO.

³⁷ Fourth All India Handloom Census, 2019-20.

Figure 7: Travel time by sector for procurement of raw materials and sale of products



Constraints

Time

In India, amongst the self-employed home-based workers in the non-agricultural sector, an overwhelming 67 per cent are women.³⁸ Women are compelled to seek ways to meet the day-to-day needs of their families. Women operating home-based businesses often cannot and do not find time to go out due to their household duties and caring responsibilities. Therefore, they remain invisible and unrecognised by society and the labour movement.

Aggregate time use of a day reinforces women as the primary caregiver and therefore, face time constraints. In Rajasthan, 24 per cent of the surveyed women live in joint families, 46 per cent of the female entrepreneurs have help with unpaid caregiving work (cooking meals, taking care of children, and keeping the house together) but only 8 per cent have unpaid family worker(s) helping them with their businesses. While most of the female entrepreneurs in the state have someone to share the burden of unpaid caregiving work, the onus of operating the business lies on her.

³⁸ Rights of Home-based Workers, National Human Rights Commission, 2006.

Respondents in Rajasthan still ranked difficulty in balancing work and household chores as the number one reason for not being able to expand their business. On an average, the Rajasthani home-based female entrepreneur spends more time on unpaid caregiving work than her home-based business as illustrated by Figure 8. However, the time spent on her business is spread across the day as she needs to fit in her working hours around other daily commitments. Caregiving truncates productive time in the mornings and evenings, as shown in Figure 9. This spaced out time dedication to the business is not a very productive way to operate her business since she is unable to give undivided attention at a single stretch to her business. Some women even work late hours of the night and race against time daily.

Since the market landscape in Rajasthan is dominated by private players and SHGs who provide raw materials and services to carry the finished products to the stipulated location, time spent on procurement of raw materials is minimal. On an average, the surveyed female entrepreneurs spend only 0.1 hours on procurement and 0.1 hours on marketing. This eases off some of the time constraint and the burden of having to navigate gender prejudices in the market, allowing women leading home-based businesses to focus more on the production of the craft.

Figure 8: Average hours spent on each activity in a day (24 hours)

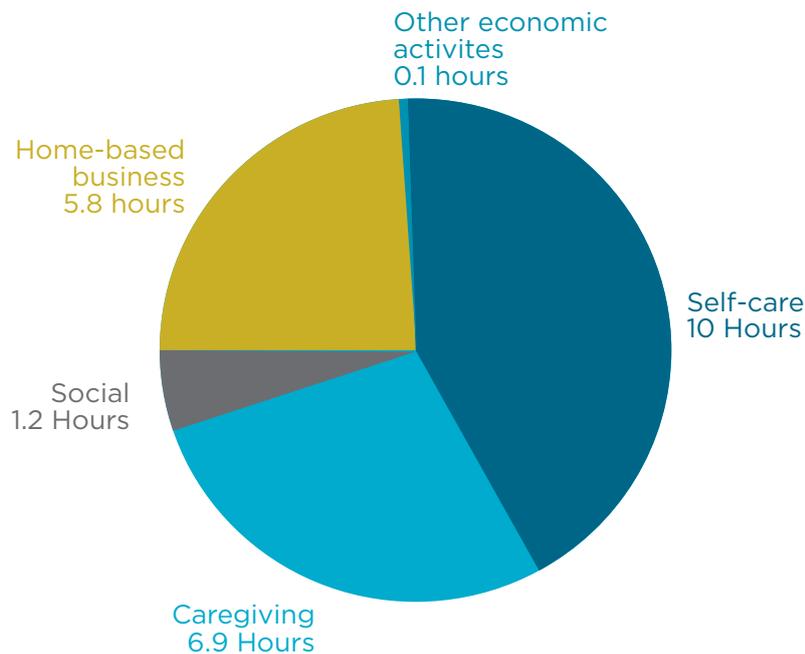
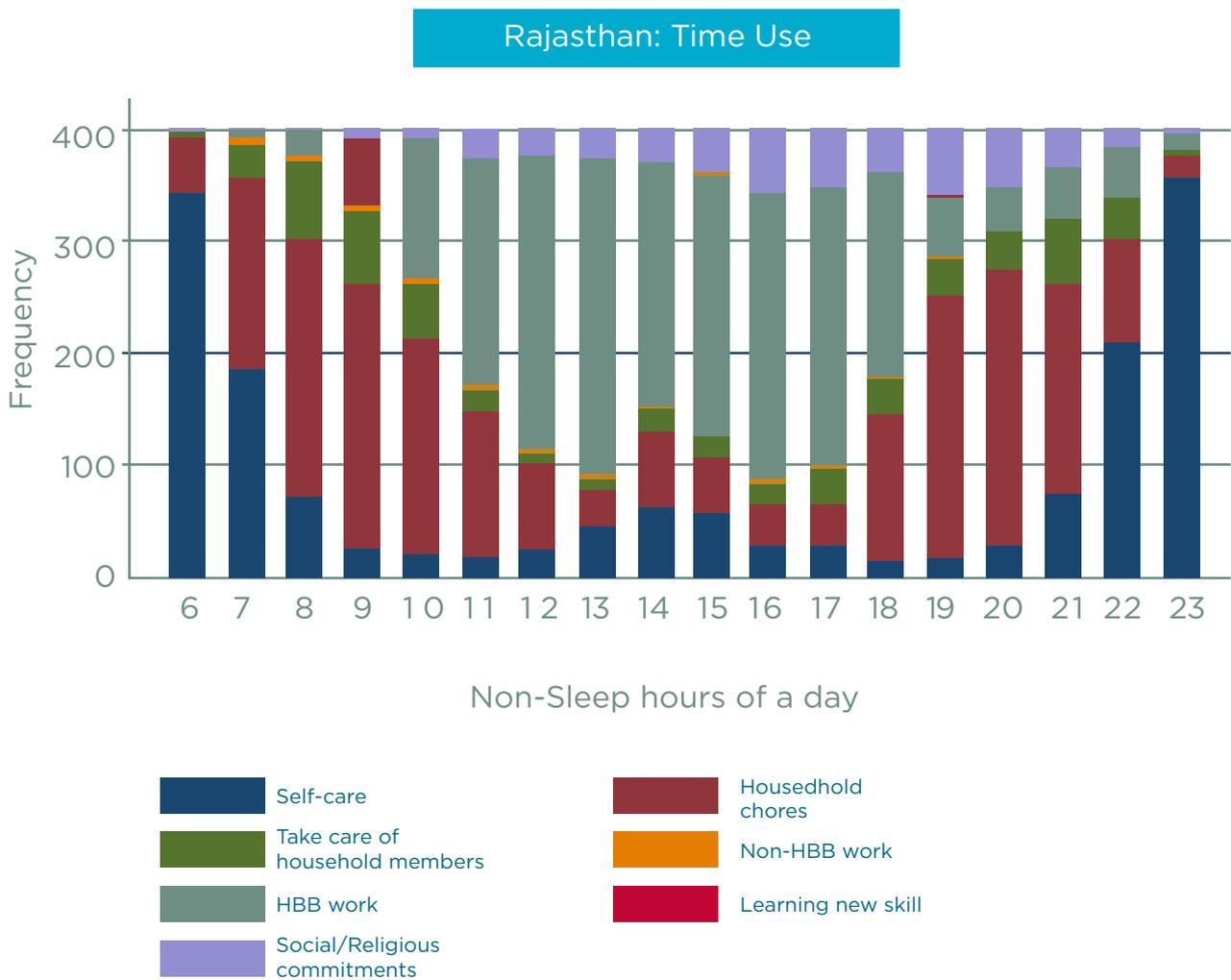


Figure 9: Time use of non-sleep hours of a day by frequency of activity by respondents at each hour



N.b.: In the time use graph, each bar on the X-axis represents an hour within non-sleep hours of a day (6am – 11pm). The colours represent the type of activity on which the hour is spent against the frequency of respondents on Y-axis.

Social Security Nets

In low-income countries, around one in five of the world's poor still lack safety net coverage³⁹. Safety nets, including cash transfers not only help nations invest in human capital, but also serve as a source of income for the poor, improving their standard of living.

However, the home-based workers in the cottage industry work in silos without having any direct interaction with the market players or an open communication

³⁹ The State of Social Safety Nets 2018, World Bank.

channel. This keeps the women entrepreneurs less informed about the schemes and different social security nets rolled out by the government.

Mobility and gender bias are ingrained in the market landscape which makes it difficult for the women entrepreneur to navigate all by herself. This contributes to the existing problem of information asymmetry.

Scheme penetration and engagement of women entrepreneurs with the government is limited. Scheme awareness across sectors is only about 30 per cent with an even less uptake of schemes across the board.

Government plays an important role of being a facilitator between women entrepreneurs and the wider market by organising Melas and Haats. It extends its support by empanelling artisans to an overarching institution through SHG channels. Taking scheme awareness and uptake as a proxy for government presence, government's engagement as an enabler to scale up nano-enterprises is the need of the hour.

About 80 per cent of the respondents who were aware of the government schemes belonged to Jaipur and Sikar districts. One reason could be the central location of districts where information and awareness about the schemes is more profound. The second could be the awareness campaigns run by the private partners informing the partners on various schemes. Even though respondents from Kota and Udaipur work closely with SHGs they are not aware or keen to take up schemes. It can be concluded from the data that respondents from these two districts rely on informal lending like chit funds. Chit funds are a convenient form of savings, but the respondents run the risk of getting duped or not getting the fixed returns. Unlike national banks which guarantee a return on the savings, chit funds make for a mechanism for liquidity and emergency funds.

Most availed schemes in Handicraft:

- Life Insurance schemes (PMUJBY, PMSBY, MGBBY)
- Rebate Subsidy or Marketing incentive or Rebate Schemes

Most availed schemes in Handloom:

- Cooperative Handloom Weavers Savings and Security Scheme/ Cooperative Handloom
- Scheme for Free supply of electricity to Handloom Weavers



**KEY
NOTES**

Table 3: Scheme penetration by sector

Scheme Penetration	Handicrafts	Handloom
Are aware of at least one scheme	67.74%	69.23%
Have availed at least one scheme	4.76%	18.52%

Business Management Skill

Business management skills and the way women entrepreneurs operate informs us about the bandwidth of these women entrepreneurs in organising their business operations and the potential to expand.

Since the respondents depend heavily on contractual companies and SHGs for their market accessibility and sales, 90.25 per cent of the female respondents from Rajasthan do not need to identify which products contribute to their monthly sales. The onus of making this decision rests with the contractual companies and SHGs.

Maintaining business records is not a common practice among women entrepreneurs regardless of her product being high-value or a low-value product. Respondents working with contractual companies and SHGs do not need to maintain business records which could be a possible explanation for such low numbers. Over 70 per cent of the women home-based entrepreneurs keep a regular inventory of stock.

Business operation skills are low

- Half of the respondents did not keep regular financial accounts. Another quarter (26.5%) did keep manual accounts. For about 60 respondents contractual company was maintaining records. The other times they kept a memory record of costs/ sales or profit and loss. The respondents did not have a systematic way of maintaining records of sales/ costs/ profits- loss

Marketing skills are low

- Over 90% of the women entrepreneurs do not need to identify the customers or seek out new customers. This is because they rely on SHGS and contractual companies for market access.
- Only 1.25% have invested on skill training in the past year.
- Out of the 63.75% respondents who keep records only about a third of them make entries daily.



**KEY
NOTES**

Marketing skills are low

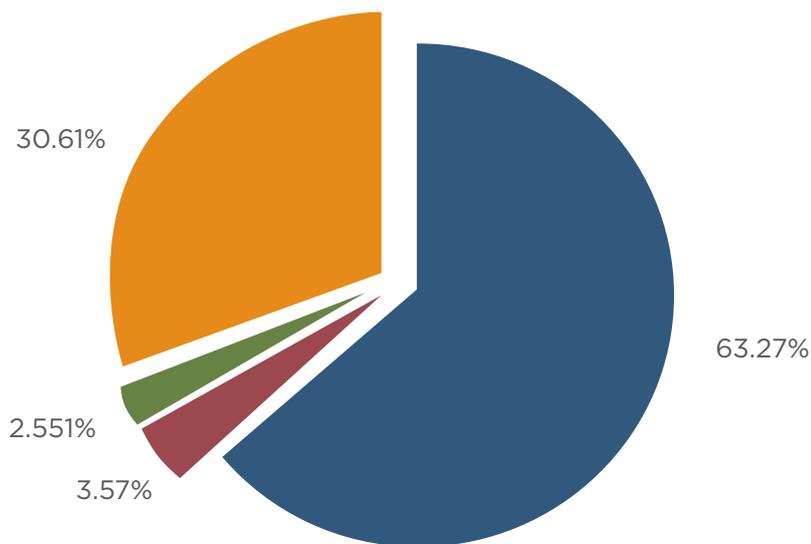
- Penetration of digital payments is only 1%.
- Lack of awareness and unwillingness to learn to operate a phone are the top three frequently cited reasons for not being able to use digital payments.
- 56% of the 400 respondents do not own a mobile/smart phone.



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- Lack of awareness and unwillingness to learn to operate a phone are the top three frequently cited reasons for not being able to use digital payments.
- 56% of the 400 respondents do not own a mobile/smart phone.

Figure 10: The person who keep records of business



RECORD KEEPING

- Myself
- Husband
- Family/Friends
- Contractual company

Agency

50 per cent of the time decisions regarding business and financial operations are made by contractual companies. 12.75 per cent of women home-based entrepreneurs made independent decisions regarding business operations. About 80 per cent of financial decisions regarding the business were taken by contractual companies and SHGs.

For 50 per cent of the respondents the nudge to join the business came from the family. 129 out of 400 women entrepreneurs were self-starters and set up their business without any advice or mentorship.

1) 70% of the women entrepreneurs surveyed were first time entrepreneurs and had no work experience, prior to entering business.

2) The top three critical barriers to entrepreneurship is:

- Balancing family and work life
- Difficulty in obtaining finance/credit
- Lack of technical industry relevant skills

Mentorship:

- Only 3 female entrepreneurs out of 400 had local businessmen/women for mentorship while setting up the business. There a dearth of local support system for women entrepreneurs who invariably have to rely on contractual companies and SHG



**KEY
NOTES**

Figure 11: Locus of decision-making in handicraft sector

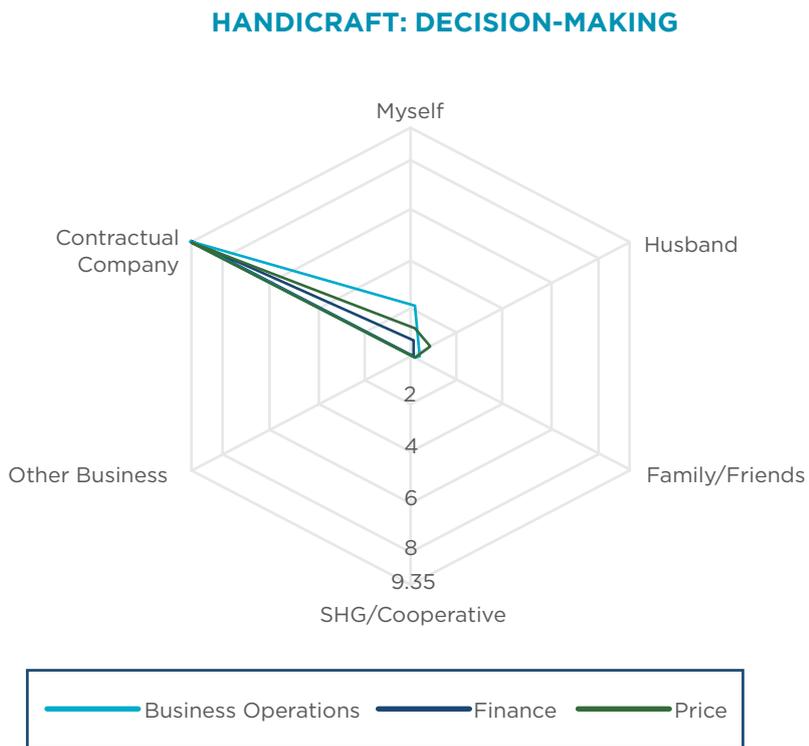
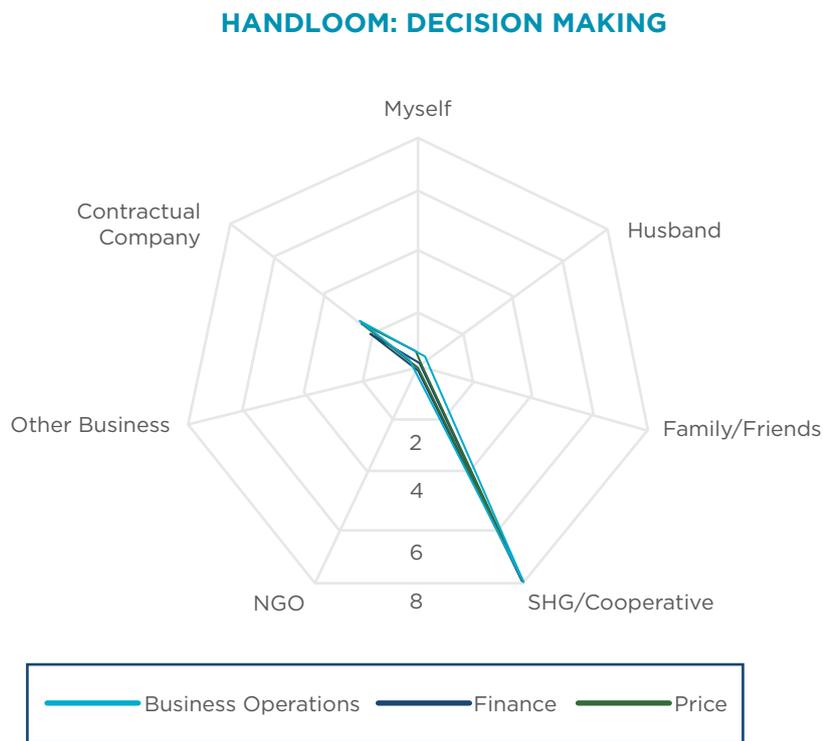


Figure 12: Locus of decision making in the handloom sector



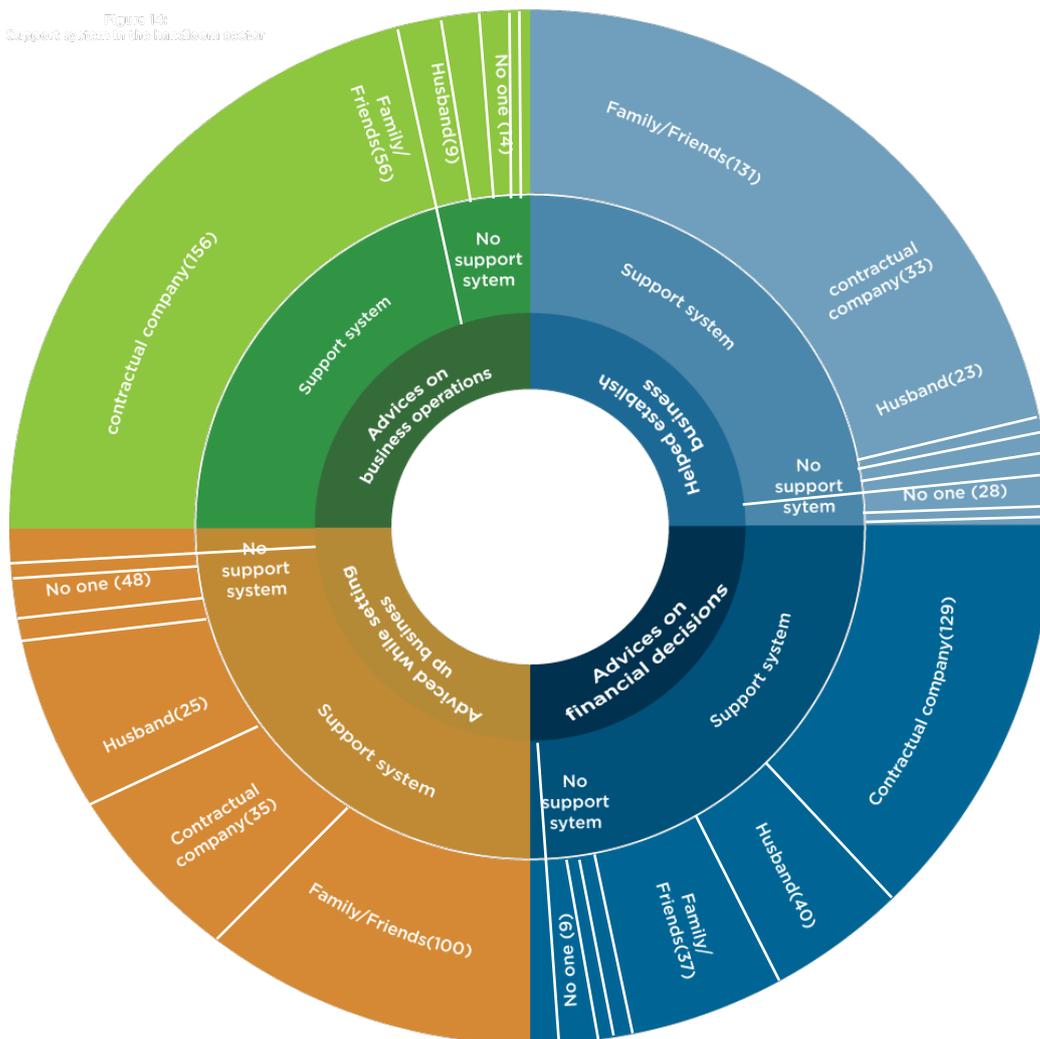
	Who helped you establish the business?	Who gave you advice or mentored while setting up your business?	If you had to seek advice regarding business operations, who would you go to?	If you had to seek advice regarding financial decisions, who would you go to?
No one	0.93	1.07	1.63	1.53
Has support system	9.07	8.99	8.37	8.47

Figure 13: Support system in the handicrafts sector

Figure 13
Support system in the handicrafts sector



Figure 14: Support system in the handloom sector



Women home-based entrepreneurs in Rajasthan are very risk tolerant as illustrated in Figure 15, which shows that they have a positive attitude and have the bandwidth to continue operating even under difficult situations. This is a counter intuitive finding considering these women entrepreneurs are rarely exposed to risky situations. They operate in a closed communication channel with indirect linkage to the market which does not expose them to risky or loss inducing scenarios. Their institutional affiliation to a contractual company or an SHG gives them less flexibility in business and finance related decision making.

Figure 15: Risk behaviour of female entrepreneurs⁴⁰



2.2.TAMIL NADU

Characteristics of a Female Home-based Entrepreneur in Tamil Nadu

Demography

Age

Average age = 35 years
18-34 50.0%
35-54 43.75%
55+ 6.25%

Marital status

Never married	8.25%
Married	84.75%
Divorced/ Widowed	7.0%

⁴⁰ Risk aversion is the tendency of individuals, who, when exposed to uncertainty, attempt to lower that uncertainty. It is the hesitation of a person to agree to a situation with an unknown payoff rather than another situation with a more predictable payoff but possibly lower expected payoff. Risk averse individuals, with risk score 1, are those who do not like to take risk. Risk tolerant individuals, with risk score 8, are those who are willing to take risk in the trade-off for higher returns.

Loss aversion refers to people’s tendency to prefer avoiding losses to acquiring equivalent gains. For example, it is better to not lose INR 100 than to find INR 100. What distinguishes loss aversion from risk aversion is that the utility of a monetary payoff depends on what was previously experienced or was expected to happen. Loss averse individuals, with a loss score 1, are those who avoid loss. Loss tolerant individuals, with a loss score 8, are those who are willing to take a loss in the trade-off for higher returns.

Average household size = 5.19 members

Household size	
1 person	1.0%
2 people	4.5%
3 people	9.5%
4+ people	85%

Average monthly household income = INR 14,500

Monthly household Income	
<10k	41.5%
10k-25k	51.0%
25k-50k	5.75%
50k and above	1.75%

Table 4: Sector-wise Business Characteristics

	Handicrafts ⁴¹	Handloom
Average Business age	12 years	21 years
Have a business license for the home-based business in their name	34%	43%
Own-account enterprises	66.5%	38.5%
Have unpaid family help	27.5%	57.5%
Average investment ⁴²	INR 11,086	INR 13,128
Average monthly household income ⁴³	INR 17,283	INR 13,363
Average monthly business revenue ⁴⁴	INR 7,054	INR 7,350
Average monthly business expenditure	INR 7,694	INR 2,136

Personas

Hierarchical clustering⁴⁵ was used to identify personas with similar characteristics from our data. While clustering three similar personas emerged across the two states, the performance of these personas on some criteria varies in Tamil Nadu and Rajasthan due to the market and sectoral differences. These three personas are millennial, striving, and latent entrepreneurs.

The personas were measured on a scale of 1-10. The study captured the risk and loss taking preference of the respondents by playing a hypothetical game. Two situations with monetary incentives were presented to get a sense of how risk tolerant/averseness and loss tolerant/averseness the respondents are. This behaviour was used to get a sense of how they would respond to stressful or risky business decisions.

⁴¹ Excluded four observations for calculations of average monthly income, revenue, and expenditure: 1 who refused to answer, and 3 who were outliers' earnings more than INR 1 lakh per month.

⁴² Weighted average. Excluded 3 respondents who either refused and/or did not know.

⁴³ Weighted average.

⁴⁴ The technique of hierarchical clustering is an algorithm that groups similar objects into groups called clusters where each cluster is distinct from each other, and the respondents within each cluster are broadly similar to each other.

⁴⁵ The technique of hierarchical clustering is an algorithm that groups similar objects into groups called clusters where each cluster is distinct from each other, and the respondents within each cluster are broadly similar to each other.

The Millennial Entrepreneur

- Educated and relatively young (upto 30 years) with a new business.
- Started her business to supplement family’s income.
- Has more tolerant attitudes towards risk and loss. Experiments by selling different products but maintains records to garner higher yearly turnover in sales.



Age



Formal Education



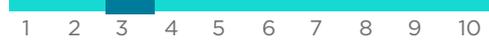
Business associate - none



Business registered



Takes key business operation decision



Doing business for more than 20 years



Annual sales of business - more than 50,000



Loss aversion score



Risk taking

The Striving Entrepreneur

- Middle-aged entrepreneur with primary level or more schooling.
- Started her business to supplement her family’s income and to continue her family’s tradition.
- Has neutral attitudes to loss and risk. Maintains some business records and sells a few diverse products with good turnover in sales.



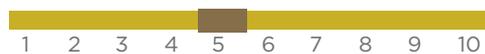
Age



Formal Education



Business associate - none



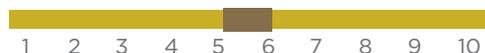
Business registered



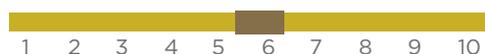
Takes key business operation decision



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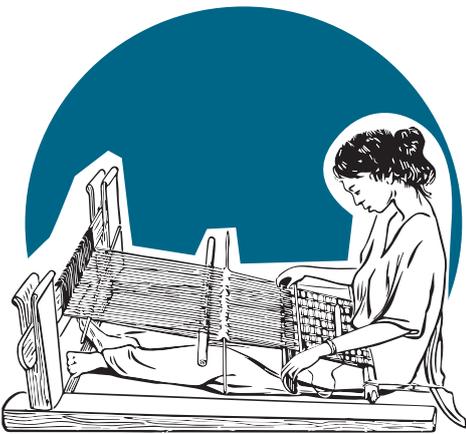
Loss aversion score



Risk taking

The Latent Entrepreneur

- Older in terms of age, both for self and the business she operates.
- Maintains some business records despite having little or no primary education, and operates her business to continue family tradition.
- Is loss averse but neutral about risk taking. This has resulted in making safe decisions such as not diversifying her products.



Market Landscape

Market Access

Recent research documents show that women entrepreneurs tend to be more spatially isolated within local areas and less networked than male entrepreneurs.⁴⁶ The case of home-based businesses is even more amplified because they are less visible. By definition, home-based businesses are isolated and therefore, do not have access to markets beyond the local market. The potential of the surrounding market is limiting, highly dependent on the product type, density, competition,

⁴⁶ Kerr et al., 2017. Personality Traits of Entrepreneurs: Review of Recent Literature (Retrieved from: https://www.hbs.edu/faculty/publication%20files/18-047_b0074a64-5428-479b-8c83-16f2a0e97eb6.pdf).

and connectivity. Therefore, having affiliation with intermediaries and collective enterprises dictates market access in Tamil Nadu from both the supply and demand side.

The handicraft sector in Tamil Nadu has the least market access with 57 per cent having no affiliation to an intermediary affiliation (Figure 16). The women or businesses that do not have any institutional affiliation have to manage the entire supply chain from procurement to marketing. This places them at a disadvantage where they invest a lot on procuring raw materials but cannot surpass the limitations of the local market to increase their sales. These businesses deal with twice the number of suppliers on average and source their raw materials from a variety of channels including collecting from natural sources and cultivating or making at home. The burden of managing multiple supply channels and paying high upfront costs falls on the entrepreneur for whom the per unit costs are high, and both time and mobility are limited. Most often, female handicraft artisans do not travel and are dependent on the male family members for the public role of travelling to buy raw materials. A few 17 per cent are found to take on the cost and effort of travelling far (over three hours) themselves. Contrastingly, an overwhelming 84 per cent do not travel to sell the finished products and instead opt to sell from their home premises or local markets as illustrated by figure 17. A small handful who do not have affiliation are taking the effort to market their products online, at melas, and poster advertisements – this cohort, similar to the ones who travel far for supplies, are more an exception than the norm. For the most part, artisans limit their market communication to the word of mouth or phone. The lack of information regarding marketing channels is genuine and can be seen from the fact that an overwhelming number of female artisans sell their products from their homes and only have access to local markets.

The handloom sector in Tamil Nadu, owing to decades of organisation and institutionalisation, is the prime example of the development of market access through collective enterprises. In the study sample, 67 per cent of handloom weavers are members of collective enterprises and 80 per cent work on some form piece rate contract. They are generally provided with or buy raw materials from the cooperatives or the contractual company, and they sell the finished products back i.e. they operate piece-rate businesses. On average, females leading handloom businesses only interact with 1 supplier every month, illustrating the prominence of intermediary relationships especially with cooperatives and contractual companies as illustrated in Figure 16. Similarly, they travel short distances to the cooperative or intermediary's office to collect inputs and drop off orders. Aggregation through time has led the handloom clusters to solidify and the market to reach a state of equilibrium guaranteeing the weavers economic security. Almost all do not actively seek new customers, markets, or avenues to sell their products, as indicated by Figure 17, and communicate exclusively via word of mouth and their phones.

Figure 16: Prominent supply channels by sector

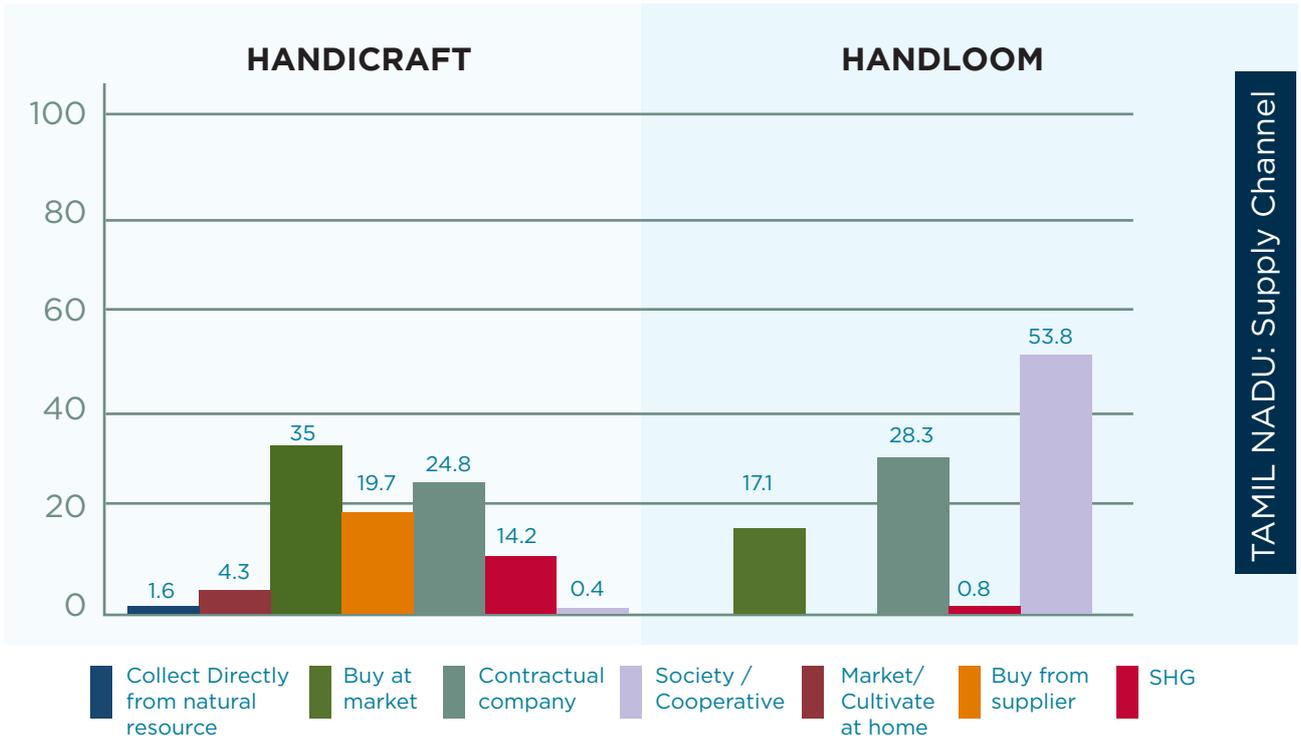
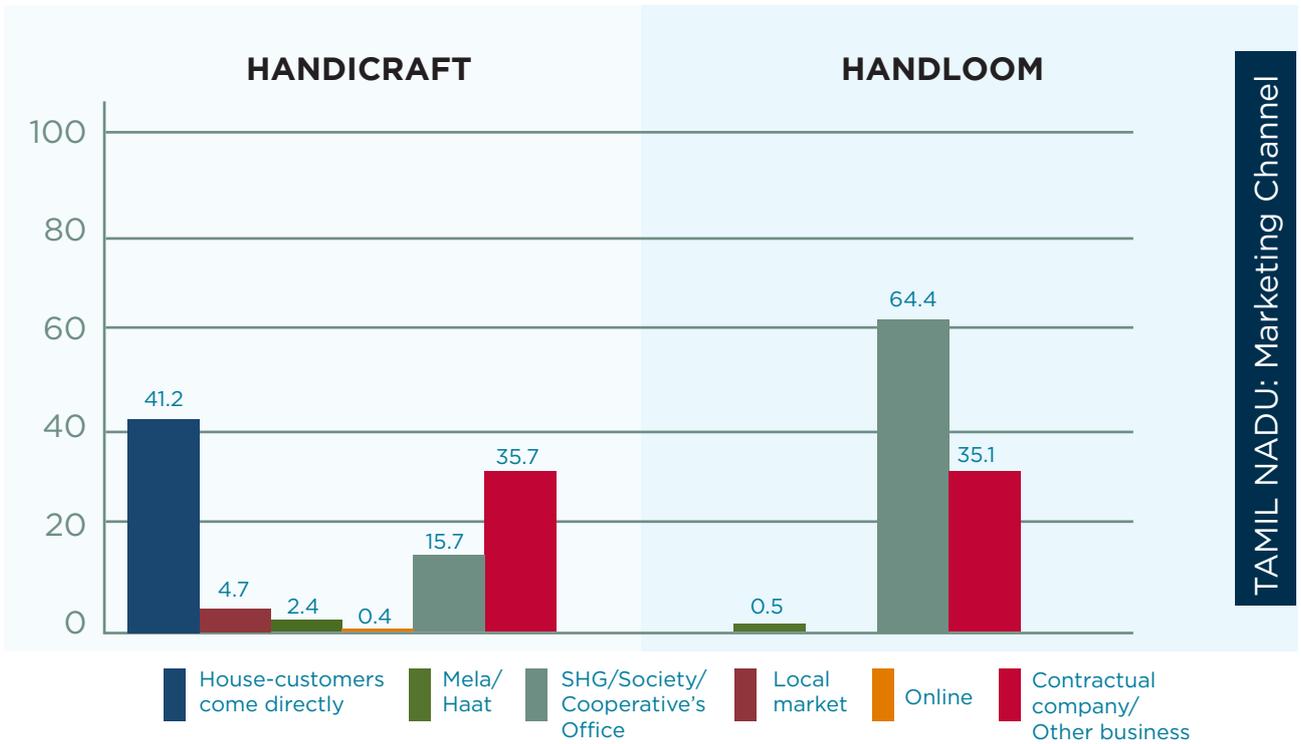


Figure 17: Prominent marketing channels by sector



Market Linkages

Often markets do not exist locally, and there is a need to build or create institutions which would link local markets with the larger markets. In Tamil Nadu, intermediaries like collective enterprises and private companies (subcontractors, traders, etc.) are the sole linkages to the larger markets. 80 per cent of enterprises in the handloom sector have market linkages, via collective enterprises and private intermediaries. The handicraft sector is largely unlinked with 62.5 per cent of the businesses working on their own account (Figure 31). While some handicraft businesses in Tamil Nadu have SHG affiliation, given the nascency of SHG transformation to community enterprises in the state, this affiliation has not necessarily resulted in market access beyond local markets.

Seasoned collective enterprises build stable market linkages on both ends of the supply chain by streamlining procurement through cost-sharing and wholesale approaches, while simultaneously aggregating sales to surpass the demand and price limitations of local markets. These collective enterprises, enabled by the government, are also channels through which welfare schemes are delivered. The collective model in handloom in Tamil Nadu is widespread and highly organised owing to the decades of work led by the state government. Contrastingly, the movement towards collective enterprise in the female led handicraft is nascent where the outreach to organise, let alone develop market linkage is in progress. The home-based businesses with no affiliation manage a diverse supply channel but are grossly limited in terms of market access. An overwhelming number of female artisans expect customers to come to their households undermining both their sales and price potential. Even in cases where SHG formation evolved into clusters or community owned enterprises, underdeveloped market access due to limited linkages to larger markets are the key bottleneck limiting both the individual and collective businesses from growing.

Contractual companies are present in both sectors but their position in the supply chain is dependent on the presence of collectives. In cases where these private companies are the only linkage to larger markets, they offer benefits of more sales without the effort of travelling and marketing. Some companies also provide or sell raw materials, reducing travel time and effort to procure materials. However, the risks of raw materials getting damaged or the finished product being rejected is borne by the entrepreneur. Additionally, profits accruing from linkages to larger markets at higher prices are not shared or do not trickle down to the artisans and weavers. The presence of collective enterprise as a buffer with private companies helps female home-based entrepreneurs negotiate for better prices and fairer terms of trade, aggregate quality, and access social safety schemes that smoothen the costs associated with damaged raw materials and finished products.

The Cooperative Model Amongst Weavers in Tamil Nadu



The handloom industry in Tamil has a long history and has survived competition from mills and power looms. A critical factor that has contributed to its survival and continuation as a vital non-farm self-employment sector is the widespread presence of consortia of weavers' cooperative societies across the state, especially in the geographic clusters. There are 1,232 cooperative societies that organise resources and streamline marketing for weavers in the state. The cooperatives have also increased outreach and utilisation of handloom specific schemes such as yarn supply, work shed, weavers' health insurance, and pension. The Savings and Security Scheme Fund in particular, has improved the financial inclusion of weavers and provided a safety net against price fluctuations and emergencies.

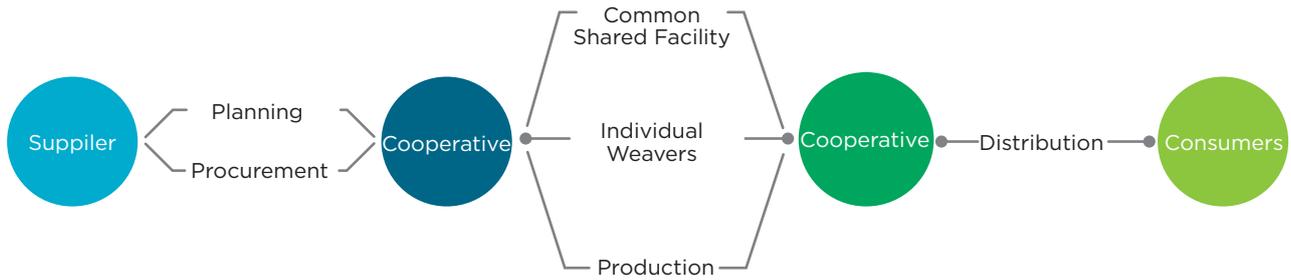
The marginal benefits of a cooperative model are felt most by weavers who make low-value products such as dhoties, handkerchiefs, mats, and towels. Weavers of these products face high effort cost to procure supplies and sell, in addition to the stiff competition from power looms. In comparison, weavers of intricate silk sarees can make two sarees per month that each fetch INR 10,000 upwards. These famous sarees, such as the famous Kanchipuram silk saree, have vested interest in customers and retailers who come to home-based business directly as well as Co-optex,

the apex marketing body of the Tamil Nadu Weavers Cooperative Society.

Common Shared Facilities (CFS), the physical structures where weavers converge to weave together, have emerged to address the growing pains of weavers who make high-effort low-value products. This was the case of Sri Mariamman Society in Erode where female weavers have been utilising the CFS to make towels and handkerchiefs. Working collectively at the CFC has eliminated the cost and time of delivering raw materials to weavers' homes, in addition to reducing the overall input cost through schemes availed (such as yarn subsidy) and bulk orders. Agglomerating at a single location has also streamlined collection, inventory, and delivery of orders to wholesalers that can scale up to 5000 pieces per consignment - optimal production levels at competitive prices that individual weavers would not be able to attain on their own.

For female weavers, who face constraints of time, mobility, and agency to market their products, the cooperative's CFS has become a boon. While these women lose individual control over price setting and creativity to lead their business, they however gain collective bargaining power to obtain better prices and non-monetary benefits through outreach of welfare schemes.

Figure 18: Supply chain of a Common Shared Facility (CFS) model



Demand Constraints of Handicrafts in Tamil Nadu

The Ambedkar Hastshilp Vikas Yojana (AHVY) scheme initiated by the Ministry of Textiles aims to mobilise artisans into Self Help Groups (SHGs), in addition to training the groups on various aspects of forming and running their community business enterprises. The objective of the scheme is to transform the SHGs into artisan clusters. Good Shepherd Health Education Centre and Dispensary in Karamadai, Coimbatore district has been skilling women on embroidery, tailoring, jewellery making, soft-toys stitching, and other crafts for a decade with support from AHVY. Similarly, Thalavadi Adivasi Munnetra Sangam works in the hill station of Hassanur in Erode district to deliver training on making eco-friendly furniture from lantana weed, an invasive species to the native vegetation in the Western Ghats. Through SHGs, artisans now have access to joint liability group loans offered by commercial banks that individual female artisans, with limited literacy, would not be able to access due to lack of collaterals and the burden of documents required. These NGOs have also helped artisans obtain Artisan IDs that have opened up access to schemes

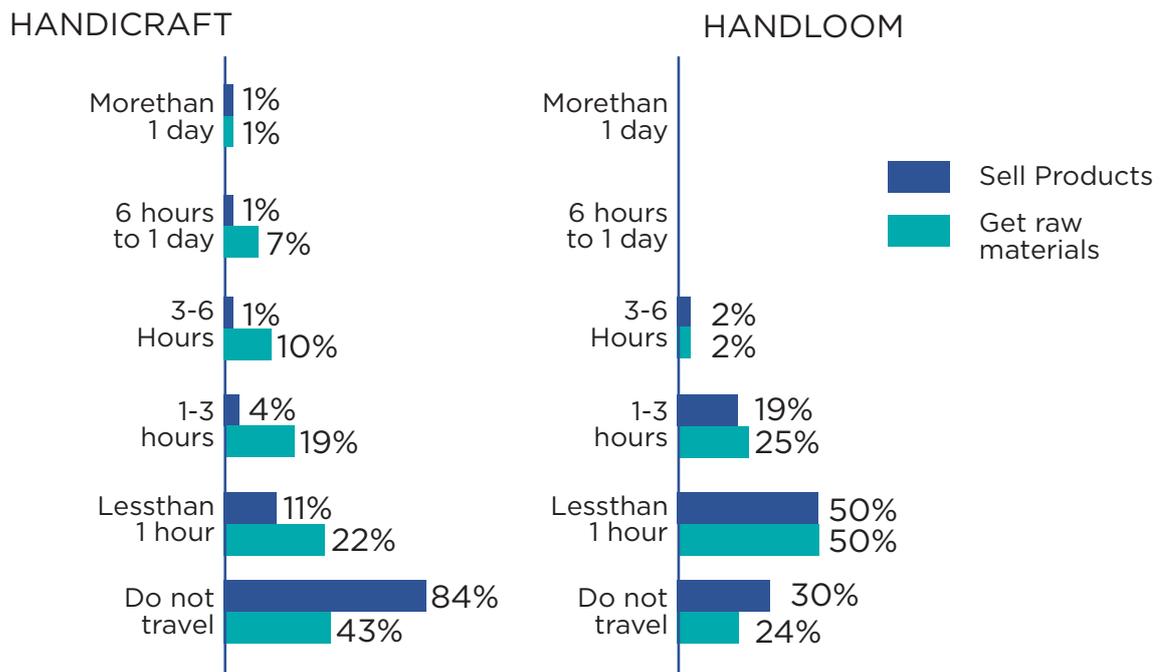
CASE STUDY

like life insurance and credit guarantee schemes.

While the female artisans of Karamadai and Hassanur are equipped with skills and access to finance to some extent, the prospect for these ventures to be transformative is largely varied and constrained by demand. In Karamadai, lucrative crafts like tailoring with a constant local demand have enabled women to expand their businesses and earn substantial incomes. However, the demand for crafts like hand-stitched soft toys and paper/artificial jewellery remain primarily low and elastic. In Hassanur, the challenge is geographical and inability to reach markets where demand for quality eco-furniture exists.

Challenges of female artisan clusters like Karamadai and Hassanur are spread across Tamil Nadu where NGOs and the government have delivered support from the supply side, but the constraint of demand and access to lucrative markets have stopped women from reaching their untapped entrepreneurial potential.

Figure 19: Travel time by sector for procurement of raw materials and sale of products



Mobility

Social and cultural norms across India restrict women's mobility affecting their participation in education and the labour force. Census data from 2011 revealed that 45 per cent of the women in India do not travel on a daily basis due to gender blind approach towards mobility and, subsequently, low rate of participation in the labour workforce.⁴⁷

Home-based businesses are an alternative gateway to livelihoods and financial independence for women who want to break free from the vicious mobility-workforce participation cycle. However, mobility continues to impede the business performance of women-led home-based businesses as market outreach is still restricted, and dependence on middlemen is still indispensable.

Mobility is minimal in the handicraft sector in Tamil Nadu as illustrated in Figure 19. Women mostly wait for customers to come to their homes. However, their effort, in terms of travel-time, for procuring raw materials is much higher, highlighting the bottleneck of market access for sales. The handloom weavers, on the other hand, reach a wider market by travelling a short distance from their home to the cooperative or contractual company's office to both acquire raw materials and sell products.

⁴⁷ Understanding the Pattern of Work Travel in India using the Census Data, Nishant Singh, 2017 (Retrieved from: <https://www.codatu.org/wp-content/uploads/Understanding-patterns.pdf>).

Outcomes of mobility and market access are evident in the sectoral and institutional differences in Tamil Nadu. Average profit margins, as shown in Table 3, are larger in the handloom sector that is more organised and institutionalised through cooperatives in comparison to the handicraft sector where the presence of collective enterprises are small and nascent. Even though female-owned businesses in both sectors make about the same monthly revenue, the profit margin for handicraft artisans are much lower due to two reasons:

1. High cost of production: Most handicraft artisans have a high cost of production per unit both in monetary terms and with respect to effort. These businesses pay upfront and procure their own supplies rendering them functional at inefficient scales. Having market access via an aggregator reduces the average cost of production by 32 per cent.⁴⁸ For the vast majority of handlooms weavers, their raw materials are provided by either the cooperative at subsidised rates through schemes availed, or contractual companies who procure at wholesale rates.
2. Low bargaining power for profitable price:⁴⁹ By selling only at the local market without affiliation to a collective enterprise, individual female artisans neither have the time nor the ability to bargain for favourable prices. Handloom cooperatives, with seasoned governance and management, take care of marketing and price negotiations on behalf of individual weavers.

Constraints

Time

The burden of unpaid caregiving work limits women's engagement in market activities. Socially constructed and enforced gender norms have disproportionately placed women worldwide to be primary caregivers. Much of this work is devoted to caring for household members and doing domestic chores. The burden of unpaid caregiving leaves women with less time for education, leisure, political participation, paid work, and other economic activities. Globally, women (including those doing paid work) do more than three times more unpaid caregiving work than men.⁵⁰

The average home-based female entrepreneur in Tamil Nadu spends more hours per day on unpaid care work than her business as illustrated by Figure 20. These are hours lost that she could have used to double her production. She is able to dedicate only 5.7 hours of the day to her business out of which 98 per cent is spent on production. This leaves her little time for streamlining procurement and marketing strategies, as well as learning new skills to manage her business more efficiently.

Boundaries between unpaid caregiving work, paid work, and selfcare are especially blurred in the case of home-based businesses where all takes place in the same entity – the home. The burden of unpaid caregiving is especially high amongst women leading home-based businesses in Tamil Nadu who mostly live

⁴⁸ Average monthly expenditure for those handicraft artisans who do not have any kind of affiliation is INR 9,281 versus those who are affiliated to a collective enterprise or contractual company is INR 6,307. These figures have excluded the three outlier businesses that earn more than INR 1 lakh per month.

⁴⁹ Bargaining price differential between handicraft artisans who have collective and contractual company could not be investigated due to limitations from bifurcation of data.

⁵⁰ Women's Work, ODI, 2016 (Retrieved from: <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/10331.pdf>).

in nuclear families with no one helping or sharing their burden. This results in the female entrepreneur suspending her work due to other household duties. Figure 21 illustrates how, for most women, caregiving duties monopolise time in the mornings and early evenings. In Tamil Nadu, time taken for self-care in the middle of the day is also prevalent. All in all, women operating handicrafts and handloom businesses from home have difficulties in working continuously and giving undivided attention to her work. Some are even compensating by working early mornings and late nights.

While the majority of women home-based entrepreneurs in Tamil Nadu (80 percent) do not share the burden of unpaid caregiving work with anyone, they also do have support from their husbands in the form of unpaid help in business as shown in Table 4. 42.5 per cent of surveyed female home-based entrepreneurs get help from an unpaid family worker, especially in the handloom sector where middle aged male family members provide support. For weaver households, where husbands run parallel handloom business, resource sharing is considered unpaid family work.

Table 5: Percentage of female-led home-based businesses that have unpaid family worker helping with business operations

Gender	Handicrafts	Handloom	Total
Male	24.5%	24.5%	40%
Female	7.5%	7.5%	6.8%

Figure 20: Average hours spent on each activity in a day (24 hours)

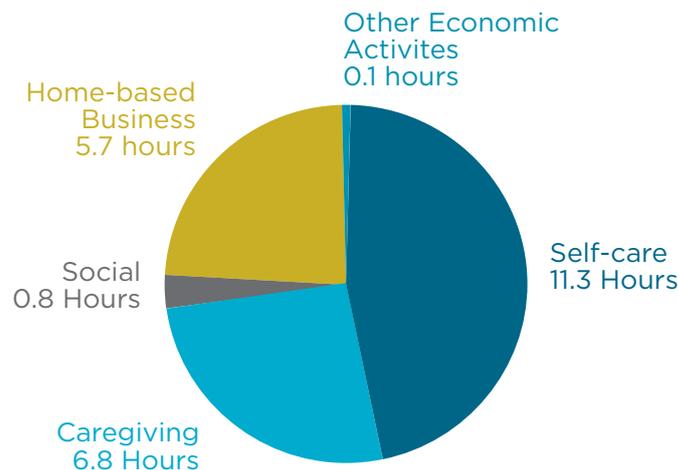
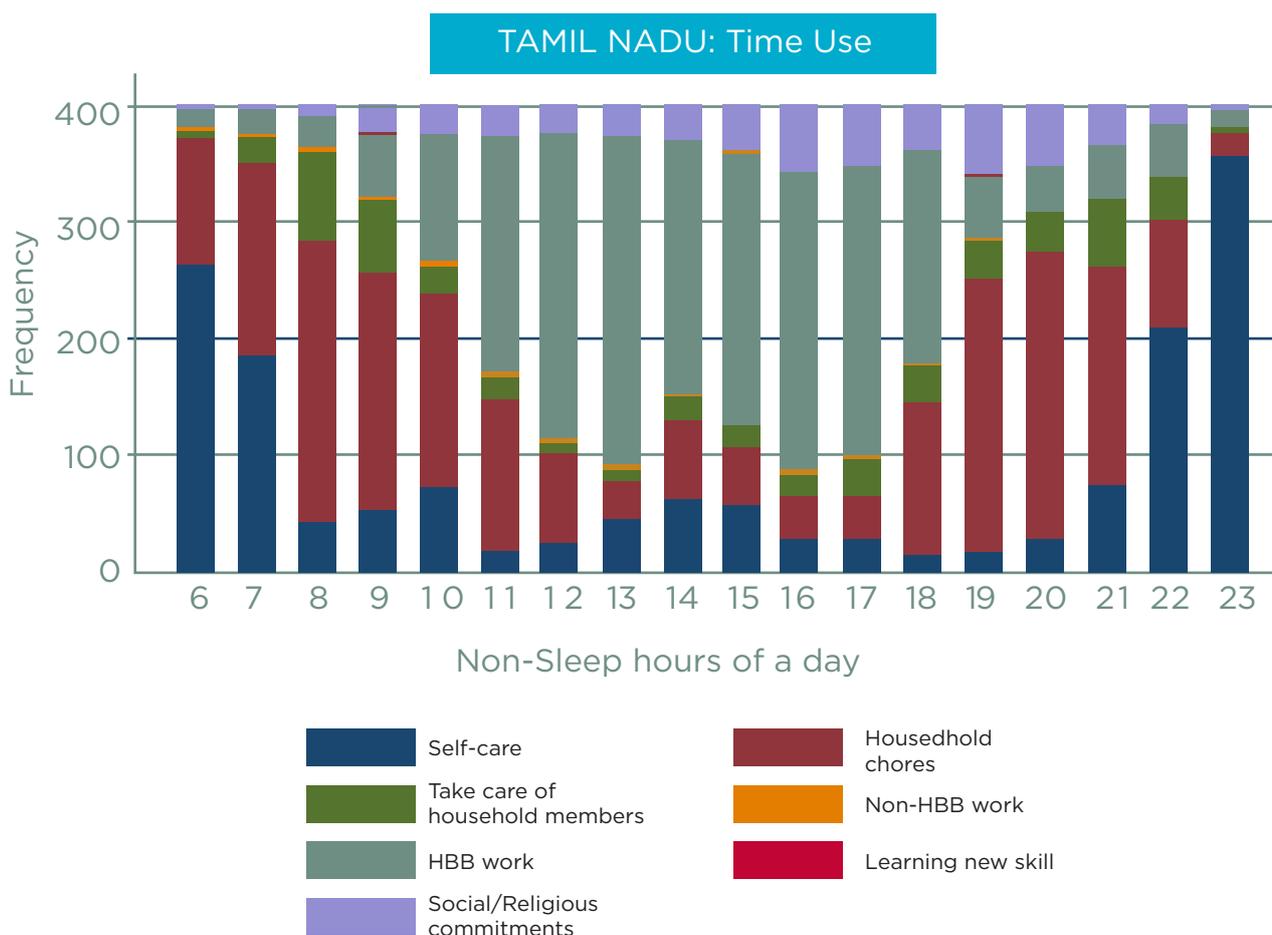


Figure 21: Time use of non-sleep hours of a day by frequency of activity by respondents at each hour



N.b.: In the time use graph, each bar on the x-axis represents an hour within non-sleep hours of a day (6am – 11pm). The colours represent the type of activity on which the hour is spent against the frequency of respondents on y-axis

Social Security Nets

Table 6: Level of formalisation in Tamil Nadu

Formalisation	Handicrafts	Handloom
Have a business license	37%	45%
Have Artisan ID	13%	12%
Are affiliated with a collective enterprise	23%	67%

Due to the informal and isolated nature of home-based businesses, their visibility is low as compared to companies and the state. Social protection for home-based businesses is an integrated concept where economic security and social security are intimately connected as the line between business and household is grey. Home-based entrepreneurs bear the entire risk of their business and do not have employee benefits of insurance and pension that companies offer – one of the reasons why companies increasingly prefer subcontracting to informal businesses and workers. The government is taking efforts to formalise and organise the handicrafts and handloom artisans by issuing Artisan IDs and facilitating the formation of collective enterprises through SHGs. However, the outreach of such efforts has been varied in Tamil Nadu. The handloom sector has had a history of cooperatives that predates Independence, making weavers visible and even favouring female cooperatives. Organisation in the handicraft sector is nascent, especially for low-value craft products where women are prominent.

Furthermore, SEWA Bharat's role at the ILO, for rights to decent work and social protection on behalf of home-based businesses making bidi, and handloom sector has contributed to the implementation of net safety schemes for home-based workers in some sectors. This has resulted in comprehensive handloom schemes with broad outreach across the nation. Moreover, the state government of Tamil Nadu implements additional schemes for handloom given the role the sector plays in rural employment, exports, and cultural recognition.⁵¹ The same cannot be said for handicrafts as the sector is not well integrated and spread thin across the different kinds of crafts and geography. Outreach is skewed towards high-value crafts like stone carving and woodwork, which are traditionally led by men. Therefore, there are fewer schemes available for handicraft artisans than handloom, which weavers are also eligible to apply being a subset of artisans.

With more development, facilitation, and higher baseline in the number of schemes; awareness and usage of schemes is high in the handloom sector (Table 6) where female entrepreneurs are networked with each other and male weavers through the cooperative societies. These schemes help them avail subsidies, rebates, and non-monetary benefits such as life and health insurance. There are handloom schemes offering subsidies and loans to improve houses and work-shed recognising that home and work environments are the same for most weavers.⁵² Information is highly asymmetric for women leading handicraft home-based businesses who operate in isolation and fringes. Awareness of the limited number of schemes is low, and usage even lower.

⁵¹ Retrieved from: <https://vellore.nic.in/handlooms-handicrafts-textiles-and-khadi/>

⁵² Handloom Development Schemes Implemented by the Department (Retrieved from: <https://www.tn.gov.in/hhtk/dht/dht-schemes.htm>).

Table 7: Scheme penetration by sector⁵³

Scheme Penetration	Handicrafts	Handloom
Are aware of at least one scheme	57%	95%
Have availed at least one scheme	26%	81%

Business Management Skills

Entrepreneurs who thrive keep a keen eye for innovation to identify new products and markets. For women entrepreneurs, this requires overcoming gender barriers of mobility and confidence to interact with the outside world, both of which women are discouraged by social conditioning. Even when they are otherwise in control of an enterprise, they often depend on male members of the family in the area of marketing or prefer to work through a single intermediary. Marketing skills are therefore, not actively exercised by female home-based entrepreneurs in Tamil Nadu. Moreover, adoption of new technology and financial services is low reflecting reluctance of home-based entrepreneurs in Tamil Nadu to take risk and respond to change. 92 per cent of sampled respondents have bank accounts but all the transactions are cash based mostly due to the cash stickiness in the informal sector and the lack of enabling infrastructure for digital payments. More than a third of women surveyed are loss and risk averse. These are latent female entrepreneurs who are elderly and have primary or less years of schooling. This cohort is less likely to adopt new technologies and market strategies to adapt and expand in response to changing market conditions.

Less and Tsang (2001), find that personality traits are less important than industrial and managerial experiences and skills in explaining firm growth⁵⁴. Almost 40 per cent of the surveyed women started their business with some work experience but most have not invested in skill training in recent past. The lack of business skills, outside the actual artisanal skills, is evident in how businesses are managed every day. Across the board, record keeping is low, let alone the use of records to make business and marketing decisions. The figures are even lower for handloom weavers who have foregone these responsibilities of operating a business to their collective societies instead of overcoming the barriers individually.

Agency

Culture affects the entrepreneurial ecosystem. Societal norms dictate how much autonomy an entrepreneur has and how much support she receives while managing her business. In this study, a woman's control over her business was measured using Locus of Control (LOC) that was narrowed down to the decisions significant for businesses – finance, operations, and price setting. Many studies have found internal LOC to be more prominent in the entrepreneurs than other professions.

⁵³ 7 schemes are applicable to handicraft and 16 to handloom.

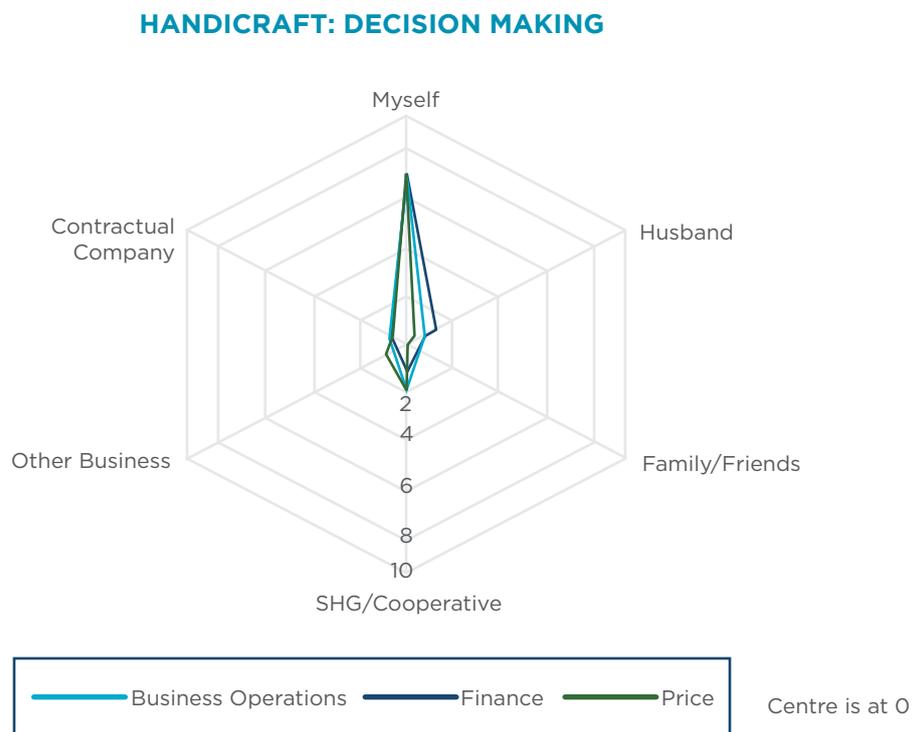
⁵⁴ Lee and Tsang, 2001. The Effects of Entrepreneurial Personality, Background and Network Activities on Venture Growth. *Journal of Management Studies*, 38(4), 583–602.

LOC is a psychological capital that contributes to entrepreneurial resilience and venture growth amongst the entrepreneurs⁵⁵. Her support network and related influences were also gauged.

Culturally, the locus of control with regards to business operations and financial management is internal in Tamil Nadu. Female entrepreneurs in the state enjoy strong community support and mentorship from husbands, family, and friends on every aspect of operating a home-based business. However, the difference between the institutional set up in each sector is highlighted by price-setting decisions. Female weavers are price takers – the price of a handloom product is collectively set by cooperatives and contractual companies (Figure 23). However, most handicraft artisans reported that they set the prices themselves (Figure 22). With nascent or no collective enterprises in the handicraft sector, the bargaining power of handicraft artisans, although autonomous, is very low – they are essentially price takers in the local market.

Within the handloom sector, business decisions are confined to the women themselves or their husbands even with a strong hold of cooperative societies in handloom sector as illustrated in Figure 23. Part of this trend could be because husbands often are weavers themselves and run parallel businesses, especially in the case of high-value silk sarees. With either 40 per cent of key financial decisions taken by husbands or influenced by husbands, handloom home-based businesses in Tamil Nadu are not entirely women-led.

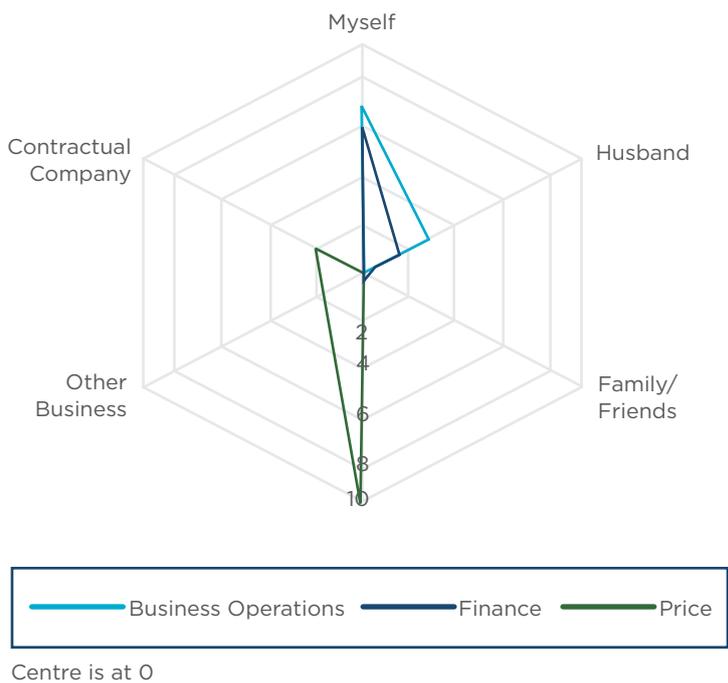
Figure 22: Locus of decision making in the handicraft sector



⁵⁵ Rauch and Frese, 2007. Let's Put the Person Back into Entrepreneurship Research: A Meta-Analysis on the Relationship Between Business Owners' Personality Traits, Business Creation, and Success. *European Journal of Work and Organizational Psychology*, 16(4), 353–385.

Figure 23: Locus of decision making in the handloom sector

HANDLOOM: DECISION MAKING



	Who helped you establish the business?	Who gave you advice or mentored while setting up your business?	If you had to seek advice regarding business operations, who would you go to?	If you had to seek advice regarding financial decisions, who would you go to?
No one	0.93	1.07	1.63	1.53
Has Support system	9.07	8.99	8.37	8.47

Figure 24: Support system in the handicrafts sector

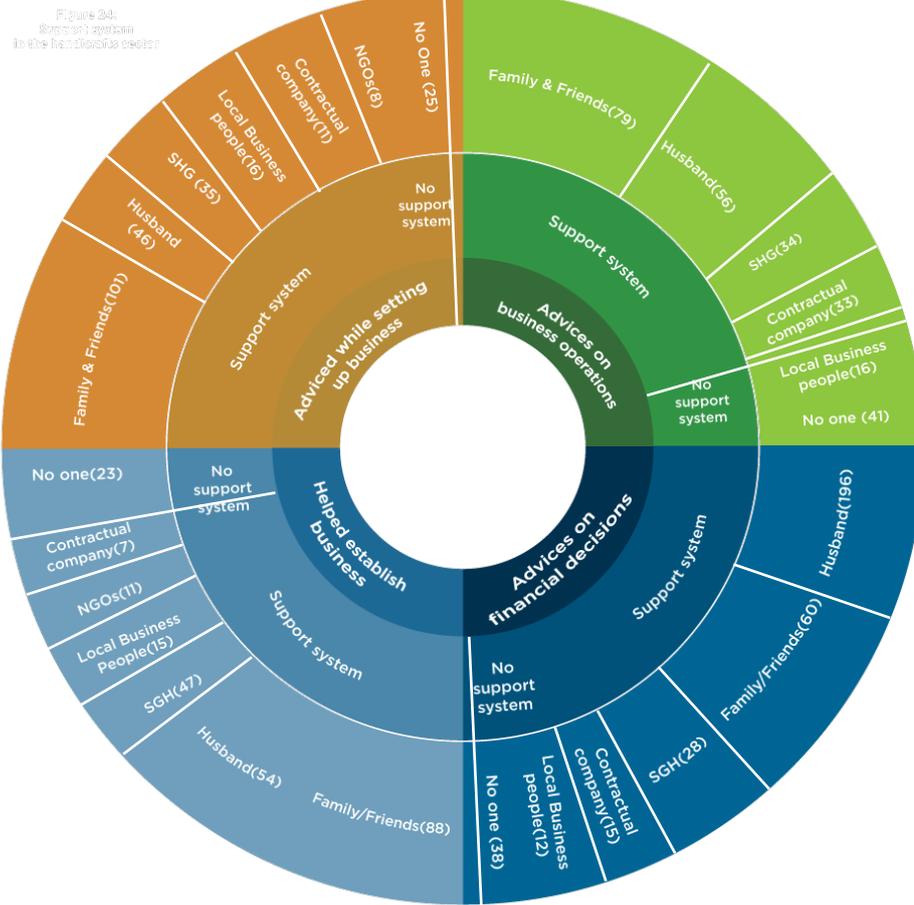


Figure 25: Support system in the handloom sector



Figure 26: Risk behaviour of female entrepreneurs⁵⁶



⁵⁶ Risk aversion is the tendency of individuals, who, when exposed to uncertainty, attempt to lower that uncertainty. It is the hesitation of a person to agree to a situation with an unknown payoff rather than another situation with a more predictable payoff but possibly lower expected payoff. Risk averse individuals, with risk score 1, are those who do not like to take risk. Risk tolerant individuals, with risk score 8, are those who are willing to take risk in the trade-off for higher returns. Loss aversion refers to people’s tendency to prefer avoiding losses to acquiring equivalent gains. For example, it is better to not lose INR 100 than to find INR 100. What distinguishes loss aversion from risk aversion is that the utility of a monetary payoff depends on what was previously experienced or was expected to happen. Loss averse individuals, with a loss score 1, are those who avoid loss. Loss tolerant individuals, with a loss score 8, are those who are willing to take a loss in the trade-off for higher returns.



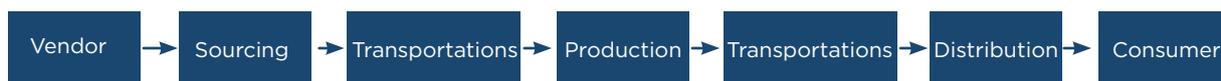
03

SUPPLY CHAIN

RESPONSIBILITY

■ Entrepreneur ■ Company/Collective Enterprise

Own Accounts Business



Piece-rate Business



Key to unpacking the landscape is analysing the supply chain itself. The supply chain analysis of business models that prevail help to identify appropriate thrust areas to optimise female entrepreneurs' access to markets and resources, and therefore, their potential to become sustainable, scalable, and visible.

The ILO distinguishes home-based businesses by own-account/self-employed and piece-rate/worker.⁵⁷ These were the business models that emerged in Rajasthan and Tamil Nadu based on the institutional set-up.

1. **Own-account businesses** are businesses run by women who work on their own account and are self-employed. They work on their own account and occupy the entire supply chain from sourcing to selling (mainly to local customers and buyers). These businesses exist independently and are not networked well amongst themselves as well as in the industry making them largely invisible. As a result, they are on the periphery of social safety government schemes and support in terms of financial, technical, and market support.

Women who operate own-account businesses either rely on the male family members to travel and procure raw materials, or undertake the ordeal themselves especially when materials are not available in local markets. Some even manually collect raw materials from natural sources such as in the case of clay, from rivers to make pottery. A few cultivate grass or bamboo at home to weave bamboo products. When the scale of these businesses is small, which is generally the case, the per unit cost of production is high, monetarily and effort-wise. Since own-account businesses operate independently, the risks associated with raw materials and products getting damaged falls on the businesses entirely.

The scope of their sales depends on the product and the scale of the local market. Lucrative businesses like tailoring have inelastic local demand that can sustain businesses. But handcrafted products are perceived as luxury goods and therefore, have elastic and low demand especially at the face of cheaper machine-made alternatives. Own-account businesses are therefore, price-takers at the local market. In our sample, own-account businesses are categorised as those businesses that did not sell any products to contractual companies and/or collective enterprises. These businesses are primarily without any institutional

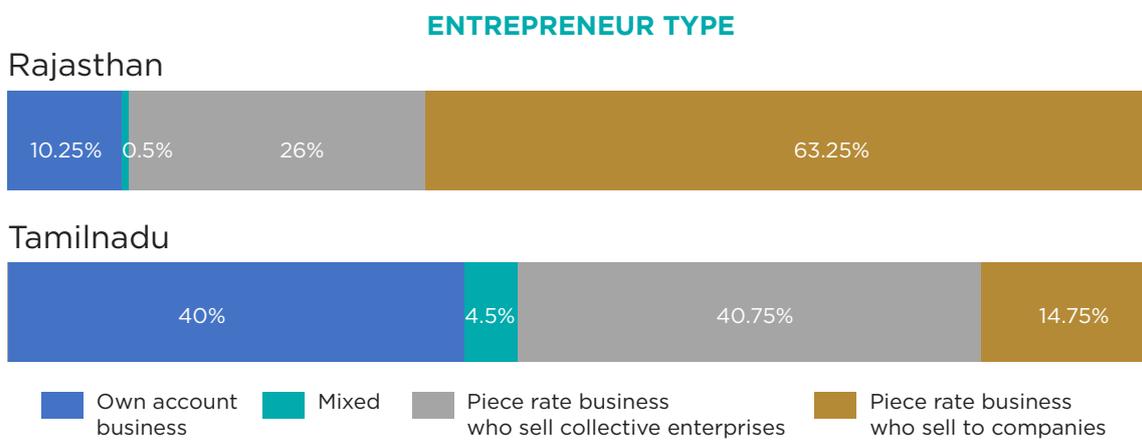
⁵⁷ International Labour Organization (ILO), 2015. Home-based workers: Decent work and social protection through organization and empowerment. (https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilo-jakarta/documents/publication/wcms_436853.pdf).

affiliation. In cases where SHGs had not transformed into collective enterprises, businesses were still seeking markets on their own-account. 10.25 per cent of surveyed female-led home-based businesses in Rajasthan were own-account businesses. In Tamil Nadu, the composition of own-account businesses was raised to 40 per cent by the handicraft sector. Female artisans in the handicraft sector in Tamil Nadu are primarily own-account business, highlighting the lack of network and market access as illustrated in Figure 31.

Intervention areas for own-account businesses:

- Network, credit, and markets linkage
 - Skilling in business management, marketing, and technology
 - Negotiating fairer terms of trade when linked to players in the larger market
2. Piece-rate businesses are businesses that receive orders at piece rate on contract or subcontract from intermediaries. Piece-rate businesses usually occupy only the manufacturing section of the supply chain. In cases such as

Figure 28: Entrepreneur type by state



embroidery, where women are prominent because of their nimble fingers, the business adds value to an existing supply chain. Men play significant roles in supply and value chains which makes them occupy cash-intensive activities as opposed to women. In both states, intermediaries, especially private companies, tended to be dominated by males.

Piece-rate businesses do not have direct contact with the markets for the goods they produce but are linked via intermediaries. Many do not know the backward or forward links of the chain they are engaged in beyond their contractor. Depending on the arrangement, these businesses can be responsible from procuring their own inputs to transporting the finished products to the intermediary. Raw materials are generally arranged by the intermediary for a lower per unit upfront payment or deduction from the final payment. Other costs of production such as electricity, infrastructure, tools, operations, and maintenance costs, are not considered in the

transaction. Like own-account businesses, piece-rate businesses absorb many of the risks of production such as delayed or cancelled order, unreliable supply of raw materials, delayed payments, and rejected goods. The finished products are either collected by the intermediary or the artisans travel short distances to drop off the products and collect raw materials at the intermediary's collection point. The intermediary, whether private company or collective enterprise, and the terms of trade determines the entrepreneurial ecosystem for piece-rate businesses.

While piece-rate businesses owners are classified as self-employed because they are not supervised by an employer and provide their own workspace, in reality, they lie somewhere between being fully independent self-employed and fully dependent⁵⁸.

Piece-rate businesses in our sample are categorised as those businesses whose customer base is composed fully of either a contractual company or collective enterprise. 89.25 per cent of sampled home-based entrepreneurs in Rajasthan were operating piece-rate businesses, working for an intermediary or an aggregator. The trend of subcontracting is prominent in certain forms of traditional craft work (such as bangle making and handloom) in Rajasthan as illustrated in Figure 29. In Tamil Nadu, 55.5 per cent of surveyed female-led home-based businesses were piece-rate businesses. Figure 31 shows the handloom sector in Tamil Nadu being dominated by cooperatives who buy products at piece-rate from weavers. In both states, there were a small cohort of entrepreneurs selling at piece-rate to companies and/or collectives as well as other retailers and directly to customers.

Amongst piece-rate businesses sampled in the study, most were locked in the supply chain i.e. they occupy only the manufacturing segment of the supply chain as illustrated in Figures 30 and 32. These businesses source their raw materials and sell to the same entity, have little control over business functions such as price setting, design, and marketing, and are essentially home-based workers selling their services.

2.A. Piece-rate businesses who sell to companies, either firms or middlemen, tend to be not networked or organised amongst other businesses of the same trade. Similar to own-account businesses, these female home-based entrepreneurs have low visibility and limited or no access to social security schemes. Their bargaining power for fairer terms of trade is minimal or non-existent. The female bears the cost in the event of raw material being damaged or if the final product is rejected.

Intervention areas for piece-rate businesses who sell to private companies are:

- network facilitation with other home-based entrepreneurs of the same trade
- skilling in business management, marketing, and technology
- negotiating fairer terms of trade
- regulation of contractors or brands and companies
- dispute resolution mechanism

⁵⁸ https://issuu.com/sainit/docs/home_based_workers.

2.B. Piece-rate businesses who sell to collective enterprises are businesses that have been organised into and are members of a collective enterprise. Collective models are initiated by the NGOs, government, and community themselves. They have collective visibility, but individual agency is limited and dependent on the governance structure – especially when collective enterprises are of mixed genders. The SHGs or cooperatives that were initiated by the government start with access to social welfare schemes as incentive to collectivise. They have greater access to finance and are eligible to apply for joint liability loans as well as subsidies and rebates from the government. Some even use shared facilities, such as a common workshop, to further lower the cost of production. Aggregation of product quality occurs over time.

These home-based entrepreneurs share costs and exercise collective bargaining power with retailers, wholesalers, and other companies allowing them to be competitive against machine made alternatives (if any) in the market. However, the prices are fixed and individual businesses may be discouraged from venturing out of the collective model.

Intervention areas for piece-rate businesses who sell to collective enterprises are:

- skilling in business management, marketing, and technology
- facilitation of female representation in governance

Figure 29: Distribution of entrepreneurs by sector in Rajasthan

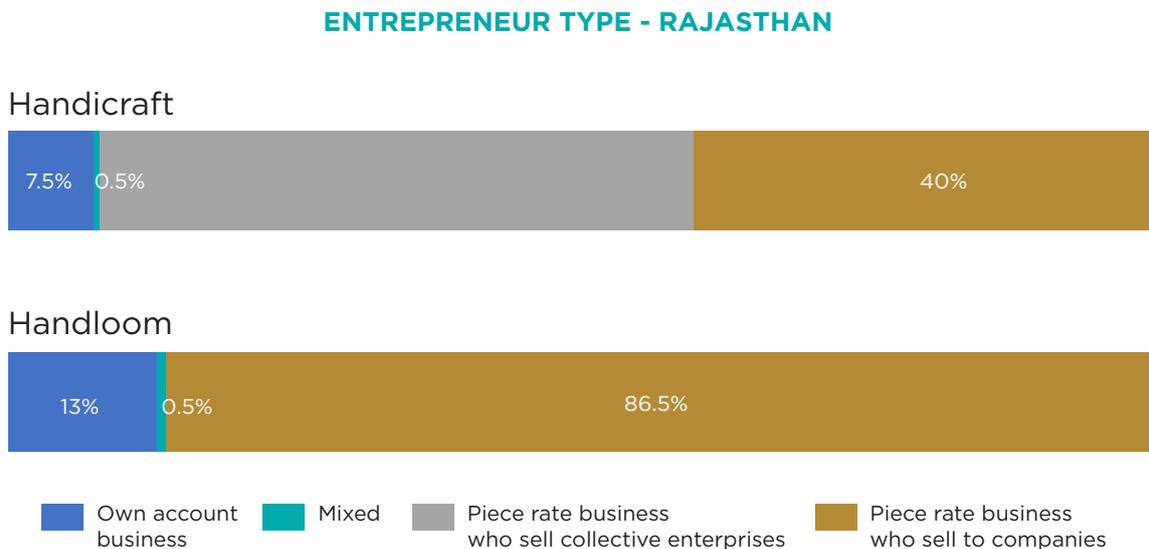


Figure 30: Distribution of entrepreneurs who are locked in the supply chain of a single institution by sector in Rajasthan

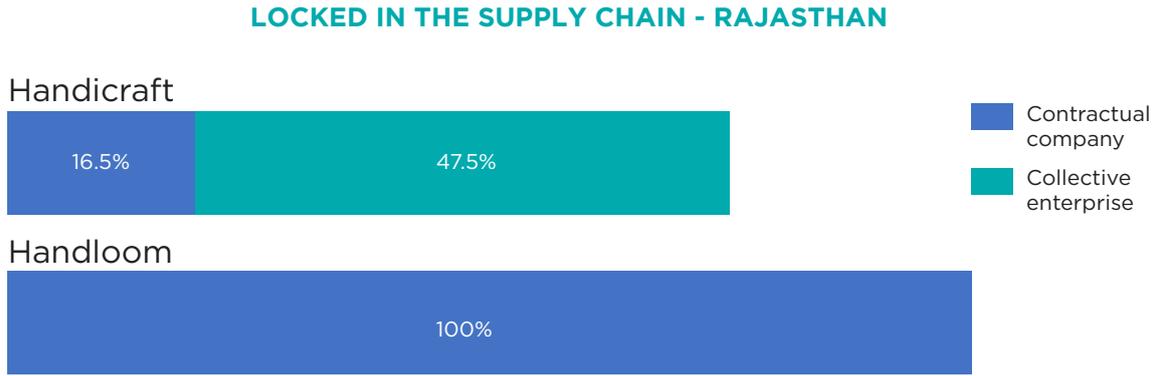


Figure 31: Distribution of entrepreneurs by sector in Tamil Nadu

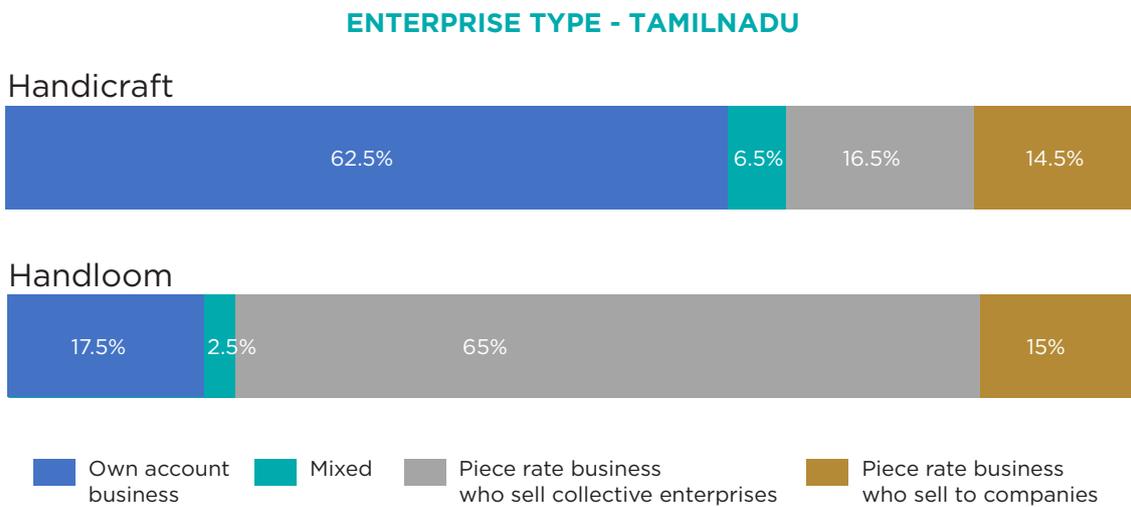


Figure 32: Distribution of entrepreneurs who are locked in the supply chain of a single institution by sector in Tamil Nadu



Table 8: Summary

Business Type	Market Linkage	Market Access	Characteristics
Own-account	None	Local	<p>Visibility and network Low visibility with no network linkage to other similar businesses. Outreach of sector-specific and other welfare schemes is therefore low. Could be linked to multiple suppliers depending on the individual entrepreneur and local market composition</p> <p>Risk and cost All risk and cost borne by the entrepreneur.</p> <p>Price setting Price setting depends on local market conditions and the product/skill. Craft clusters have many artisans and weavers who have no influence on the industry individually. Additionally, most handicraft and handloom products have an elastic demand, so the artisan/weaver is a price taker.</p>
Piece-rate	Contractual company	Local/ Domestic/ International (depends on the forward supply chain of the intermediary)	<p>Visibility and network Low visibility with no networks. Outreach of the sector and other welfare schemes is therefore, low.</p> <p>There are cases where contractual companies invest back into the communities such as Jaipur Rugs. They network with artisans and weavers, and provide social security benefits.</p> <p>Risk and cost All risk (delayed or cancelled order, damaged raw materials, delayed payments, rejected goods, etc.) borne by the entrepreneur. Cost and transportation of raw materials sometimes borne by the company. Other costs of production such as electricity, infrastructure, tools, operations, and maintenance costs, etc. are borne by the entrepreneur.</p> <p>Price setting Entrepreneur is a price taker. Price is set by contractual company and individual entrepreneurs have no bargaining power.</p>

	Collective enterprise		<p>Visibility and network Collective visibility. Outreach of sector and other welfare schemes is high, given most cooperatives and SHGs are established with the help of the government in the first place.</p> <p>Risk and cost Risk and cost sharing model. Raw materials are procured collectively but other costs of production such as electricity, infrastructure, tools, operations, and maintenance costs, etc. are borne by the entrepreneur. Depending on sector and the proactiveness of the collective enterprise, members avail government schemes that appease the non-raw material expenditures such as electricity subsidies, home and work-shed schemes, etc.</p> <p>Price setting Individual entrepreneurs are price takers. But price is set or bargained collectively for by the SHG/cooperative.</p>
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04

BUSINESS READINESS SCORECARD FOR WOMEN

Image: Ria Dutta

The Women Business Readiness Scorecard- Handloom and Handicrafts Sector (WBRS-HHS) is an index which evaluates the current sectoral performance. It is a data-driven diagnostic tool which helps to identify the key constraints and high-performance areas for value-chain in Rajasthan and Tamil Nadu. The 2020 Women Business Readiness Scorecard uses a ranking as well as a rating system. It gauges the enterprise readiness of women entrepreneurs and is measured on the ability of women home-based entrepreneurs to sustain, scale, and expand current business portfolio on economic as well as social, cultural, and behavioural parameters.

Figure 33: Women Business Readiness Scorecard approach



In a country as diverse as India, with a large, heterogeneous micro and small enterprise base, it is essential to look beyond adopting a single approach. A multi-faceted diagnostic tool such as the WBRS can be an essential addition in the toolkit of policymakers among other stakeholders; to identify enterprises with growth potential and provide targeted policy and programme support. This is even more significant in the case of women-led enterprises which are home-based, where socio-cultural and gender norms play a critical role in influencing decisions and determining development pathways.

A granular assessment of an entrepreneur and her enterprise's readiness can help identify best practices, create market linkages, and improve the targeting of skilling initiatives. By following a multi faceted approach to map readiness helps in gauging the current stage of the enterprise in the business life-cycle and identifying barriers to graduation.

The scorecard provides a framework to gauge an enterprise's readiness relative to other enterprises in the same region. However, at this stage, it may not help in drawing specific inferences for states across India. The scores are intended to inform enterprise development programmes and the diagnostics must be geared towards creating an enabling ecosystem for women entrepreneurs, rather than limiting the focus on individual factors that may influence growth.

Definitions

The Women Business Readiness Scorecard approach incorporates a composite index ranking with an additional rating system. Businesses are ranked on the basis of 30 variables. Business Readiness Scorecard is composed using 4 sub-indices namely; agency, market readiness, production readiness and legal and regulatory readiness.

Agency sub-index captures 5 indicators- decision making, financial control, economic independence⁵⁹, past experience and risk score⁶⁰. Agency sub index captures the bandwidth of the enterprise to sustain itself.

⁵⁹ Economic independence informs us about the saving, earning patterns, whether she has house help and how she utilises her day by capturing how many hours she devotes to business and non- business activities.

⁶⁰ The study captured the risk and loss taking preference of the respondents by playing a hypothetical game. Two situations with monetary incentives were presented to get a sense of how risk tolerant/ averseness and loss tolerant/ averseness the respondents are. This behaviour was used to get a sense of how they would respond to stressful or risky business decisions.

Market Readiness sub-index is a composite of 2 indicators which are advance orders and product portfolio. This sub-index measures whether the enterprise is able to match with the market demand and is innovative with diversifying its products.

Product Readiness sub-index has 3 indicators which include worksite, personnel and inventory management. This sub-index quantifies the enterprise's ability to maintain stock, ability to employ workers and source of raw materials.

Legal and Regulatory Readiness sub-index captures whether the enterprise is registered with the government and uses or is aware of the schemes rolled out by the government.

Methodology

There are many statistical approaches available to develop a composite index by using weighting and aggregation methods. We chose Multiple Correspondence Analysis (MCA) because all the data gathered from Rajasthan and Tamil Nadu are categorical and non-compensatory in nature. MCA resorts to objective weighting which assigns a weight proportional to the variability of the indicator. This is done to avoid arbitrariness in the process of assigning weights by the researcher. Objective weighting gives way to the indicisation of externally fixed base rather than a subjective weighting under which all variables have uniform weights. The aggregation method uses the multivariate method. A detailed methodology note is provided in Annexure C.

Limitations

The limitations of the business readiness index developed are as follows:

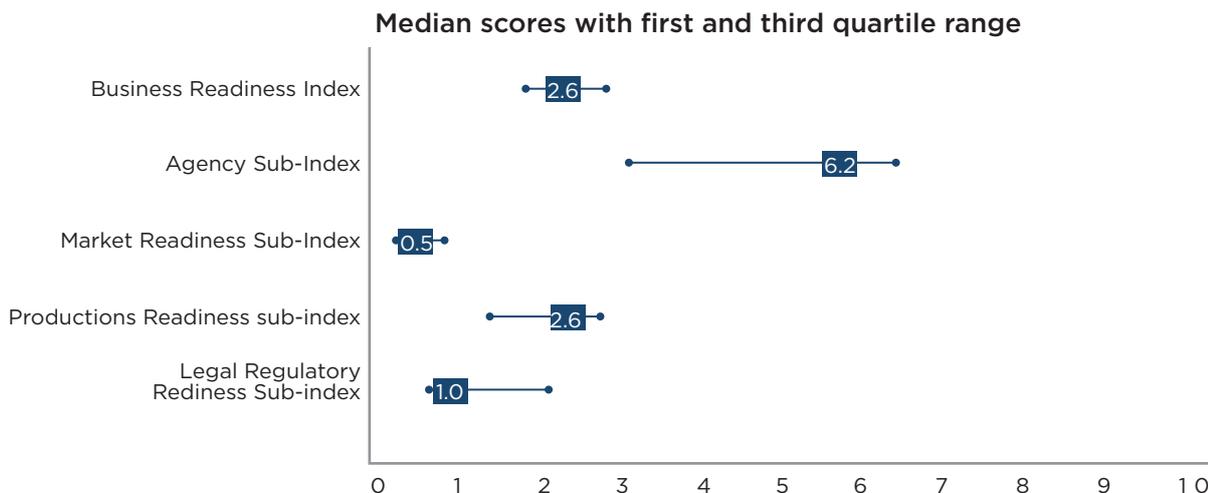
- The methodology used considers all variables as categorical in nature. The variables collected in this study are categorical, discrete as well as continuous in nature. The discrete and continuous variables included in the index calculation are converted into categorical variables by converting them into ordinal values.
- In the absence of similar scorecards developed for home-based women led businesses, there are no benchmarks for each of the sub-indices. The inference drawn can only be relative and in relation to the other scores.

Business Readiness Index – Rajasthan

The home-based women entrepreneurs of Rajasthan scored 2.6 out of 10 in the Business Readiness Index. Among the sub-indices, they got the highest score for Agency Sub-index and got the lowest score for Market Readiness Sub-Index. The median score, 25th and 75th percentile scores for each sub-index for Rajasthan is presented below:

Figure 34: Median business readiness scores in Rajasthan by sub-index

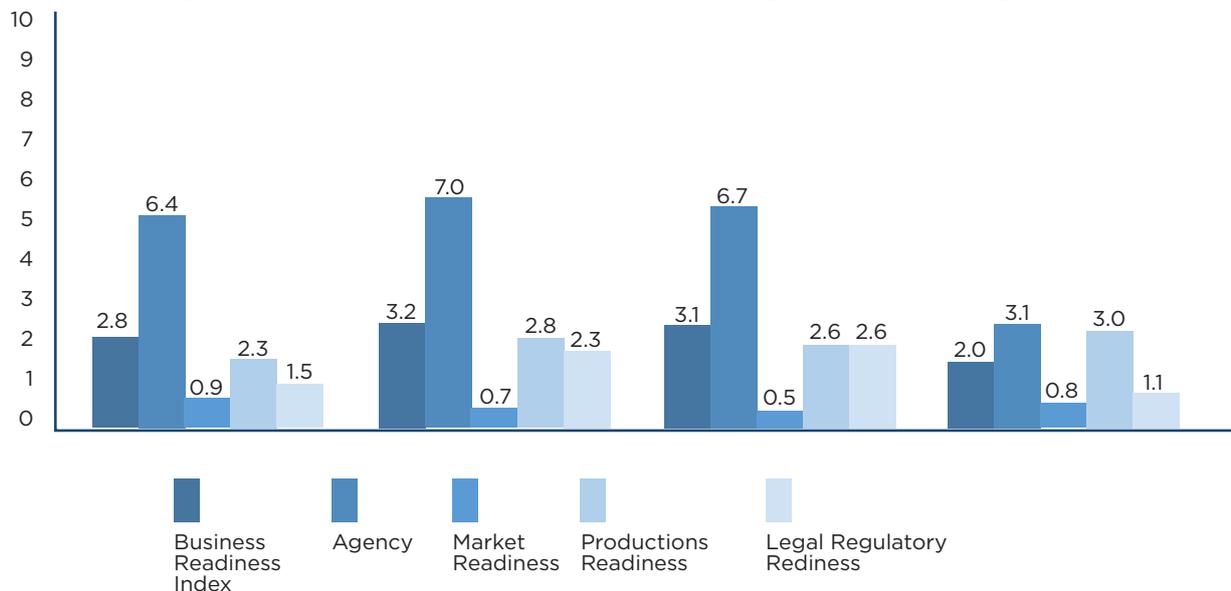
RAJASTHAN - BUSINESS READINESS INDEX AND SUB-INDICES



District-wise Scores

The district-wise Business Readiness Index scores and sub-indices scores are presented below. Kota district has the highest index score at 3.2 out of 10 Udaipur has the lowest score at 2.0 out of 10. The Agency sub-index score for Udaipur is 3.1 while it's above 6.0 for the remaining three sampled districts of Rajasthan. The market readiness score for all the four districts is less than 1 out of 10. There is a need for significant improvement in the market access and value-chain for both sectors in order to improve the business scalability and sustainability.

Figure 35: Business Readiness score by district in Rajasthan



The business readiness score for home-based women entrepreneurs of Rajasthan is very low. One of the main contributors to the low index score is the Market Readiness Sub-Index with a score of 0.5 out of 10. Significant improvements are required to improve the market access for these entrepreneurs and also improve the efficiency of the entire value-chain of the Handloom and Handicrafts sectors. The Legal and Regulatory Readiness score is also low at 1.0 out of 10. The enrolment rates of women entrepreneurs in both general government welfare schemes as well as sector specific welfare schemes needs to be improved so that they can avail the benefits of these schemes.

Takeaways from Rajasthan

Institutional affiliation and market access among the artisans and weavers, mirrors the sectoral landscape in Rajasthan. The sectoral landscape in Rajasthan is dominated by private players and SHGs. In the supply chain, men played consequential roles in supply and value chains and occupied cash intensive positions as opposed to women. The onus to run the household and engage in unpaid labour rests on women restoring the traditional order in the division of labour. Over 80 per cent of respondents lacked a direct link to the market and relied on middle men. They were employed in roles which required women to use their soft skills.

Women who work in the informal sector in India face gender discrimination and come from sections in the society which need income to survive at any cost, making them need based entrepreneurs. An average woman in Rajasthan spends between seven to eight hours on household duties and family care, and those who do not have remunerative work spend an additional five to eight hours as unpaid family workers. Most of the women lack proper education and training. They have few options as far as gainful jobs are concerned. Still, there are 33 cases where these women are sole income earners of their families.

Majority of female entrepreneurs want to grow their business as shown in Table 8. There is a need for significant improvement in the market access and value-chain development for both sectors in order to improve the business scalability and sustainability. Kota district has the highest index score at 3.2 out of 10. Udaipur has the lowest score at 2.0 out of 10. 28 per cent of the respondents stated access to financial services as a major roadblock they faced while setting up their businesses. Constraints to financial access plays an important role for both male and female entrepreneurs. However, the level of financial exclusion of female-led businesses (in comparison to males) is higher due to a number of demand and supply side constraints⁶¹ that is investigated in depth in Part II of the report.

⁶¹ Gonzales, C., S. Jain-Chandra, K. Kochhar, and M. Newiak (2015). Fair Play: More Equal Laws Boost Female Labor Force Participation. IMF Staff Discussion Note SDN/15/02. Washington, D.C.: International Monetary Fund.

Table 9: Respondent’s vision for the future

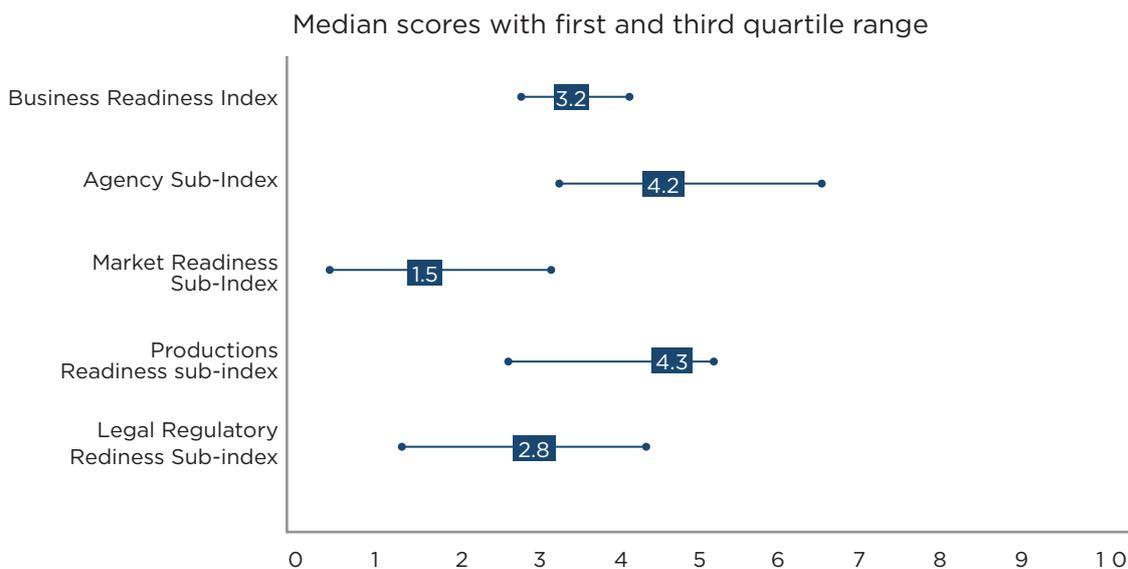
Vision	Handloom	Handicraft
Growth	81.5%	87%
Maintain the same	15%	8%
Downsize	3.5%	5%

Business Readiness Index – Tamil Nadu

The home-based women entrepreneurs of Tamil Nadu have a higher score of Business Readiness Index compared to Rajasthan at 3.2 out of 10. Among the sub-indices, they get the highest score for Production Readiness Sub-Index and the lowest score for Market Readiness Sub-Index. The median score, 25th and 75th percentile scores of each sub-index for Tamil Nadu is presented below:

Figure 34: Median business readiness scores in Tamil Nadu by sub-index

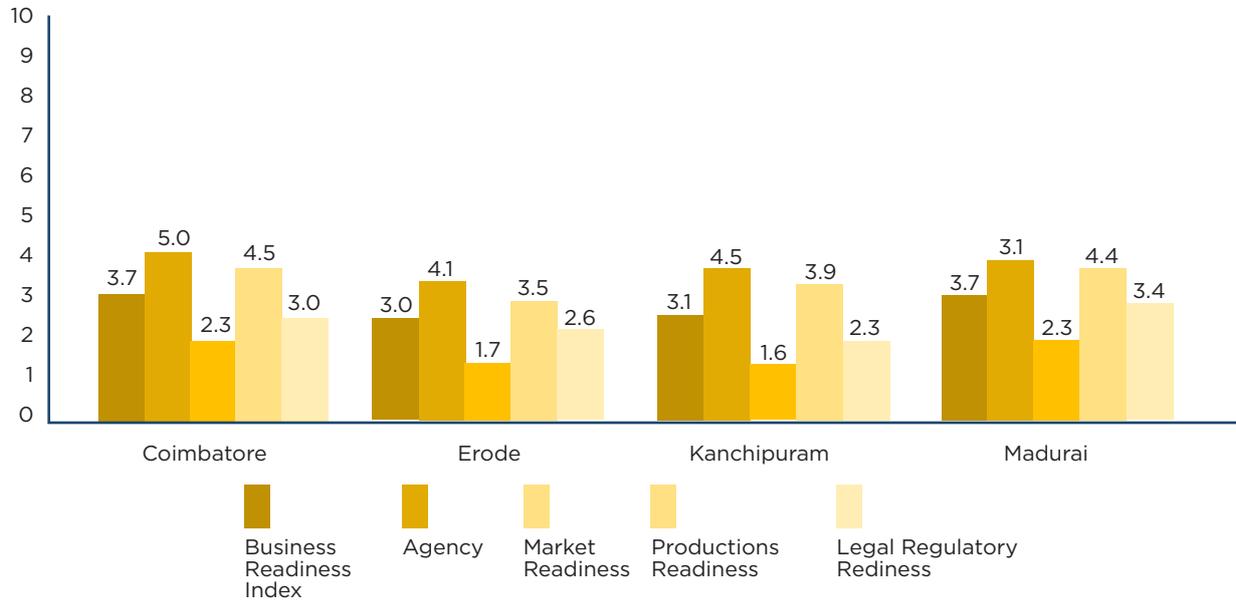
TAMILNADU - BUSINESS READINESS INDEX AND SUB-INDICES



District-wise Scores

Among the sampled districts, Coimbatore and Madurai have the highest score at 3.7 out of 10 while Erode has the lowest score at 3.0 out of 10. The main contributor to the low Business Readiness Index score is the Market Readiness Sub-index. The scores of all sub-indices are higher than the districts of Rajasthan except Agency Sub-index.

Figure 37: Business Readiness score by district in Tamil Nadu.



The business readiness score for home-based women entrepreneurs of Tamil Nadu is low. One of the main contributors to the low index score is the Market Readiness Sub-Index with a score of 1.5 out of 10. Significant improvements are required to improve the market access for these entrepreneurs and also improving the efficiency of the entire value-chain of the handloom and handicrafts sectors. The Legal and Regulatory Readiness score is also low at 2.8 out of 10. The enrolment rates of women entrepreneurs in both general government welfare schemes as well as sector specific welfare schemes needs to be improved so that they can avail the benefits of these schemes.

Takeaways from Tamil Nadu

The sectoral landscape of handicraft and handloom dictates market access and business outcomes for female home-based entrepreneurs. The handicrafts sector for female entrepreneurs is dictated by SHGs supported by the government and NGOs. But these SHGs are still at a nascent stage of being transformed into collective enterprises. The handloom sector has collectivisation that started over eight decades ago and therefore, has an integrated supply chain that extends beyond local markets. But the market linkage is primarily through the cooperative model.

The female handicraft artisans of Tamil Nadu have not yet been able to reach their business potential through the collective model because the process of becoming organised through SHGs is nascent. The SHGs are still building foundations of skilling and financial inclusion, and have not yet been able to expand beyond the local markets. For own-account artisans with universal demands, such as tailoring, the local market has been sufficient to grow and earn substantial returns. But for products with niche demands, market access has become the key inhibiting factor to growth and sustenance. Additionally, handicraft products are primarily ornamental and therefore, have an elastic demand to both price and consumer's income.

Community-owned enterprises such as SHGs and cooperatives have emerged in Tamil Nadu, facilitated by the government. These enterprises support the artisans overcome the limitations of scale to lower the cost of production, have collective bargain for favourable prices, and reach wider markets. But the collective model reinforces the trade-off between time spent on production versus actually nurturing entrepreneurial abilities. Female artisans belonging to collective units have outsourced managerial responsibilities and instead opt for a steady flow of income at fixed price, focus only on production, and are locked into a monopolistic relationship.

For the handloom businesses that have graduated from the start-up, expansion, and sustenance phases, the collective model is slowly becoming stagnant. Only 61 per cent of weavers in Tamil Nadu aspire to grow their business as illustrated in Table 9. Surveyed weavers believe the returns are not sufficient for the amount of effort and time spent, and therefore, have alternate aspirations for their children. In order for the handloom craft to be carried forward by the next generation of weavers, the market needs to expand and evolve from both supply and demand sides. The situation amongst artisans beyond the sustenance phase is even more dire. While recruiting respondents for the study, the research team experienced cases where entire artisan clusters had migrated to working for daily wages at factories in rapidly industrialising districts such as in Kanchipuram. While this trend is improving perceptions surrounding women's mobility and increasing their participation in the labour force, the social impact on the role of caregiving being vacant is unprecedented.

Coimbatore and Madurai districts ranked the highest in the state with business readiness scores of 3.7 out of 10 each. Erode district had the lowest score-3 out of 10. The reasons for these modest scores are different for the two sectors. Female entrepreneurs in the handicrafts sector have strong aspirations to grow their business (Table 8) but are limited by demand, market access, and linkage to larger supply chains. These entrepreneurs do not know how to expand their business beyond the quantity and variety of products produced - a tell-tale sign of lacking

entrepreneurial self-efficacy. For the handloom sector, female weavers have graduated the expansion phase of their business through the collective model, and are struggling with sustenance. Constraints of time, mobility, agency, and skills are all supply side factors inhibiting growth of a female-led handloom business. The same barriers that led the women to become home-based entrepreneurs have caught up to them and have become barriers to their business' growth.

Table 10: Respondent's vision for the future

Vision	Handloom	Handicraft
Grow	84%	61%
Maintain the same	15%	34%
Downsize	2%	6%



05

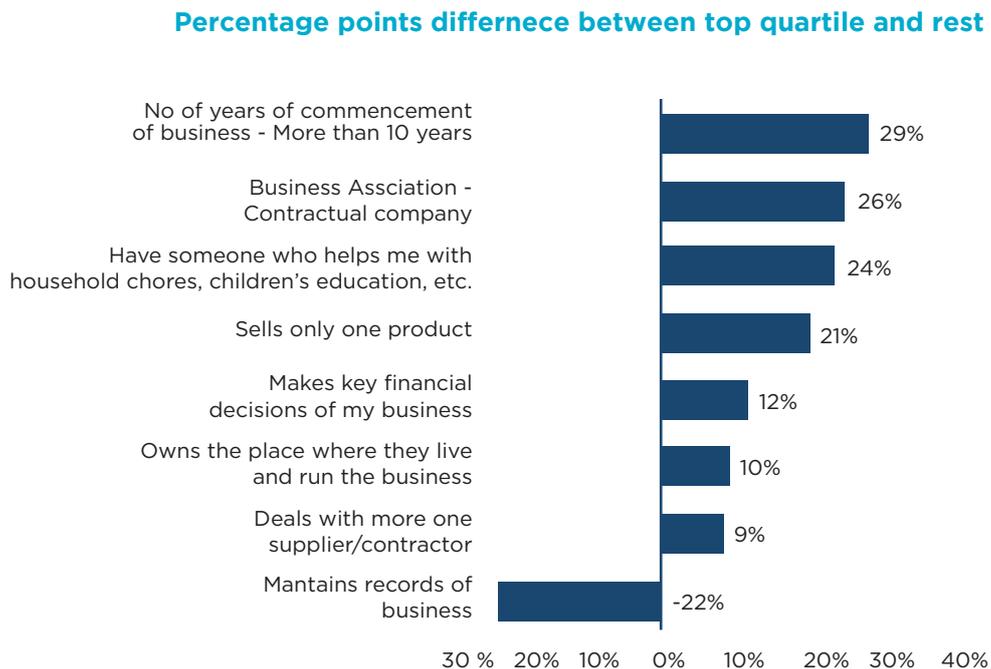
**WHAT DOES A
SUCCESSFUL
HOME-BASED WOMEN
ENTREPRENEUR
LOOK LIKE?**

While looking at all the different ways to describe a successful home-based women entrepreneur, we analysed the data to identify the important factors that influence success. We defined successful entrepreneurs as those who have achieved better Business Readiness Index scores, and the respondents who fell into the top quartile of the score were selected as top performers. Factors that are different for top performers in comparison to the remaining three quartiles were selected (Annexure C). It should be noted that the top quartile of the business readiness index score are top performers of the sample. However, women home-based entrepreneurs across the board are largely invisible and not reaching their business potential.

A successful female home-based entrepreneur in Rajasthan should have:

- good experienced in her business
- family support system
- focus on single product
- high sales turnover
- the independence to make business decisions
- multiple suppliers/contractors

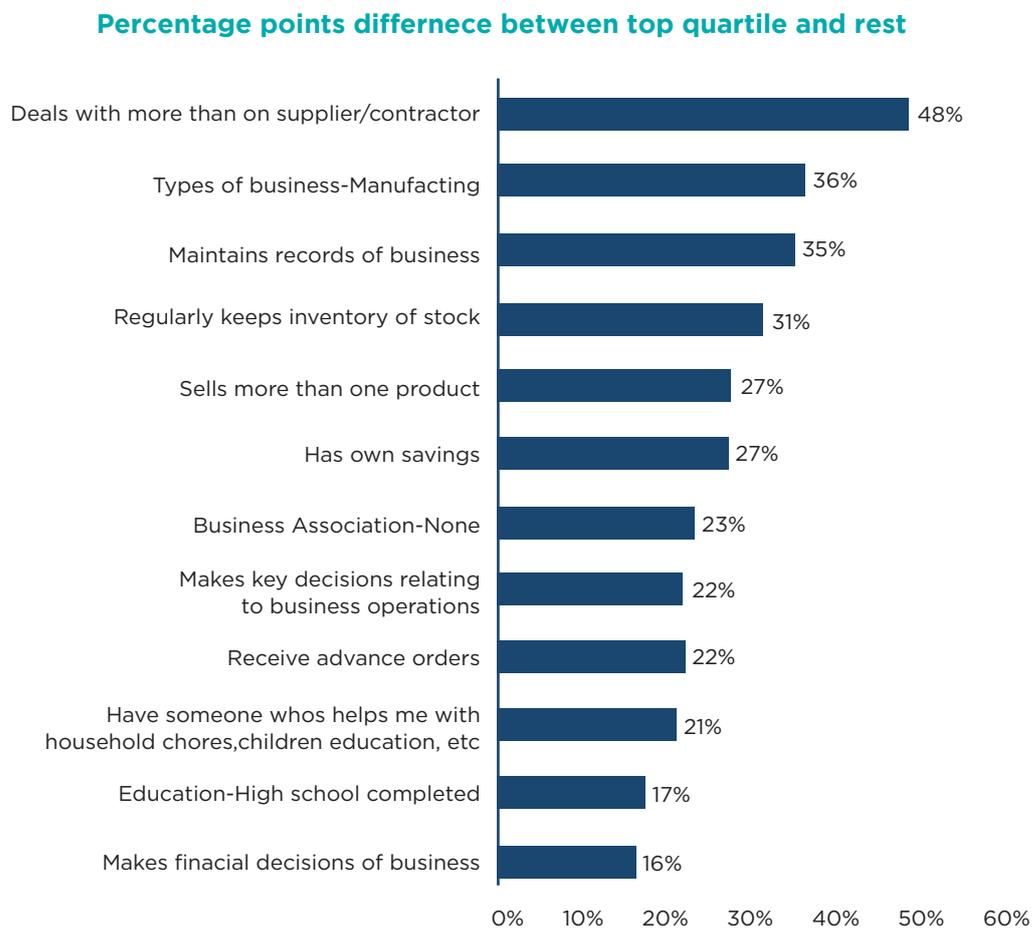
Figure 38: Percentage points difference in variables between top performing quartile and rest in Rajasthan



A successful female home-based entrepreneur in Tamil Nadu should have:

- multiple suppliers/contractors
- the independence to make business decisions
- manufacturing business type
- good inventory and record management practices
- sell more than one product
- savings of her own
- family support system
- completed high school education

Figure 39: Percentage points difference in variables between top performing quartile and rest in Tamil Nadu





06

KEY INSIGHTS AND REMMENDATIONS

Image: Rajesh Pamnani, <https://www.flickr.com/photos/pamnani/8575167966/>

Table 11: Market landscape summary

	Handloom	Handicraft
Rajasthan	<p>Strong presence of market linkers in terms of both collective enterprises and private players.</p> <p>52% are piece-rate businesses selling to collective enterprises and 40% selling to contractual companies only.</p>	<p>Market access is dominated by private players only.</p> <p>87% are piece-rate businesses selling to only contractual companies. There is no presence of collective enterprises but there is support for specific handloom clusters from the Central Government. Remaining are own-account businesses.</p>
Tamil Nadu	<p>Low presence of market linkers. 63% are purely own-account businesses. There is some presence of SHGs that are at the nascent stage led by efforts from the Central Government, and of contractual companies for specific marketable crafts.</p>	<p>Market access is public sector driven. 65% are purely piece-rate business selling to only collective enterprise – specifically cooperative societies that are seasoned and supported by the State Government. The remaining are split between own-account and piece-rate businesses selling to contractual companies.</p>

1. The market landscape for female home-based entrepreneurs across Rajasthan and Tamil Nadu lacks structure and formality with significant variations even between craft types and geography within states. Entrepreneurial strengths and business needs are further nuanced depending on factors such as age, education level, experience, business agency, risk tolerance, etc. or what we cumulatively define as ‘persona.’ Time and mobility remain barriers to expanding business and honing entrepreneurial skills. Home-based businesses in handicrafts and handloom are respectable alternatives for women who want to supplement their family income and themselves by overcoming constraints of time, mobility, literacy, and other factors that inhibit her participation in the formal labour force. Home-based businesses provide women with a safer work environment to earn a livelihood without disrupting the social fabric. But the same constraints eventually impede her business’ growth potential rendering her invisible. The study found women are able to dedicate only 5.8 hours a day on average to their home-based business that is intermittently interrupted by 6.6 hours of unpaid caregiving work.

2. Most home-based female entrepreneurs are own-account entrepreneurs. Over 70 per cent of sampled entrepreneurs are own-account entrepreneurs who do not have employees on a fairly regular or temporary basis. Only about 2% use unpaid family workers for support. Given most entrepreneurs are far from overcoming the limitations of their scale and crossing the threshold to become employers, their reliance on spouses and overarching institutions is prevalent in both states. From

those entrepreneurs who do have help, almost all are unpaid family workers – a trend most prominent among handloom weavers of Tamil Nadu. The entrepreneurs in Rajasthan especially lack support making their space-time constraints even more felt.

3. Sub-contracting at piece rate by collective enterprises and private companies are dominant features of the market landscape and, therefore, have a market monopoly. Women home-based entrepreneurs are indirectly linked to markets limiting their visibility. Direct market accessibility for women-led businesses across the board is limited given their time, mobility, and network constraints. Business scope and visibility of home-based entrepreneurs are dependent on market linkage via intermediaries – collective enterprise or private company. Over 70 per cent of the women interviewed, function in a closed communication channel by running piece-rate businesses and working on a contractual basis primarily to overcome mobility and travel-time constraints. There seems to be greater market monopoly in Rajasthan; 90% of respondents in Rajasthan show dependency on access to markets through a single market entity contractual companies, SHGs, cooperatives and so on. On the other hand, there is greater diversity in Tamil Nadu – 61% of the surveyed women sold their products to cooperatives and contractual companies; 57% of handicraft artisans operated individually. Very few women diversify their customer base once they adopt a piece rate business model. While this set up gives a consistent and singular market access, it also comes at the price of entrepreneurs losing stake in their own business decisions and creativity. Private contractual companies and SHGs dominate the vibrant handicrafts and handloom landscape in Rajasthan. In Tamil Nadu, the collective enterprises are public sector driven with a history dating back to pre-independence in the case of handloom.

4. Business outcomes are best for women who run piece-rate businesses but are also members of seasoned collective enterprises such as Self-Help Groups (SHGs) and cooperative societies. Affiliation with a seasoned collective enterprise has benefits of cost and risk sharing; collective bargaining power for price; aggregation of product quality to meet market standards; reaching a stable and wider market; and accessing welfare schemes to overcome limitations of scale and gender-related market constraints. Seasoned collective enterprises backed by the government have access to and a strong role in formulating social security policies targeting their trade leading to visibility and formalisation for their work. This gives some female entrepreneurs scope to go higher up the value chain to have more roles. SEWA Bharat, the world's largest union of informal workers, has a strong presence in the handicrafts sector in Rajasthan and has been instrumental in achieving higher earning and better working conditions for home-based entrepreneurs through self-development and self-organisation. Similarly, the Tamil Nadu Handloom Weaver's Cooperative Society has organised weavers across the state to deliver targeted schemes and streamline market opportunities locally, nationally, and internationally. This has enabled the handloom sector in Tamil Nadu

to remain competitive against the burgeoning power loom industry.

5. Contractual companies with a social business model provide social security nets to artisans and facilitate in government scheme delivery. When women entrepreneurs are in a piece rate contract with companies without a social element, they become sole bearers of risk without the collective agency to bargain for fair prices. Affiliation with contractual companies reduces monetary burden/investment, time, and effort costs of procuring raw materials and selling products. The contracts allow products to reach wider markets allowing a steady stream of income. But the home-based business operates in a silo, making them a price taker and rendering them still invisible. Information asymmetry and scheme awareness is also limited due to lack of social interaction and open communication channels. Essentially, women home-based entrepreneurs earn an income based on piece rate and hardly ever get a cut of the profit. Jaipur Rugs in Rajasthan, championing the social business model, gives an alternative narrative of companies sub-contracting home-based artisans. Jaipur Rugs organises their artisans for efficient delivery of not just raw materials but also alternative education, health camp, and business training in addition to linking weavers to insurance and government schemes.

6. Female home-based entrepreneurs are mostly price takers, but exhibit strong entrepreneurial aspirations. A massive 78 per cent of the sample had aspirations to grow their business. Despite aspirations, their outreach is mostly limited to local markets and institutional affiliations, making them price takers.

7. There is a trade-off between developing entrepreneurial skills versus market access via an intermediary in the case of women leading home-based businesses. Particularly because of limited time female entrepreneurs can dedicate to their business, when given the choice, they choose to occupy limited space on the supply chain in favour of a consistent singular market via an intermediary. But with a focus only on production, the home-based female entrepreneur does not develop entrepreneurial qualities essential for business growth.

Recommendations

The study has shed light into the need for two approaches when designing policy interventions for the market landscape of female home-based entrepreneurs:

1. There is a strong need for a facilitative and enabling ecosystem for home-based entrepreneurs. Because the market landscape lacks structure and formality with significant variations across the two states, taking a facilitative approach is necessary. With the added time-use, spatial and other gendered constraints, an enabling ecosystem is a prerequisite for a home-based female entrepreneur to grow and scale their business for better revenues. Standalone entrepreneurs who run own-account businesses especially need network facilitation with other entrepreneurs in similar trades and in enabling market linkages. While a small proportion of entrepreneurs have scaled their businesses and garner high returns are successful the majority are still unable to overcome their constraints, scale, and invisibility.

The entrepreneurs who operate their business on piece-rate contracts for a single intermediary need assistance in diversifying their customer base through e-commerce platforms that have higher outreach of end customers. They also need facilitation in negotiating fairer terms of trade and regulation when working with private contractors. Similar to own-account entrepreneurs, these females running home-based businesses and selling to private intermediaries would also benefit from networking facilitation towards each other and other market agents.

2. Women entrepreneurs should not be approached as a singular segment but instead need to be segmented according to their nuanced needs and strengths. It thus becomes essential to define the home-based women entrepreneurs from a persona lens and target different policies for each of them. Within the scope of this project sample, we found three clusters of personas with the potential for distinct policy interventions:

The millennial entrepreneur who is young, literate, entrepreneurial, and risk taking with the goal of growing her young business: Being mothers to young children, the time and mobility constraint is a pressure point. These entrepreneurs could make the most out of skilling interventions that focus on efficiency and can optimise disruptive technologies such as e-commerce, digital finance, and marketing efforts (such as product or process certification) facing towards export.

The striving entrepreneur who has some schooling and has gained business know-how through experience: With the scope to still scale up her business, these entrepreneurs need mentorship, business management skilling, access to credit, and to diversify their customer base. Being linked to demand aggregators who can explore the e-commerce market potential on their behalf could also be a potential opportunity.

The latent entrepreneur who either inherited her business or opened it out of necessity: With no or only some primary education, and only her craft skills to rely on, the latent entrepreneur is risk-averse and is focused on subsistence after operating her business for many years. These entrepreneurs would benefit the most by being a member of a collective enterprise or trade union that can give them steady revenue and collectively negotiate fairer terms of trade with other private players.

3. The ‘Women Business Readiness Scorecard’ approach tested by the study is a powerful policy tool to diagnose targeted interventions at the macro sectoral level and micro-entrepreneur persona level that can enable and empower female entrepreneurs to sustain, scale, and expand current business portfolio on economic as well as social, cultural, and behavioural parameters. The way forward with it lies in understanding the various dimensions that influence the business readiness of women-led enterprises in the informal sector is critical to provide targeted policy and program support. A granular assessment of an entrepreneur and her enterprise’s readiness can help identify best practices, create market linkages, and improve the targeting of skilling initiatives. Mapping readiness, however, must follow a multi-faceted approach - by gauging the current stage of the enterprise in the business life-cycle and identifying barriers to graduation. In a country such as India, with a large, heterogeneous micro and small enterprise base, it is essential to look beyond adopting a single approach to identify enterprises with growth potential. This is even more significant in the case of women-led enterprises which are home-based, where socio-cultural and gender norms play a critical role in influencing decisions and development pathways.

In our study, women entrepreneurs in Rajasthan score higher on the Agency sub-index, as compared to entrepreneurs in Tamil Nadu. On the other hand, the Production Readiness sub-index score is higher for women entrepreneurs in Tamil Nadu, compared to entrepreneurs in Rajasthan. We consistently see low market readiness across entrepreneurs in our sample, in both states. In the absence of similar scorecards for home-based businesses led by women, there are no benchmarks for each of the sub-indices. Thus, instead of using the tool for interstate comparisons, the scorecard provides a framework to gauge an enterprise’s readiness relative to other enterprises in the same region. Even other factors like the scale of business often depend upon time-use patterns for women engaged in home-based businesses that do not follow a typical ‘9 to 5’ schedule, owing to the disproportionate burden of unpaid care responsibilities. Thus, at this stage, the scorecard may not help in drawing specific inferences for states, but, serve as a tool to capture benchmarks based on sub-indices. As a way forward, a multi-faceted diagnostic tool such as the WBRS can be an important addition in the toolkit of policymakers, practitioners and other stakeholders in the ecosystem to support enterprises with growth potential and prioritise areas of

intervention for other enterprises. An important caveat with this approach is that the index and sub-index scores should inform enterprise development programs and the diagnostics must be geared towards creating an enabling ecosystem for women entrepreneurs, rather than limiting the focus on individual factors that may influence growth.



QUESTIONNAIRE

WOMEN-LED HOME-BASED
BUSINESS STUDY

ANNEXURE A

Section A: Interview Information

A1	State	1. Rajasthan 2. Tamil Nadu	A1==1>A2.1 A1==2>A2.2
A2.1	District (Rajasthan)	1. Sikar 2. Jaipur 3. Dausa 4. Ajmer 5. Alwar 6. Churu 7. Barmer 8. Bikaner 9. Jaisalmer 10. Udaipur 11. Jodhpur 12. Tonk 13. Kota	>A3
A2.2	District (Tamil Nadu)	1. Kanchipuram 2: Madurai 3: Erode 4: Coimbatore 5: Chennai 6: Vellore 7: Tiruvallur 8: Salem 9: Kanyakumari	>A3
A3	City	alpha-numeric	
A4	Village/neighbourhood/ hamlet/cluster name/SHG name/society name	alpha-numeric	
A5	Street/landmark	alpha-numeric	
A6	GPS coordinates	auto-generate	
A7	Sector	1: Handicraft 2: Handloom	1: Handicraft 2: Handloom

A7.1	Handicraft Sub-sector	<ul style="list-style-type: none"> • Embroidery • Applique • Zari • Pottery • Hand block printing • Cane and bamboo • Grass, leaf, reed, fiber • Bangle making • Zardosi • Stone carving • Jootis & Mojaris • Jewellery (Meenakari) • Paintings-888: Other, specify: 	>A8
A7.2	Handloom Sub-sector	<ul style="list-style-type: none"> • Saree • Shawls, stole, scarf, muffler • Angavastram, dhoti, sarong, lungi • Towel, napkin, duster, gamcha • Durries, rugs, mats • Dress material (Salwar, kameez, etc.), suiting, shirting, long cloth • Bedsheet, furnishings, blankets, tablecloth, curtains, cushions, quilts • Tie & dye (bandhani) • 888: Other, specify: 	>A3
A8	Surveyor ID	<ul style="list-style-type: none"> • Veena • Tara • Rekha • Ruchi • Neelu • Dhamayanthi • Indra • Ramya • Sulekha • TBD 	A8==(1,2,3,4,5) >A9.1 A1==(6,7,8,9,10) >A9.2
A9.1	Respondent ID (Rajasthan)		>Section B
A9.2	Respondent ID (Tamil Nadu)		>Section B

Section B: Demographic Information

B1	Name	Text	
B2	Age	numeric	Age completed on 1st August 2019
B3	Phone number	numeric	10 digits
B4	Phone number of person closest to respondent	numeric	10 digits
B5	What is the highest level of schooling that you have completed?	<p>0: Literate without formal schooling</p> <p>1: Pre-Primary (Anganwadi, nursery, LKG, UKG)</p> <p>2: Class I completed</p> <p>3: Class II completed</p> <p>4: Class III completed</p> <p>5: Class IV completed</p> <p>6: Class V completed</p> <p>7: Class VI completed</p> <p>8: Class VII completed</p> <p>9: Class VIII completed</p> <p>10: Class IX completed</p> <p>11: Class X completed</p> <p>12: Class XI completed</p> <p>13: Class XII completed</p> <p>14: Diploma/certificate</p> <p>15: College degree</p> <p>16: Post-graduate degree</p> <p>-777: Refused</p>	10 digits
B6	Before working on your own business were you employed as a worker (part time/ full time/ permanent/ temporary/ contractual) at another similar firm?	<p>0: No</p> <p>1: Yes</p> <p>-777: Refused</p>	<p>0: No</p> <p>1: Yes</p> <p>-777: Refused</p>

B7	Marital Status	0: Unmarried/never married 1: Married 2: Divorced/separated 3: Widowed -777: Refused	B7=1> B8 All other answers >B10
B8	What is the highest level of schooling that your spouse has completed?	<ul style="list-style-type: none"> • 0: Literate without formal schooling • Pre-Primary (Anganwadi, nursery, LKG, UKG) • Class I completed • Class II completed • Class III completed • Class IV completed • Class V completed • Class VI completed • Class VII completed • Class VIII completed • Class IX completed • Class X completed • Class XI completed • Class XII completed • Diploma/certificate • 15: College degree • 16: Post-graduate degree • -777: Refused 	
B9	What is your spouse's profession?	<ul style="list-style-type: none"> • Do not work • Looking for work • Kirana Store • Business- Trade • Business- Services • Business- Manufacturing • Government Salaried Job • Private Salaried Job • Agriculture (own) • Retired • Daily wages • - 888: Others, specify: • -777: Refused 	

B10	Do you live in a nuclear / joint family?	0: Nuclear Family 1: Joint Family -888: Other, specify:	
B11	Do you have someone who helps you with household chores, children's education, etc.? ex: maid, parents, husband, etc.	0: No 1: Yes	
B12	What is your total monthly household income?	<ul style="list-style-type: none"> • Less than 10 thousand • Between 10 thousand - 25 thousand • Between 25 thousand - 50 thousand • Between 50 thousand - 1 lakh • Above 1 lakh • -999: Don't Know • -777: Refused 	
B13	What is your household's primary source of income?	1: Kirana Store 2: Business- Trade 3: Business- Services 4: Business- Manufacturing 5: Government Salaried Job 6: Private Salaried Job 7: Pension 8: Agriculture (own) 9: Daily wages -888: Others, specify: -777: Refused	
B14	What is your household's secondary source of income	1: Kirana Store 2: Business- Trade 3: Business- Services 4: Business- Manufacturing 5: Government Salaried Job 6: Private Salaried Job 7: Pension 8: Agriculture (own) 9: No Secondary Income 10: Daily wages -888: Others, specify: -777: Refused	

B15		Household details		• all numeric				
				Total (1)	Less than 18 (2)	18-30 years (3)	31-59 years (4)	Above 60 years (5)
B15.1	Household Size	A	MALE	Autosum 15.1 A (2+3+4+5)				
		B	FEMALE	Autosum 15.1 B (2+3+4+5)				
		C	MALE	Autosum 15.1 C (2+3+4+5)	Autosum 15.1 (2(A)+2(B))	Autosum 15.1 (3(A)+3(B))	Autosum 15.1 (4(A)+4(B))	Autosum 15.1 (5(A)+5(B))
B15.2	Earners	D	MALE	Autosum 15.2 D (2+3+4+5)				
		E	FEMALE	Autosum 15.2 E (2+3+4+5)				
		F	TOTAL	Autosum 15.2 F (2+3+4+5)	Autosum 15.2 (2(A)+2(B))	Autosum 15.2 (3(A)+3(B))	Autosum 15.2 (4(A)+4(B))	Autosum 15.2 (5(A)+5(B))
B16	Do you currently have savings in any of these forms?			<p>0: No savings</p> <p>1: Keep cash at home</p> <p>2: Banking instruments (bank/post office) (Fixed Deposit/Recurring deposit/PPF/MIS, etc)</p> <p>3: Capital market and insurance (Invested in mutual funds, shares/equities/debt/Govt. bonds, new life insurance policies and/or paid premium on existing policies)</p> <p>4: Non-bank savings (Saved money with NBFC/ chit fund/ cooperatives/Ponzi scheme, in a thrift and credit group /SHG/ Committee)</p> <p>5: Physical assets (Bought gold/Coins/ Bars/Jewellery and other precious stones/ jewellery}, Invested in property (house/real estate), including paying EMI/part payment/down payment, in agriculture land, movable appreciating assets like art, in livestock and so on)</p> <p>-888: Others, specify:</p>				<ul style="list-style-type: none"> • B16=0> Section C • All other answers >B17 • If B16=0, single response; other all • multi response; max 3
B17	For what purpose do you save?			<p>1: Ceremonies and festivals (including marriages)</p> <p>2: Educational expenses</p> <p>3: Emergency</p> <p>4: Business</p> <p>5: Household consumption</p> <p>6: Assets for the household</p> <p>-888: Others, specify:</p>				<ul style="list-style-type: none"> • Multi response; max 3

Section C: Risk Preference

Read: The purpose of this activity is to understand how you make decisions about risk. Imagine a game where I will ask you to make some choices where you can decide whether or not you want to face some risk, which is like deciding whether to invest your money or to keep it with you at home.

[Surveyor instruction: DO NOT play the coin toss game with the respondent. Doing so may mislead the respondent into thinking you will give them the money equivalent to the coin toss outcome. The result of the coin toss does not matter. The purpose of this exercise is to find out whether they decide to play the game or not.

Decision Number	Option A: Reject the coin toss	Option B: Accept the coin toss		Decision
	Get zero rupees for sure: 100%	Heads Chance of gaining: 50%	Tails Chance of losing: 50%	
C1.1	Rs 0	Rs 100	Rs 20	1. Option A 2. Option B
C1.2	Rs 0	Rs 100	Rs 40	1. Option A 2. Option B
C1.3	Rs 0	Rs 100	Rs 60	1. Option A 2. Option B
C1.4	Rs 0	Rs 100	Rs 80	1. Option A 2. Option B
C1.5	Rs 0	Rs 100	Rs 100	1. Option A 2. Option B
C1.6	Rs 0	Rs 100	Rs 150	1. Option A 2. Option B
C1.7	Rs 0	Rs 100	Rs 200	1. Option A 2. Option B

C2

You can either pick:

Option A: Reject the coin toss and not play the game. In which case you will get Rs. 100.

Option B: Accept the coin toss and play the game. If heads or tails appear, you will gain a certain amount of money.

Now for each game, would you select Option A or Option B.

Decision Number	Option A: Reject the coin toss	Option B: Accept the coin toss		Decision
	Get Rs. 100 for sure: 100%	Heads Chance of gaining: 50%	Tails Chance of losing: 50%	
C2.1	Rs. 100	Rs. 150	Rs. 200	1. Option A 2. Option B
C2.2	Rs. 100	Rs. 100	Rs. 200	1. Option A 2. Option B
C2.3	Rs. 100	Rs. 80	Rs. 200	1. Option A 2. Option B
C2.4	Rs. 100	Rs. 60	Rs. 200	1. Option A 2. Option B
C2.5	Rs. 100	Rs. 40	Rs. 200	1. Option A 2. Option B
C2.6	Rs. 100	Rs. 20	Rs. 200	1. Option A 2. Option B
C2.7	Rs. 100	Rs. 0	Rs. 200	1. Option A 2. Option B

Section D: Business

Read: I will now ask you questions about your business and how you manage it.			
D1	Type of business	<ul style="list-style-type: none"> • Manufacturing • Retail • Service • -888:Others, specify 	Select one
D2	How many years since commencement of business?	<ul style="list-style-type: none"> • Months: • Years 	Numeric Select only one
D3	What was your primary reason for starting the business?	<ul style="list-style-type: none"> • Continue family tradition • Supplement family income • Pass time activity • Economic independence • Lack of other employment/income opportunities • Personal interest • Only source of income for the entire household • -888: Other, Specify: 	Select only one
D4	What was your primary reason for starting the business?	<ul style="list-style-type: none"> • No • Yes • -777: Refused 	D4=0, -777 >D6 D4=1>D5
D5	Is the business registered under your name?	<ul style="list-style-type: none"> • No • Yes • -777: Refused 	>D6 Select one
D6	When you began your enterprise, what were the top three challenges you faced?	<ul style="list-style-type: none"> • No challenges • Market condition • Legal/ regulatory conditions • Financial difficulty • Means of production • Challenges with raw materials • Lack of self-confidence • Limited industry and network contacts • Balancing family and work life • Labour (supply and/or adequate skill) • -888: Others, specify: 	D6=0 single response; All other answers multi response; max 3
D7	Who helped you establish the business?	<ul style="list-style-type: none"> • 0: No one • 1: Husband • 2: Family/Friends • 3: Society/Cooperative • 4: SHG • 5: Local Government/Panchayat • 6: NGOs • 7: Local business men/women • -888: Others, specify: 	D7=0 single response; all other answers multi response; max 3

D8	Midnight to 1 am	<ul style="list-style-type: none"> • Selfcare/sleep/rest/bathing • Household chores • Take care of household members (children, elderly, etc.) • Primary production (farming/ animal husbandry) • Assist spouse's business • Handicraft/Handloom Business - procuring raw materials • Handicraft/Handloom Business - production • Handicraft/Handloom Business - marketing/sales • Learning new skill for self or business • Social/religious commitments (visiting temple, attending SHG or community meetings, etc.) 	
D8.1	1 am to 2 am		
D8.2	2 am to 3 am		
D8.3	3 am to 4 am		
D8.4	4 am to 5 am		
D8.5	5 am to 6 am		
D8.6	6 am to 7 am		
D8.7	7 am to 8 am		
D8.8	8 am to 9 am		
D8.9	9 am to 10 am		
D8.10	10 am to 11 am		
D8.11	11 am to 12 pm		
D8.12	12 pm to 1 pm		
D8.13	1 pm to 2 pm		
D8.14	2 pm to 3 pm		
D8.15	3 pm to 4 pm		
D8.16	4 pm to 5 pm		
D8.17	5 pm to 6 pm		
D8.18	6 pm to 7 pm		
D8.19	7 pm to 8 pm		
D8.20	8 pm to 9 pm		
D8.22	9 pm to 10 pm		
D8.23	10 pm to 11 pm		
D8.24	11 pm to Midnight		

Section E: Non-financial Supply Side Factors

E1	Are you or your business associated with any of the following:	<ul style="list-style-type: none"> • None • SHG/Joint Liability Group (mixed) • SHG/Joint Liability Group (only female) • Cooperative Society (mixed) • Cooperative Society (only female) • Contractual company • -777: Refused 	E1=0,-777 single response. All other answers multi response
E2	Is your business seasonal?	<ul style="list-style-type: none"> • No • Yes 	
E3	Peak period (months)	<ul style="list-style-type: none"> • January • February • March • April • May • June • July • August • September • October • November • December 	Multi response
E4	Does your family currently own or rent the home you live in and run your business out of?	<ul style="list-style-type: none"> • Own • Rent • Leased • -777: Refused 	Multi response
E5	Does your house have the required amount of space/land to conduct regular business activities?	<ul style="list-style-type: none"> • No • Yes 	
E6	Where do you source the raw materials for production??	<ul style="list-style-type: none"> • 1: Make/cultivate at home • 2: Buy at market • 3: Buy from supplier • 4: Buy from SHG • 5: Buy from Society/ Cooperative • 6: Buy from by Contractual Company • 7: Provided by SHG • 8: Provided by Society/ Cooperative • 9: Provided by Contractual Company • -888: Others, specify: 	Multi response; max 3

E7		Do you need to travel to get the raw materials for production?	<ul style="list-style-type: none"> No Yes 	ME7=0>E9 E7=1>E8	
E8		How long is the travel time to get the raw materials for production?	<ul style="list-style-type: none"> Less than half an hour Between 1 to 3 hours Between 3 to 6 hours Between 6 hours to 1 day More than 1 day 	>E10 Select one	
E9		How many suppliers/contractors do you deal with on a monthly basis?	<ul style="list-style-type: none"> Numeric 	>E10 Select one	
E10		How many employees does your business have including yourself?	<ul style="list-style-type: none"> E10.1 - E10.3 	>E10 Select one	
		Total (1)	Regular (2)	Temporary (3)	Unpaid family worker (4)
E10.1	MALE	Autosum E10.1 (2+3+4)			
E10.2	FEMALE	Autosum E10.2 (2+3+4)			
E10.3	TOTAL	Autosum E10.3 (2+3+4)	Autosum E10.1+E10.2 (2)	Autosum E10.1+E10.2 (3)	Autosum E10.1+E10.2 (4)
E11		During the last fiscal year, did your business spend on skill training of workers?	<ul style="list-style-type: none"> No Yes 777: Refused 	>E10 Select one	
E12		On an average in a month, how much do you spend on the following for the business purpose?	<ul style="list-style-type: none"> numeric 		
E6		Where do you source the raw materials for production??	<ul style="list-style-type: none"> Make/cultivate at home Buy at market Buy from supplier Buy from SHG Buy from Society/Cooperative Buy from by Contractual Company Provided by SHG Provided by Society/Cooperative Provided by Contractual Company -888: Others, specify: 	Multi response; max 3	
	Items	Total (INR) (1)	<ul style="list-style-type: none"> Mode of payment (1: Yes) 		
A	Employee's salary		<ul style="list-style-type: none"> Cash (2) 	<ul style="list-style-type: none"> Cash (3) 	<ul style="list-style-type: none"> Cash (4)

B	Raw materials				
C	Transportation				
D	Rent				
E	Utilities (water, electricity, communication, etc.)				
F	Leasing (machinery, equipment, land, building)				
G	Taxes (if applicable)				
H	Interest payments (loans/EMIs)				
I	Others				
J	TOTAL	Auto sum E12 (A-I) (1)			

Section F: Financial Management – Business

F1	How much did you invest to establish your business?	<ul style="list-style-type: none"> • Less than 10 thousand • Between 10 thousand - 25 thousand • Between 25 thousand - 50 thousand • Between 50 thousand - 1 lakh • Above 1 lakh -999: Don't Know • -777: Refused 	Single response
F2	How did you finance establishing your business?	<ul style="list-style-type: none"> • Savings • Loans (formal) • Loans (informal) • Inheritance • Income from other sources/assets • -777: Refused • -888: Other, specify: 	F2=-777 single response; all other answers multi response; max 3
F3	Who gave you advice or mentored while setting up your business?	<ul style="list-style-type: none"> • No one • Husband • Family/Friends • Society/Cooperative • SHG • Local Government/Panchayat • NGOs • Local business men/women • -888: Others, specify: 	F3=0 single response; all other answers multi response; max 3
F4	Who makes key decisions relating to your business operations (such as how much to produce, who to hire, where to sell, etc.)?	<ul style="list-style-type: none"> • 1: Myself • Husband • Family/Friends • Society/Cooperative • SHG • Local Government/Panchayat • NGOs • Local business men/women • -888: Others, specify: 	Single response
F5	If you had to seek advice regarding business operations, who would you go to?	<ul style="list-style-type: none"> • 0: No one • Husband • Family/Friends • Society/Cooperative • SHG • Local Government/Panchayat • NGOs • Local business men/women • -888: Others, specify: 	F5=0 single response; all other answers multi response; max 3
F6	Who makes key financial decisions (such as setting price, investing, cost, getting a loan, etc.) of your business?	<ul style="list-style-type: none"> • 1: Myself • Husband • Family/Friends • Society/Cooperative • SHG • Local Government/Panchayat • NGOs • Local business men/women • -888: Others, specify: 	Single response
F7	If you had to seek advice regarding financial decisions, who would you go to?	<ul style="list-style-type: none"> • 0: No one • Husband • Family/Friends • Society/Cooperative • SHG • Local Government/Panchayat • NGOs • Local business men/women • -888: Others, specify: 	F7=0 single
F8	How do you maintain the records of costs/sales/profit-loss?	<ul style="list-style-type: none"> • Do not keep regular accounts • Memory record • Manual accounts • Computerised/Digital/Bar-code based • -888: Others, specify: 	F8=0, 1>F12 F8=2, 3, -888 >F9

F9	How often do you keep these records?	<ul style="list-style-type: none"> • Daily • Weekly • Once in 15 days • Monthly • Every three months • Every six months • Annually • -888: Others, specify: 	>F10 Single response
F10	Who keeps these records?	<ul style="list-style-type: none"> • Myself • Husband • Employee • Family/friends • Hired professional • -888: Others, specify 	>F11 Single response
F11	Which of the following do you keep an inventory of?	<ul style="list-style-type: none"> • Daily Sales amount • Items sold • Items bought • Cost of purchased items • Salary payments to workers and myself • Business cash taken for household expenses • Loan repayment 	>F12 Multi response
F12	What is your monthly revenue from your business	<ul style="list-style-type: none"> • Less than 10 thousand • Between 10 thousand - 25 thousand • Between 25 thousand - 50 thousand • Between 50 thousand - 1 lakh • Above 1 lakh • -999: Don't Know • -777: Refused 	Single response
F13	Specify the annual sales for your business for the mentioned time period?		
F13.1	Last financial year:	<ul style="list-style-type: none"> • Less than 10 thousand • Between 10 thousand - 25 thousand • Between 25 thousand - 50 thousand • Between 50 thousand - 1 lakh • Above 1 lakh • -999: Don't Know • -777: Refused 	Single response
F13.2	Expected annual sales in current year:	<ul style="list-style-type: none"> • Less than 10 thousand • Between 10 thousand - 25 thousand • Between 25 thousand - 50 thousand • Between 50 thousand - 1 lakh • Above 1 lakh • -999: Don't Know • -777: Refused 	Single response
F13.4	Expected annual sales in the consecutive three years:	<ul style="list-style-type: none"> • No • Yes 	
F15	On a regular basis, do you ask other market actors about the price at which you can sell your product?	<ul style="list-style-type: none"> • No • Yes 	
F16	Who sets the price for your product?	<ul style="list-style-type: none"> • Myself • Husband • Family/Friends • Customers (B2C) • Other businesses/merchants/retailers (B2B) • Contractual company (B2B) • SHG • Society/Cooperative • -888: Others, specify: 	

F17	What is the average price per unit that you sell to customers/other businesses?	Numeric	>F18
F18	How many units did you sell last month?	Numeric	>F19
F19	Do you get requests/advance orders from local traders, wholesalers and manufacturing companies?	<ul style="list-style-type: none"> • No • Yes • -777: Refused 	
F20	Do you have any current outstanding business loan?	<ul style="list-style-type: none"> • No • Yes • -777: Refused 	F20=0 >F24 F20=1 > F21 F20=-777>F27
F21	Reason for availing business loan?	<ul style="list-style-type: none"> • For expansion of current business • For inventory management/Working capital/Cash flow • For vehicle or equipment • Refinancing of existing loan • To purchase fixed assets • To start new business • -777: Refused • -888: Others, specify: 	>F22 Multi response; max 3
F22	Source of availing business loan?	<ul style="list-style-type: none"> • Bank/financial institution • Micro finance institution/ Non-banking financial institution • Cooperative society • SHG • Chit funds • Local money lender • Friends/relatives • -777: Refused • -888: Others, specify: 	>F23 Multi response; max 3
F23	Are any of your assets (home, land, jewelry, etc.) under mortgage as collateral for securing this loan?	<ul style="list-style-type: none"> • No • Yes • -777: Refused 	>F27
F24	Reasons for not taking a business loan?	<ul style="list-style-type: none"> • Don't need it • Need but never applied • Need, applied, and rejected • I have paid back earlier loans • -777: Refused • -888: Others, specify: 	F24=1>F25 F24=2>F26 All other responses >F27
F25	Why did you never apply for a loan?	<ul style="list-style-type: none"> • Lack of awareness • Lack of willingness to learn • Do not have documents • Insufficient collateral • Nuisance cost (wait time, paperwork, etc.) • Fear of not being able to payback • High interest rate • Prefer informal sources • -777: Refused • -888: Others, specify 	>F27

F26	Reasons for rejection of loan	<ul style="list-style-type: none"> • Low credit score • Lack of required documents • Inadequate cash flow • 4: Young business • 5: Previous debt profile • 6: Market risky conditions • 7: Insufficient collateral • -777: Refused • -888: Others, specify: 	>F27
F27	Do you have a personal bank account?	<ul style="list-style-type: none"> • No • Yes • -777: Refused 	F27=0, -777>F29 F7=1>F28
F28	Do you use your personal account for business purpose?	<ul style="list-style-type: none"> • No • Yes • -777: Refused 	>F29
F29	Do you have a separate bank account for business?	<ul style="list-style-type: none"> • No • Yes • -777: Refused 	F29=0 >F30 F29=1 >F31 F29= -777>F32
F30	Why does your business not have a bank account?	<ul style="list-style-type: none"> • Do not need it • Lack of awareness • Lack of willingness to learn • Do not have documents • Do not possess mobile/smart phone • High transaction cost • High initial cost • Nuisance cost (wait time, paperwork, etc.) • Cash flow gets impeded • Personal data security • Fear of government and tax • -888: Others, specify: 	>F32 Multi response; max 3
F31	Which of the following services are you availing from the bank for the business purpose?	<ul style="list-style-type: none"> • Payment acceptance/POS • Cash management/collections • Loan • Asset/property insurance • -888: Others, specify: 	>F32 Multi response
F32	Do you use any digital payments system for the business purpose?	<ul style="list-style-type: none"> • No • Yes • -777: Refused 	F32=0 >F33 F32=1 >F34 F32=-777>Section G
F33	What are your top three reasons for not using digital payments system?	<ul style="list-style-type: none"> • Lack of awareness • Lack of willingness to learn • Do not possess mobile/ smart phone • Lack of internet access • Lack of bank account • Fear of being cheated • Customer choice • High transaction cost • High initial cost • Cash flow gets impeded • Personal data security • Fear of government and tax • -888: Others, specify: 	>Section G Multi response; max3

F34	Which of these digital interface are you currently using for the business purpose?	<ul style="list-style-type: none"> • Internet banking • Point of Sale (POS/mPOS) • Mobile wallets • Unified payment interface • -888: Others, specify: 	>Section G Multi reponse
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Section G: Market Access

G1	What is the distribution (%) of the type of customers?		G(1) must add to 100%
	Items	Approximate % (1)	
A	Individual customers (B2C)		
B	Contractual Company (B2B)		
C	Other business/merchants/retailers (B2B)		
D	SHG		
E	Society/Cooperative		
F	Others		
G	TOTAL	Auto sum F1 (A-F)	
G2	Where do you sell your products?	<ul style="list-style-type: none"> • House - customers come directly • Market • Mela/haat • Online • SHG/Society/Cooperative's office • Contractual company/Other business/merchants/retailers office/shop • -888: Others, specify: 	Multi response; max 3
G3	Do you need to travel to sell your products?	<ul style="list-style-type: none"> • No • Yes 	Multi response; max 3
G4	How long is the travel time to sell your products?	<ul style="list-style-type: none"> • Less than half an hour • Between 1 to 3 hours • Between 3 to 6 hours • Between 6 hours to 1 day • More than 1 day 	Select one
G5	Who gives you information/advice on where to sell your product (such as haats, melas, etc.)?	<ul style="list-style-type: none"> • No one • Husband • Family/Friends • Society/Cooperative • SHG • Local Government/Panchayat • NGOs • Local business men/women • -888: Others, specify: 	G5=0 single response; all other answers multi response; max 3

G6	How do you communicate business related information to your Customers/Vendors/Other Businesses?	<ul style="list-style-type: none"> • Word of mouth • Posters/Banners at POS • Mobile phone/Text/Email • Distributing pamphlets • Online platform • -888: Others, specify: 	Multi response
G7	Do you only sell one product (variety)?	<ul style="list-style-type: none"> • No • Yes • -777: Refused 	
G8	Are you able to sell all your products?	<ul style="list-style-type: none"> • No • Yes • -777: Refused 	G8=0 >G9 G8=1, -777 >G10
G9	How much excess stock (in units) do you currently have?	numeric	>G10
G10	Are you able to meet the market demand on time?	<ul style="list-style-type: none"> • No • Yes • -777: Refused 	
G11	Do you regularly keep an inventory of your stock?	<ul style="list-style-type: none"> • No • Yes • -777: Refused 	
G12	Do you take advance money on new orders from customers?	<ul style="list-style-type: none"> • No • Yes • -777: Refused 	
G13	Does your business/product/process have any kind of certification or trade mark?	<ul style="list-style-type: none"> • No • Yes • -777: Refused 	

Section H: Aspirations/Acumen

H1	Which of the following welfare schemes are you familiar with?	<ul style="list-style-type: none"> • None • Life Insurance Scheme – Pradhan Mantri Jeevan Jyoti Bima Yojna (PMJJBY), Pradhan Mantri Suraksha Bima Yojana (PMSBY), Mahatma Gandhi Bunkar Bima Yojana (MGBBY) • MUDRA loans • Standup India • Rebate Subsidy/Marketing Incentive/Rebate Schemes • Artisan ID • Ambedkar Hastshilp Vikas Yojana(AHVY) • Handicrafts Artisans Comprehensive Welfare Scheme/Rajiv Gandhi Shilpi Swastya Yojana (RGSSY)/ Bima Yoajana for Handicrafts Artisans • Cost Free Distribution of Sarees and Dhoties Scheme • Scheme for Free Supply of Electricity to Handloom Weavers • Integrated Scheme for Development of Silk Industry (ISDSI) /Special Rebate for Silk • Yarn Supply Scheme • Handloom Mark, Silk Mark, India Handloom Brand • Deen Dayal Hathkargha Protsahan Yojana (DDHPY) • Weaver’s Health Insurance Scheme (WHIS) • Weavers House-cum-Workshed Scheme/ Workshed Scheme • Co-operative Handloom Weavers Savings and Security Scheme/ Co-operative Handloom Weavers Family Pension Scheme/ Co-operative Handloom Weavers Old Age Pension Scheme • -888: Others, specify: 	<p>H1=0 >H7 All other responses >H1 H1=0 single response; all other answers multi response</p>
H2	Who gave you information about the above schemes?	<ul style="list-style-type: none"> • No one • Husband • Family/Friends • Society/Cooperative • SHG • Local Government/Panchayat • NGOs • Local business men/women • -888: Others, specify: 	<p>H2=0 single response; all other answers multi response; max 3</p>

H3	Which of the following government schemes have you applied for?	<ul style="list-style-type: none"> • None • Life Insurance Scheme – Pradhan Mantri Jeevan Jyoti Bima Yojna (PMJJBY), Pradhan Mantri Suraksha Bima Yojana (PMSBY), Mahatma Gandhi Bunkar Bima Yojana (MGBBY) • MUDRA loans • Standup India • Rebate Subsidy/ Marketing Incentive/ Rebate Schemes • Artisan ID • Ambedkar Hastshilp Vikas Yojana (AHVY) • Handicrafts Artisans Comprehensive Welfare Scheme/Rajiv Gandhi Shilpi Swastya Yojana (RGSSY)/ Bima Yojana for Handicrafts Artisans • Cost Free Distribution of Sarees and Dhoties Scheme • Scheme for Free Supply of Electricity to Handloom Weavers • Integrated Scheme for Development of Silk Industry (ISDSI) /Special Rebate for Silk • Yarn Supply Scheme • Handloom Mark, Silk Mark, India Handloom Brand • Deen Dayal Hathkargha Protsahan Yojana (DDHPY) • Weaver’s Health Insurance Scheme (WHIS) • Weavers House-cum-Workshed Scheme/ Workshed Scheme • Co-operative Handloom Weavers Savings and Security Scheme/ Co-operative Handloom Weavers Family Pension Scheme/ Co-operative Handloom Weavers Old Age Pension Scheme • -888: Others, specify: 	<p>H3=0 >H4 All other answers >H5</p> <p>H3=0 single response; all other answers multi response; no cap</p>
H4	Why have you not applied to any of the above government schemes?	<ul style="list-style-type: none"> • Don’t need it • Lack of awareness • Lack of willingness to learn • Do not have documents • Nuisance cost (wait time, paperwork, etc.) • Do not trust • -777: Refused • -888: Others, specify: 	>H7
H5	Did you receive any benefits from the schemes you applied to?	<ul style="list-style-type: none"> • No • Yes • -777: Refused 	<p>H5=0>H6 H6=1, -777>H7</p>
H6	Reasons for not receiving the benefit	<ul style="list-style-type: none"> • Application rejected • Application approved, but benefits have not arrived • -888: Others, specify: 	>H7
H7	How do you recognise your customers who contribute to the most of your sales and profit?	<ul style="list-style-type: none"> • I don’t do it • By intuition • By personal record of the customer • By reviewing sales data • -888: Others, specify: 	<p>H7=0>H9 All other answers >H8</p>

H8	How do you use this information to grow your business?	<ul style="list-style-type: none"> • No action • I provide discounts • Maintain a personal relationship with my most valuable customers • I take special request for products from my most valuable customers • Sell on credit • -888: Others, specify: 	>H9
H9	On a regular basis, do you seek for new customers/businesses/markets to sell your product?	<ul style="list-style-type: none"> • No • Yes • -777: Refused 	
H10	How do you identify products that contribute the most to your monthly profits?	<ul style="list-style-type: none"> • I don't do it • By intuition • Customer enquiry • By reviewing sales data • -888: Others, specify: 	>H11
H11	Are you able to adequately stock your most profitable products based on seasonal demand and customer preferences?	<ul style="list-style-type: none"> • No • Yes • -777: Refused 	
H12	How has the financial situation of your business changed in the past 1 year?	<ul style="list-style-type: none"> • Worse • About the same • Better • -999: Don't know 	
H13	How do you expect that the situation of your business shall change over next 1 year?	<ul style="list-style-type: none"> • Worse • About the same • Better • -999: Don't know 	
H14	What is your vision for your business in the near future?	<ul style="list-style-type: none"> • Grow • Maintain the same • Downsize 	

H15	How satisfied are you with the financial situation of your business?	<ul style="list-style-type: none"> • Completely dissatisfied • Dissatisfied • Neither satisfied nor dissatisfied • Satisfied • Completely satisfied 	H14=1>H16 H14=2>H17 H14=3>H18
H16	How would you like to grow your business?	<ul style="list-style-type: none"> • By getting new customers • By selling more products • By selling different kinds of products • By expanding business in terms of infrastructure • By adopting digital payment system • By hiring more staff • By social networking • -888: Others, specify: 	>H19 Multi response
H17	Why do you want to maintain business as usual?	<ul style="list-style-type: none"> • I can't give more time due to household responsibilities • Cannot hire more labour • Cannot increase physical capital (land, equipment, etc.) • Supply of raw materials is limited • Cannot increase my customer base • I don't know how to expand my business • -888: Others, specify: 	>H19
H18	Why do you want to downsize?	<ul style="list-style-type: none"> • Nobody in my family wants to take over my business • I don't like this business • I want to switch into another business • Income from this business is less/not profitable • I don't have time • -888: Others, specify: 	> H19
H19	What stops you from expanding your business? (Record top three reasons)	<ul style="list-style-type: none"> • No problems • Lack of government support such as women friendly schemes etc. • Lack of societal support • Lack of family support to start or run business • Lack of industry networks, contacts or mentors • Lack of resources like land, electricity, water etc. • Lack of business information and management skill • Lack of technical skills and training • Difficulty in accessing finance/credit for business activities • Difficulty in balancing work and household chores • -888: Others, specify: 	H19=0 single response All other answers multi response; max 3

Surveyor comments (optional):



SAMPLING STRATEGY

ANNEXURE B

Systematic random sampling method was used. A total sample of 800 was divided across each state and sub-sector. We acknowledge sampling bias from recruitment strategy but we proceeded this way as the strategy mirrors the institutional set up on the ground.

District and sub-sector selection: Given the constraints of time and other resources, the following factors were considered when selecting districts and sub sectors for sampling in each state:

- Density of artisans and weavers: For handicraft, the data on Artisan ID assigned by the government was used to shortlist districts by density of artisans in sub-sectors where female artisans were most prominent. For handloom, the districts were selected based on the number of registered cooperative societies in each district of Tamil Nadu.
- The landscape for Rajasthan was very different. Private aggregators have captured the market and partnering with them gave access to most of our respondents. For handicraft, a mix of NGOs and private companies were reached out. Initial meetings with the central government (Ministry of Textiles) was extremely helpful to gauge the concentration of artisanal population since the lists of SHGs were shared.
- Overlap of handloom and handicraft clusters wherever possible so as to get diversity in the sample.
- Geographic distribution of districts within each state is represented while accounting for loss of productive survey days to travel between districts.
- Project partnerships in districts and subsectors to facilitate respondent recruitment.

Additionally, insights from the Development Commission of Handicrafts, the Development Commission of Handloom, the Weavers' Service Centres, Handicraft Service Centres, and other partners in respective states were taken into consideration.

In Rajasthan 4 districts were chosen - Jaipur, Sikar, Kota, and Udaipur. Specific districts specialised in a targeted craft and equal concentration of weavers and artisans was not observed for Rajasthan.

Erode, Coimbatore, Kanchipuram and Madurai districts were selected in Tamil Nadu. Crediting the high density of both artisans and weavers in Tamil Nadu, data was collected on both sectors in each district.

Handicraft sub-sectors: Embroidery; zardosi; applique; zari; fabric painting; tie and dye; tailoring; pottery; cane and bamboo; grass, leaf, reed, and fiber; bangle making; jewellery (Meenakari); toys (clay & paper mache); plastic mats and baskets.

Handloom subsectors : Saree; Shawls, stole, scarf, and muffler; Angavastram, dhoti, sarong, and lungi; towel, napkin, duster, and gamcha; durries, rugs, and mats; dress material (salwar, kameez, etc.), suiting, shirting, and long cloth; Bedsheet, furnishings, blankets, tablecloth, curtains, cushions, and quilts.

Respondent Selection:

Inclusion criteria	Exclusion criteria
1. Women led HBB 2. Sector: a. Handloom b. Handicraft 3. Manufacturing, producing and/or selling from home premises 4. Sell product by the unit	1. HBBs that are led by male members of the household 2. Individuals who work for wages/salary

Sample Summary:

RAJASTHAN	Handicraft	Handloom	TOTAL
Jaipur	48	34	82
Sikar	0	12	12
Kota	0	154	154
Udaipur	152	0	152

TAMIL NADU	Handicraft	Handloom	TOTAL
Kanchipuram	50	50	100
Madurai	50	50	100
Erode	50	50	100
Coimbatore	50	50	100

Sl.No.	Handicrafts by Sub sector	Rajasthan	Tamil Nadu
1	Embroidery	31	19
2	Applique	39	7
3	Zari	0	0
4	Pottery	2	16
5	Hand block Printing	0	0
6	Cane and Bamboo	0	12
7	Grass, leaf, reed, fiber	0	38
8	Bangle making	50	0
9	Zardosi	40	0
10	Stone carving	0	0
11	Jootis & Mojaris	0	0
12	Jewellery (Meenakari)	28	0
13	Fabric Painting	4	1
14	Tie & dye	3	4
15	Tailoring	3	18
16	Toys (clay & paper mache)	0	60
17	Plastic mats & baskets	0	25
	TOTAL	200	200

Sl.No.	Handloom by Sub-sector	Rajasthan	Tamil Nadu
1	Saree	154	144
2	Shawls, stole, scarf, muffler	0	2
3	Angavastram, dhoti, sarong, lungi	0	4
4	Towel, napkin, duster, gamcha	0	23
5	Durries, rugs, mats	46	27
	TOTAL	200	200



BUSINESS READINESS CORE METHODOLOGY

Image: Ria Dutta

There are many statistical approaches available to develop composite index by weighting and aggregation like PCA, factor analysis and correspondence analysis. We chose multiple correspondence analysis (MCA) because all the data gathered from Rajasthan and Tamil Nadu are categorical and non-compensatory in nature. Instead of relying on Principal Component Analysis (PCA) which works with numeric variables compensatory in nature, MCA was chosen since it was suitable for the kind of data gathered on the field.

Further a system of objective weighting was opted for the MCA analysis. Multiple Correspondence Analysis (MCA) resorts to objective weighting which assigns a weight proportional to the variability of the indicator. This is done to avoid arbitrariness in the process of assigning weights by the researcher. Objective weighting gives way to the indication of externally fixed base rather than a subjective weighting under which all variables have uniform weights. The aggregation method is complex because the multivariate method is used for aggregation.

The various phases followed for developing the composite index are as follows:

I. Developing Theoretical Framework

A robust theoretical framework was developed for selecting a combination of variables for different sub-indexes. Socio economic phenomena cannot be measured by a single descriptive indicator and should be represented by multiple dimensions (Mazziotta and Pareto, 2013⁶⁵). Combination of these multiple dimensions when considered together creates a proxy of the phenomenon. A similar exercise was undertaken to develop the Business Readiness Scorecard. A total of 800 data points was collected in both states covering handloom and handicraft sectors. Some of the important indicators which informs us of the entrepreneurial stride were captured during data collection. These are as follows -

Key determinants which inform the entrepreneurial performance of the women respondents are as follows:

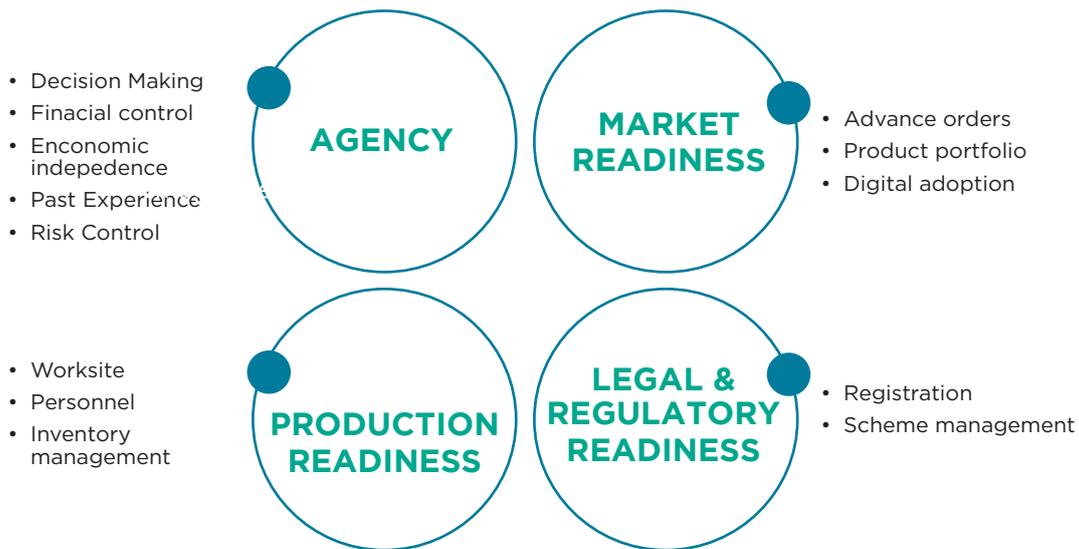
1. Ability to sustain for the next 3 years
2. Ability to scale/expand
3. Aspiration for self
4. Aspirations for business
5. Risk preferences
6. Time preferences
7. Measuring uncertainty aversion

These 7 determinants were further re-categorised into 4 broad sub-indices:

1. Agency
2. Market Readiness
3. Production Readiness
4. Legal & Regulatory Readiness

⁶⁵ Mazziotta and Pareto (2013), Methods for Constructing Composite Indices: One for all or all for one

Composition of Sub- indices:



II. Creating Sub- indices

Step 1: The first step of calculating the Women Business Readiness Scorecard-Handloom and Handicrafts Sector (WBRS-HHS) is to create four separate indices for each of the four dimensions. These dimension indices (Agency, Market Readiness, Production Readiness and Legal & Regulatory Readiness) are then used to calculate the Women Business Readiness Scorecard. In each of the four-dimension indices, each variable is recoded in an ascending order and assigned individual weights using MCA.

Step 2: These four indices are then aggregated to create the Business Readiness Scorecard by taking a simple aggregate.

III. Monotonicity

MCA is used to analyse data which is described by nominal variables. Data transformation is achieved by recoding the selected variables. The variables are coded in such a way that the monotonicity axiom is maintained – an increase in the value of a categorical value results in an increase in the business readiness index score. Each nominal value has multiple levels and each of these levels are coded as binary values. This way we do not risk losing any information. Rather this method provides us with the advantage of identifying the specificities of the modalities which are being considered individually.

IV. Optimal weights

Assigning optimal weights to each variable used in the composite index depends on the principle of the MCA which extracts a factor value from Dimension 1. Dimension 1 retains maximum information contained in the data matrix. The standardised scores of the first factor are taken as the weights for each variable response.

V. Calculation

Aggregation of the variables for calculating the composite index is done using the following formula:

Business Readiness Index (BRI)

$$= \frac{1}{K} (W_{1i1}I_{1i1} + W_{2i2}I_{2i2} + \dots + W_{pij}I_{pij}), \dots$$

K= number of variables

W= the weight (score of first standardised axis/ dimension 1)

I= binary indicator (0/1)

The Business Readiness Index has negative in its lowest part which will make interpretation difficult. For this reason, we make the values positive by using the absolute value of the average which is calculated by using the following formula:

$$C_{\min} = \frac{\sum_{k=1}^K W_{\min}^k}{K}$$

The calculated value is then added to the BRI to obtain new positive BRI scores.

The list of variables included in each of the sub-index is given below:

Sub- Index	Indicators	Question
Agency	Decision making	Decision making relating to business operations (how much to produce, who to hire, where to sell, etc.).
		Decision making relating to financial decisions.
		Who sets the price for your product?
	Financial control	How do you maintain the record of costs?
		Do you regularly keep an inventory of your stock?
	Economic independence	Number of household members who are earning?
		For what purpose do you save?
		Do you have someone who helps you with household chores, children's education, etc.? ex: maid, parents, husband, etc.
		How did you spend these hours of your day yesterday?
	Past experience	How many years since commencement of business?
	Risk score	Ability to gauge business risk and take decisions required to scale up businesses.

Market Readiness	Advance orders	Is your business seasonal?
		Do you get requests/advance orders from local traders, wholesalers and manufacturing companies?
		Where do you sell your products?
		Do you use any digital payments system for the business purpose?
		Which of these digital interfaces are you currently using for the business purpose?
	Product portfolio	Do you only sell one product (variety)?
Association with SHG/ Cooperatives/ Contractual Company.		
How many suppliers/contractors do you deal with on a monthly basis?		
Production Readiness	Worksite	Does your family currently own or rent the home you live in and run your business out of?
		Where do you source the raw materials for production?
	Personnel	How many employees does your business have including yourself?
	Inventory management	How much excess stock (in units) do you currently have?
		Which of the following do you keep an inventory of?
		Are you able to adequately stock your most profitable products based on seasonal demand and customer preferences?
Legal & Regulatory Readiness	Registration	Is your business registered?
		Is the business registered under your name?
	Scheme management	Which of the following welfare schemes are you familiar with?
		Which of the following government schemes have you applied for?



TOP PERFORMING ENTREPRENEURS

ANNEXURE D

Image: Michael Foley, <https://www.flickr.com/photos/michaelfoleyphotography/5695344503/>

Rajasthan

The following tables shows the value and its 95 per cent confidence interval for different indicators for the top quartile and remaining three quartile of business readiness score of respondents from Rajasthan. The green highlighted indicators are statistically different between the top quartile and remaining three quartiles at 95 per cent confidence interval.

The percentage points difference between the top quartile and remaining three quartiles for the above indicators is represented below:

Indicators	Top quartile (Value and its 95% CI)			Other 3 quartiles (Value and its 95% CI)		
	Value	Lower CI	Upper CI	Value	Lower CI	Upper CI
Business Demographics						
Age	37.53	35.16	39.9	33.95	32.91	34.99
Education - High school completed	14%	7%	21%	25%	20%	30%
Nuclear family	69%	60%	78%	79%	74%	84%
Agency Indicators						
No of years of commencement of business - More than 10 years	65%	56%	74%	36%	31%	41%
Have someone who helps me with household chores, children's education, etc.	63%	54%	72%	39%	33%	46%
Makes key financial decisions of business	16%	9%	23%	4%	2%	6%
Has own savings	67%	58%	76%	74%	69%	79%
Loss aversion score	7.9	7.2	8.6	8.1	7.8	8.5
Risk aversion score	8.2	7.5	8.9	8.8	8.5	9.1
Makes key decisions relating to business operations.	20%	12%	28%	11%	7%	15%
Market Readiness						
Sell only one product	96%	92%	99%	75%	70%	80%
Business association - Contractual company	76%	68%	84%	50%	44%	56%
Deals with more than one supplier/contractor	11%	5%	17%	2%	1%	4%
Get advance orders	33%	24%	42%	25%	20%	30%
Business is not seasonal	73%	64%	82%	73%	68%	78%
Production Readiness						
Maintain records of business	31%	22%	40%	53%	47%	59%
Own the place where I live and run the business	93%	88%	98%	83%	79%	87%
Regularly keep inventory of stock	36%	27%	45%	26%	21%	31%
Legal and Regulatory Readiness						
Business registered	92%	87%	97%	87%	83%	91%

Tamil Nadu

The following tables shows the value and its 95 per cent confidence interval for different indicators for the top quartile and remaining three quartile of business readiness score of respondents in Tamil Nadu. The green highlighted indicators are statistically different between the top quartile and remaining three quartiles at 95 per cent confidence interval.

The percentage points difference between the top quartile and remaining three quartiles for the above indicators is represented below:

Indicators	Top quartile (Value and its 95% CI)			Other 3 quartiles (Value and its 95% CI)		
	Value	Lower CI	Upper CI	Value	Lower CI	Upper CI
Business Demographics						
Age	41.67	39.88	43.46	43.8	42.66	44.94
Education - High school completed	38%	28%	48%	21%	16%	26%
Nuclear family	94%	89%	99%	97%	95%	99%
Agency Indicators						
Type of business - manufacturing	72%	63%	81%	36%	31%	41%
Regularly keep inventory of stock	35%	26%	44%	4%	2%	6%
Has own savings	72%	63%	81%	45%	39%	51%
Makes key decisions relating to business operations	79%	71%	87%	57%	51%	63%
Makes key financial decisions of business	68%	59%	77%	52%	46%	58%
Have someone who helps me with household chores, children's education, etc.	36%	27%	45%	15%	11%	19%
No of years of commencement of business - More than 10 years	62%	52%	72%	65%	60%	70%
Loss aversion score	5.0	4.3	5.7	3.9	3.5	4.3
Risk aversion score	5.8	5.0	6.6	4.8	4.3	5.3
Market Readiness						
Deals with more than one supplier/ contractor	57%	47%	67%	9%	6%	12%
Business association - None	26%	17%	35%	3%	1%	5%
Get advance orders	68%	59%	77%	46%	40%	52%
Business is not seasonal	83%	76%	90%	93%	90%	96%
Production Readiness						
Maintains records for business	64%	55%	73%	29%	24%	34%
Sell more than one product	50%	40%	60%	23%	18%	28%
Own the place where I live and run the business	68%	59%	77%	69%	64%	74%
Legal and Regulatory Readiness						
Business registered	50%	40%	60%	38%	33%	43%



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