Acknowledgements

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Bastar, a district in the state of Chhattisgarh, is home to one of the largest tribal populations in the country. According to the 1991 census, at least 72 per cent of the population belonged to the Scheduled Tribe social group. According to the 2011 census data, at least 86 per cent of the population of Bastar live in rural regions and the female literacy rate in the rural region pegs at only 38 per cent (Census India, 2011). While agriculture remains the dominant occupation in the region, trading of forest produce also constitutes a bulk of livelihood options in the region (Ganguly & Chaudhary, 2003). Through the enactment of the Forest Rights Act 2006, the Government of India allows the tribal communities to access forest resources for both habitation and self-cultivation, apart from using forest produce for consumption and trade (Samvaad, 2006). The people in the region collect various forest produce including saal seeds, mahua flower/seed, tamarind, among others and trade them outside the region.

Various studies point out that women, especially from the marginalised sections, venture into harvesting forest products due to the nature of its production and collection procedure, catering to local markets (Murthy et al., 2002). The produce is usually sold in the weekly markets or “haats”, which are designated places of economic activity as well as social gathering (Ganguly & Chaudhary, 2003). Given the remote location of villages and the difficult terrain, selling the produce in the haats makes for a more feasible option than selling at the government-designated ‘Mandis’, which are few and far between. The small traders or ‘Koochiyas’ who are the first point of trade for this segment, are often accused of malpractice in terms of both weight measurement and pricing (Ganguly & Chaudhary, 2003). Due to the small volumes collected, collectors lose their bargaining power, resulting in low prices. Additionally, collectors have inadequate information about market prices and the awareness about the supply-demand forces of non-timber forest produce (NTFPs) and government regulations is highly insufficient (Saxena, 1995). With the knowledge that the collectors will need money for weekly expenditures, local traders (intermediaries) coerce the collectors by cheating them regarding produce weights, withholding information and indulging in fraudulent behaviour (Pandey et al., 2016). Marginalised communities fall prey to this due to the existing barriers to information, market systems and the impoverished state of being. Gender adds a complex layer to this issue with women being burdened with traditional roles in society and having less access to organised markets.
The continued exploitation in the region led to the ‘1999 Imli Andolan’, a district administration initiative to protect tribals through directives and official arrangements of markets (Ganguly & Chaudhary, 2003). The Ministry of Tribal Affairs under TRIFED (The Tribal Cooperative Marketing Development Federation of India) in the year 2014 initiated the Scheme for MSP (Minimum Support Price) for Minor Forest Produce and the development of the value chain to enhance income levels and ensure sustainable harvesting of MFPs (GOI (Ministry of Tribal affairs), 2020). The Government along with the civil society groups and NGOs in the region continue to adopt various models including the creation of Farmer Producer Organisations (FPOs) in order to enhance the collectivisation and efficient marketing of forest produce. A Producer Organisation (PO) is a legal entity formed by primary producers, viz. farmers, milk producers, fishermen, weavers, rural artisans, craftsmen. A PO can be a producer company, a cooperative society or any other legal form which provides for sharing of profits/benefits among the members. Evidence suggests that FPOs have improved backward and forward market linkages, which helps tribal women farmers with more market information, which in turn increases their negotiating power with buyers. The positive ripple effect of this system leads to more women with stable incomes which then increases their financial decision-making power within their households (Srinivasan, 2018).

Further, the collectivisation feature of FPOs helps the farmers make use of the advantages of economies of scale and launch sustainable businesses of their own. As a result, producers are better equipped to compete with larger farms and agribusinesses by having access to inputs and outputs, gathering the necessary market knowledge, learning about new technologies, and taking part in high-value markets (Das & Modak, 2023). A study conducted in the tribal region of Odisha found that women who were part of the FPO witnessed not just an increase in income but also improved decision-making capabilities, providing better agency in the household (Satpathi et al., n.d.).

Further, FPOs also encourage digitisation of the supply chain that facilitates direct price negotiation with the customers, eliminating the need for middlemen and increasing the returns of the primary producer (Das & Modak, 2023).

In the context of Bastar, there is a need to enhance traditional supply chains by infusing new technologies, creating sustainable working models similar to FPOs, and training rural enterprises to adapt to changing market needs. To this end, LEAD at Krea University with The Tribal Hermit to test a livelihoods model for supporting Tribal enterprises to enhance their income through the digitisation of their supply chain.\(^1\)

The intervention was designed as an upskilling program for a cluster of tribal women who were organised into a collective by the implementation partner. These women (predominantly belonging to tribal groups) are engaged in the collection, processing, quality check, and packaging of multiple products obtained from locally produced/cultivated resources to diversify their income portfolio and act as a cushion against market risk.

For this intervention, a group of 60 women were formed as an FPO in Bastar. Through the FPO, the women were provided training in the processing and packaging of tamarind products. Administrative data on arrivals (non-reporting by traders not ruled out) indicate that, in terms of value, tamarind and allied products account for nearly 50 per cent of the turnover (non-nationalised FPOs) of Bastar’s mandis (market), while mahua (Madhuca Longifolia) has a 32 per cent share (Ganguly & Chaudhary, 2003). While mahua has a strong local demand, most of the tamarind is eventually traded outside the district.

The products were procured by TTH and sold in the open market through the organisation’s existing market linkages. The participants were also motivated to produce a minimum quantity by offering a monthly stipend. The intervention had three key components: training, monthly stipend, and market connectivity.

\(^1\) Tribal Hermit is a social impact venture undertaking rural development & livelihood projects generating sustainable livelihood opportunities for the SHGs, artisans & farmers in rural India, specialized in digital-first market linkages, capacity building & sustainability. Their handicraft collection of Home décor & Jewelry products are crafted by skillful Dhokra craft artisans from Kondagaon, Bastar & Raigarh Dist. of Chhattisgarh. https://tribalhermit.com/about-company/
Study Objectives

This study aimed to understand opportunities for promoting sustainable livelihoods among SHG members belonging to tribal groups, and how existing market-based approaches can be adapted to support these objectives:

• Evaluating the impact of digitising the supply chain of the livelihood program on the social and economic empowerment of the tribal women in the FPO

• Understanding the impact of the program on time use between paid FPO activities and unpaid household activities, expenditure and savings behaviours, financial risk-taking, and other aspects of tribal women’s entrepreneurial activities.

Study Methodology

The evaluation aimed to primarily undertake a quantitative assessment with qualitative insights for the best measurement of the outcomes of the programme. The study followed structured interviews through face-to-face interactions to capture quantitative and qualitative aspects of the population. The survey data collection happened at two points in time: Baseline ie. before the onset of the project and an Endline, which happened 6 months after the intervention. The two rounds of surveys were administered to the 60 tribal women who were part of the TTH cluster. The survey delved into the following key themes:

1. Respondent demographics, household income and asset profile

2. Women’s decision-making autonomy at home, time-use

3. Sources and amount spent on monthly household expenses
Insights

Profile of Participants

Occupation Preferences

Agriculture, presumably, was the major primary occupation for women in the region, where over a third of the population (36 per cent) worked only as casual labour in agricultural lands owned by others and only 8 per cent reported working in their own lands, pointing to complex land ownership patterns in the tribal region. In a survey conducted in Gujarat, 80 per cent of the tribal women believed that their life improved after associating themselves with SHGs. The research revealed that the women who were part of the SHGs had increased political awareness, economic empowerment, improved family healthcare, lifestyle and food consumption (Talmaki, 2014). The prevalence of SHGs was quite strong in the region and many women were also engaged in work related to the SHG, more so that 25 per cent women reported such related work as their primary occupation. The SHG-related work mostly pertains to ‘Bihan’ livelihoods scheme under the SRLM or general bookkeeping activities with the associated SHGs.

At least five per cent reported to have engaged in formal salaried employment either with the government or private sector. The average income earned is reported to be around Rs. 2000 while maximum income earned is Rs. 7000 per month.

For those who are primarily engaged in agriculture, activities pertaining to affiliated SHGs accounted largely as a secondary occupation (47 per cent), followed by engagement in MNREGA works (10 per cent). The secondary income activity generally yields an average monthly income of Rs. 1000, while those engaged in SHG and MNREGA works earn up to Rs. 2000 per month.
This comes against the backdrop of the poor education levels among the surveyed respondents, of whom 42 per cent reported to have had no formal education and another 20 per cent only primary-level education. None of the respondents reported to have attained education beyond higher secondary levels.

Structural barriers in employment coupled with gender norms such as care responsibilities have been established to create adverse effects in terms of female labour force participation. An ILO report on declining female labour force participation (Kapsos et al., 2014) indicates that insufficient employment opportunities in the vicinity of places of residence are also a major factor in influencing women's decision to leave work. Unsurprisingly, around 84 per cent of the women respondents work within their village for both primary and secondary occupation. Only five out of the 57 respondents in the sample work in places beyond five kms from their residence, indicating the mobility issues in access to employment especially for women from tribal regions like Bastar.
Household Support

Women in rural areas dedicate a greater amount of time to reproductive and domestic tasks, which include activities like fetching water and fuel, processing food, husking, and looking after children and the ill, compared to urban women as well as in comparison to men (Saleemi & Kofol, 2022). In our sample, however, 91 per cent of women reported receiving some form of assistance in performing their daily household chores. Such support was mostly offered by spouses, followed by the female head of the household.

A study of informal workers in the global horticulture commodities value chain shows that in the smallholder sector, women are more likely than men to contribute to family work while men are more likely to be in the value chain (Chan, 2013). Supporting women smallholders includes ensuring access to land and financial services and providing assistance to help them become entrepreneurs, including through cooperatives (ILO, 2019).

During the baseline period, around 86 per cent women agreed that they help their husband or family in their line of work for an average of 20 days per month. The unpaid assistance offered to their family members, mostly the husband, was primarily in agriculture, either working in their own farms (35 per cent) or while working as casual labour in other people’s farms (27 per cent).

It is also interesting to note that 60 per cent of the women reported that their household has some agricultural land in their possession, while 28 per cent of women reported to have land titles in their name. During the endline assessment the women supporting their family in their paid work reduced by 16 per cent. From the baseline to endline, the household income levels came down from an average of Rs. 4000 to Rs. 3000. However, this reduction in average household income cannot be directly attributed to reduced women’s support to the spouse’s line of work.

Figure 3: Engagement in Paid Work

Do you support your family/husband in paid work?

<table>
<thead>
<tr>
<th></th>
<th>Baseline-Percent</th>
<th>Endline-Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>13.6</td>
<td>23.7</td>
</tr>
<tr>
<td>Yes</td>
<td>86.4</td>
<td>76.3</td>
</tr>
</tbody>
</table>
Financial Outlook

Empirical studies point out that rural women associated with SHGs are linked to a more crucial role in family decision-making and pursue jobs to increase family income. The produce collected by the tribal women were procured by TTH and sold through their existing market linkages. On average, the women collected at least 67 kilos of tamarind per month, with a maximum up to 115 kilos. The produce from the women is procured at a total cost price of Rs. 780 per month, where a minimum of Rs. 533 and a maximum price of Rs. 1740 per month were recorded.

The earnings from the FPO seemed to be positively reflected in the monthly savings patterns of the surveyed household. From the figure below we see that the amount of savings in personal bank accounts increased 100 per cent from the baseline to endline period. Similarly, savings in the form of livestock also increased three times from the baseline average monthly levels.

**Figure 4:** Monthly Savings Across Time Periods

- Livestock: Baseline - 200, Endline - 750
- Land: Baseline - 200, Endline - 300
- Jewellery: Baseline - 300, Endline - 533
- With SHG/credit group: Baseline - 331, Endline - 622
- Post Office savings: Baseline - 716, Endline - 1355
- Savings account with commercial or government bank: Baseline - 537, Endline - 1115
- Cash at home: Baseline - 682
Mobile Phone Ownership

Several studies highlight the increase in the adoption of technology in the form of mobile phones and access to the internet especially among women in rural tribal regions in India (Shah et al., 2022; Arivanandan, 2022).

The mobile phone penetration was quite high among the tribal women, with almost 95 per cent women reporting to have a mobile phone. However, seven in 10 women reported that they share the mobile phone with some other person in their household, mostly with their children, especially the male child (46 per cent), followed by the girl child (16 per cent) and husband (12 per cent). More than half of the women (54 per cent) use smartphones and internet connection seems to be indispensable, with 92 per cent of women accessing the internet through their phones (both smart and keypad phones).

Empowerment Quotient

When it comes to decision-making responsibilities, a major proportion of the women make decisions in consultation with their husbands. Literature points out that when women make decisions in their household, it is a strong indicator of women’s agency and hence contributes to their empowerment (Saleemi & Kofol, 2022). However, various research shows that the many dimensions concerning tribal women are controlled by the men in the family.

The dimensions range from small decisions such as household and social choices to crucial decisions such as family planning, financial, legal and political choices. Due to long-followed norms and related condemnation, the active role of tribal women in decision-making processes within households as well as outside their homes is largely insignificant (Bhowmick & Jan, 2023).

Almost half of the beneficiary women reported that they take decisions regarding their household only in consultation with their husbands. Such decisions range from micro choices such as purchase of daily household needs including food, to macro decisions like purchase of land, vehicles, TV etc. This particular indicator of women’s empowerment quotient did not find a significant difference from baseline to endline, where 26 out of 59 women in the baseline and 28 women in the endline reported to consult with their respective husbands primarily on household purchases. Further decisions of paramount consequences such as children’s education and healthcare expenditure witnessed increased intervention from husbands, where 59 per cent households take decisions on children’s education only in consultation with the male spouse. This number slightly reduced to 49 per cent during the endline, while influence of other family members was reported by at least 15 per cent women. Similarly 40 per cent of women decide on healthcare expenses only in consultation with their respective husbands.

Figure 5: Decisions about Children’s Education
As much as 42 per cent of women exhibited autonomy when it came to spending their own earned money. Only 17 per cent of women reported that their husbands are in control of their salary, and this reduced to 10 per cent during the endline assessment. The women also exhibited free will regarding their right to work. More than half of the surveyed women (52 per cent) during both the baseline and endline period stated that it was at their discretion that they went to work while only 10 per cent women asked their respective husbands for permission to go to work.

Empirical studies link ‘women’s freedom of movement’ as a major indicator of women empowerment. An ADB study (Field & Vyborny, 2022) on women’s mobility established that physical mobility is positively correlated to women’s participation in the labour force and social norms are a key hurdle in realising the same. In our study, the women who are part of the FPO intervention seem to travel more to the community centres present outside the village when compared to the period prior to the intervention. While only 17 per cent of women prior to the intervention reported that they go to community centres outside the village, this number increased to 50 per cent during the endline. Apart from the community centres, women also travel to health centres outside the village, which saw a 23 per cent increase in the number of respondents from baseline to endline period.

Figure 6: Decision about Going to Work

<table>
<thead>
<tr>
<th>Decision about Going to Work</th>
<th>Baseline</th>
<th>Endline</th>
</tr>
</thead>
<tbody>
<tr>
<td>My own decision</td>
<td>55.93%</td>
<td>47.46%</td>
</tr>
<tr>
<td>My husband’s decision</td>
<td>11.86%</td>
<td>13.56%</td>
</tr>
<tr>
<td>Decision shared with husband</td>
<td>28.81%</td>
<td>32.20%</td>
</tr>
<tr>
<td>Decision shared with another person</td>
<td>3.39%</td>
<td>6.77%</td>
</tr>
</tbody>
</table>
**Gender Norms**

More than 60 per cent of women were of the view that men have the right to dictate women’s mobility especially related to their work. Unsurprisingly, about three quarters of women stated that they obtain permission from their husband or elder brother (in the case of unmarried women) on decisions regarding work or doing business that is outside the home premises. This was followed by a requirement to obtain permission from parents-in-law (15 per cent) and relatives (8 per cent). However, 16 per cent of women stated that they are not required to obtain permission from anyone in matters of work or business.

Close to half of the respondents (47 per cent) admitted that they will have to face negative consequences, mostly verbal in case they fail to adhere to the family’s disapproval of work. While at least 32 per cent women during the baseline feared not being able to step out of the house in case they pursue work against the family decision, this fear drastically reduced during the endline where only 3 women reported to face such a ban on travel.

**Mental Health**

Although six months is a short time to identify a significant effect on the upliftment of mental health of women, the endline survey found that women fared well on few indicators such as feeling hopeful, good sleep etc. For example, during the baseline period, at least 27 per cent of women reported extreme loneliness most of the time. However, this number reduced to 12 per cent at the time of endline assessment. Similarly, at least 14 per cent women reported feeling worthless most of the time during the baseline, and this reduced to just 1 per cent by the endline period.

**Figure 7:** Consequences Expected if Women Pursue Work/Business against the Approved Decision

![Figure 7](image-url)

- **None**: 61% (Baseline) - 46% (Endline)
- **Scolding/others will stop talking**: 47% (Baseline) - 3% (Endline)
- **Ban on going outside home**: 32% (Baseline) - 5% (Endline)
- **Beating (including all forms of physical abuse)**: 3% (Baseline) - 2% (Endline)
Conclusion

The report is a consolidation of preliminary findings on the socio-economic impacts of the FPO intervention in the Bastar region. Various studies reveal the important role that FPOs play in improving the lives and livelihoods of small farmers, especially in tribal regions. With the active functioning of FPOs, collectivisation is an important aspect that improves the bargaining power of small farmers in procuring input materials as well as output sales. With efficient FPOs in place, the backward linkage for timely access to quality inputs such as raw materials, loans, and information as well as the forward linkages such as employment generation through market-led agricultural businesses, collective processing and bargaining can be strengthened (Kujur et al., 2019).

Apart from integrating the vulnerable sections of society into organised markets, FPOs play an instrumental role in the logistics of product storage and supervision, transportation and to survive price volatility that primary produce most commonly faces. Additionally, it enhances the political influence of small-scale producers, lowers the expenses related to marketing both agricultural inputs and products, and establishes a platform for members to exchange knowledge, align their efforts, and arrive at collective decisions (Joshi & Choudhary, 2018).

In Chhattisgarh, FPOs are majorly supported by NABARD, SFAC and Chhattisgarh’s Directorate of Horticulture and Farm Forestry (Prasad, 2021). A recent study conducted in the target region, assessing the impact of the FPO system started in collaboration with NRLM, revealed that such systems significantly contribute to increasing income, thereby transforming the socio-economic status of the household (Rathour et al., 2022).

From the financial outlook findings, we clearly see that the intervention has positively increased savings of the beneficiaries especially in the form of formal savings such as banks. Further, savings in the form of livestock and SHG credit at least doubled, indicating a strong influence of the intervention on the savings patterns.

More than half of the surveyed women stated that they do not seek permission to go to work and half of the women during the endline period mentioned that they frequent the meeting/community centres which are present outside the village after the intervention. However, 60 per cent of women believe that they need their family approval to travel if the work is outside the village and at least 80 per cent of the sample expressed willingness to work only within their own village. This reinforces the fact that there is a need for such interventions within the vicinity of villages to improve women participation in the labour force, since mobility of women is severely restricted by both structural and social barriers. The study also could not find satisfactory evidence in terms of improvement in the empowerment quotient or the mental health of the beneficiary women. This could be partly attributed to the short period between baseline to endline assessment and further research in this direction is clearly required.

This project aimed to identify opportunities for integrating women in tribal regions with higher-order value chains. Given the sample sample size and exploratory nature of this study, further research is needed to understand the long-term implications of the interventions. While more in-depth research might be required, the study throws light on the benefits of formalisation and collectivisation for enabling access to diverse livelihood opportunities in these settings, which points towards the need to promote such efforts in future.
References


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