

CHAPTER: 04

CREATING ENTERPRISE FOR FOREST DEPENDENT COMMUNITIES: CASE STUDY OF SAL LEAF COLLECTORS

DIPANKAR SEN GUPTA

dipankar.sengupta22eph@iimranchi.ac.in

ANKUR JHA

ankur.jha@iimranchi.ac.in

TAPAS PAUL

tapaspaul@pradan.net

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ABSTRACT

Small-scale forest-based enterprises, many of which rely on NTFPs, provide up to half the income to about 25 per cent of India's rural labour force (Tiwari and Campbell 1995) & generates 10 million workdays annually (IIFPT report). However, a major quantum of NTFP commodities is often sold in the raw form that does not generate remunerative price for the collectors. This is further compounded by inadequate institutional mechanism to discover fair price by the collectors, lack of collective bargaining, weak support system & suboptimal access to timely capital & technology. The limiting factors cause the collectors to operate at the lower end of the NTFP value chain. Towards this end, the study has tried to capture a case study on 1500 women-led farmer producer company in tribal dominated Ranibandh block of Bankura that is striving to move up the value chain by plugging the above-mentioned gaps & collective marketing.

Keywords: NTFP, Sal leaf, biodegradable, Value chain, West Bengal

INTRODUCTION

The livelihood in rural areas is intricately linked with the productive capacity of natural resource base that provides an inclusive pathway for marginal rural population to increase their wellbeing (Jun

Harbi, et.al.,2023; Pandey, 2016). Moreover, among the rural population living in proximity to the forest land, non-timber produce caters to diverse needs (Pandey et al.,2016; Ghosal S,2011) as timber extraction from government forest areas is difficult owing to multiple acts and policies (Ghosh M & Sinha B, 2016). The prominent NTFP in India include sal leaves, mohua flower, kend leaf, tamarind, lac and host of other commodities. Due to rising consumer awareness around biodegradable products, non-timber forest produce (NTFP) is uniquely poised to gain significant traction in the biodegradable product segment. Among the NTFPs, sal leaf products hold prominence due to their multiple uses & scope for building inclusive value chain by engaging most marginal person. Mahapatra et al., in 2005 pegged the estimated size of sal plate industry to be around 70-80 million INR.

Despite the above-mentioned advantages, the NTFPs like sal leave products are not able to capture the market or perform as expected. One of the issues in the case of the sal leaf product industry is growing competition from well-established substitutes like paper, polystyrene (thermocool sheets), which have the advantage of longer shelf life. However, with growing awareness and altruism among consumers (Guiao, B. G. M., & Lacap, J. P. G., 2022), there is space for environmentally friendly products like non-paper, non-polystyrene products. As most of the collectors are women, it provides a compelling case to promote NTFP products like sal leaf products through the women run collectives to leverage shared prosperity. Hence, the study aims to understand the roadblocks related to higher order market linkage through collective marketing efforts. Towards this end, the study has assessed the current situation and came up with possible solutions for sustaining 1500 women led FPC called Ranibandh Mahila Farmer Producer Company Limited located in tribal dominated Ranibandh block of Bankura district in *jungle mahal* cluster of West Bengal.

REVIEW OF LITERATURE

NTFP are the products that are gathered from forest except timber (Ahenkan and Boon, 2011). Behera (2009) reported that NTFPs contributed to 70% of the forest-based export earning in India. Falconer and researchers like Arnold (1989) suggested that rural people utilize NTFPs for different purposes like food, income, farm input, social, cultural, and religious functions. Further, an estimate illustrates that 275 million poor rural people in India depend on NTFPs for at least a part of their subsistence and cash livelihoods (Malhotra and Bhattacharya, 2010; Bhattacharya & Hayat, 2009). The poorest sections of the rural community are predominantly dependent on the NTFPs (Marshal et al., 2005). It is also commonly accepted that women are the principal users of forests and home base nature of the industry draw women to NTFP based enterprise (Mahto and Chatterjee 2011). Further researchers like Tanbunman (1995) argued that landless and marginal farmers are engaged in NTFP based enterprises during lean agricultural months & indigenous entrepreneurship provides at least a partial solution to their economic woes (Townson 1995). A similar view highlights that income from the forest resource provides good support during period of shocks like crop failure, loss of wage employment, unforeseen situations (Krishnakumar et al., 2012, Angelsen et al., 2014, Pandey et al.,2016). Among NTFPs, sal leaf plate making is a major source of income for women (Saha and Sengupta, 2014). NTFP items like sal leaf items are finding increasing acceptance among the consumers in India and abroad (Averdung and Wagenfuehrer, 2011, Salih and Salimon, 2021). Existing literature suggests that NTFP products have scope for large scale employment potential, value

addition opportunities, scope for sustained earnings (Mahapatra et.al., 2012, Islam et.al., 2015) and that small enterprises can alleviate poverty (DFID, 2005). However, the potential commercial value of NTFP is not judged properly (Murthy et al., 2005) & NTFP as a commodity group is challenging for marketing due to variation in the end use, diversity, and number (Lintu, 1995). However, the right kind of marketing information (Karki, 2003), strengthening of market relationships (Kuala et al., 2006), value sharing through inclusive business models (Harper, 2009) as well as value chain development (Jones, 2011) can overcome the above limitations.

PROFILE OF THE AREA

The community living in Ranibandh predominantly engages in four livelihood activities namely agriculture, livestock rearing, collecting minor forest produce, and labour works. All these choices of livelihood activities vary upon the availability of number of working adults in the household, the proximity of the resources, and geographical feasibility. Almost, both men and women equally spend their time in these activities, except in collecting minor forest produce. Collecting forest produce is solely women's role. Men go for seasonal migration to nearby agriculture dominant areas and women manage kids and elders as well as garner income from NTFP. The table below mentions the demographic profile of the area:

Table 4.1: Demographic profile

Indicator	Quantity
Total Household	25953
SC (%)	11.45
ST (%)	47.07
BPL (%)	28.87
Literacy rate (%)	68.53

a. Ranibandh development block

Ranibandh is located at 22°51'50"N 86°47'05"E. Ranibandh CD block is in the south-western part of the district and belongs to the hard rock area. Ranibandh CD block has an area of 428.51 sq.km. It has 1 panchayat samity, eight gram panchayats, 90 gram sansads (village councils), and 169 inhabited villages. This block shares boundary with Purulia & Paschim Medinipur and forms part of *Jungle Mahal* cluster of West Bengal predominantly inhabited by the tribal population. Ranibandh CD block is bounded by Khatra and Hirbandh CD blocks in the north, Raipur CD block on the east, Binpur II CD block, in Paschim Medinipur district, on the south and Manbazar I, Manbazar II in Purulia district, and Bandwan CD blocks on the west.

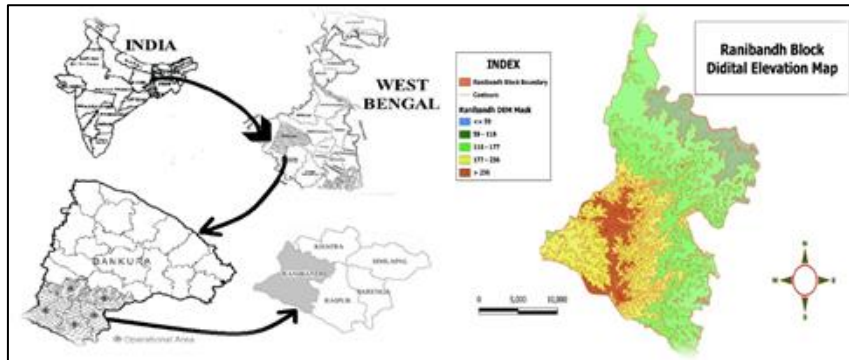


Figure 4.1: Map of Ranibandh block

Table 4.2: Geographical profile of Ranibandh block

Profile	Quantity
Block Area (Ha.)	42850.66 (approx. 165.4 Aq. Km.)
Elevation	83 m (272 ft)
Forest Coverage (Ha.)	11495.83 (26.83% of Block area)
Population Density (per Sq. Km.)	280
Annual Rainfall (mm)	1100 mm to 1400 mm
Irrigated Area (Ha.)	4045 (9.44% of Block area)
Non-irrigated Area (Ha.)	16608 (38.76% of Block area)
Area coverage in Kharif (Ha.)	18169 (42.40% of Block area)

b. Materials and methods

As the primary aim of the study is to explore a contemporary event, a case study approach was adopted for the purpose of the study as it is apposite for exploring a contemporary social phenomenon within a real-life context (Yin, 2009). To start with, secondary research including existing literature, market study reports, extant policies & other relevant documents were referred. The producer company selected for case study, RMFPCL² has 4 business verticals namely paddy, vegetables, fruits and sal leaves with the newest vertical being related to sal leaf products. The producer company covers 108 PGs (producer groups) across 78 villages spread across eight *gram panchayats*. The grounded theory suggested sampling approach was followed. The principle suggests if the selected sample has power to enable comparison on characteristics, then it has significant power to explain concept (Rodrigo and Arenas, 2008). While case study can be used as a research design (Yin), grounded theory can complement data analysis by identifying patterns, consolidation of the patterns & building emerging theoretical framework. Thus, the combination of the two methods lends synergy and rigor to the qualitative study process.

We followed a purposive sampling and administered four FGDs and four in-depth interviews to select groups of relevant stakeholders to gain greater insights into the farmer producer company and the industry as under:

² Ranibandh Mahila Farmer Producer Company Limited (RMFPCL) is an all women FPC promoted in the year 2021 (Date of Incorporation- 18/01/2021) registered under Companies act, 2013 (NO. 18 OF 2013).

Table 4.3: Role of stakeholders and description of information collection

Stakeholder	Role in Organization/Process	Description
Producer group members	A producer group comprises of 20-40 members in a geographical cluster who are linked with the producer company (RMFPCL) for supplying rough sal leaf plates	The FGD was attended by 10 producer group members belonging to the same village. The FGD lasted for about 90 minutes
BOD members	Office bearers of the RMFPCL who are responsible for formulating strategy, operations & maintaining compliances	The mini FGD was attended by 4 BOD members that lasted for 60 minutes. Two of the attendees holds the position of President and secretary of RMFPCL.
Shareholders	Legal owners of shares of RMFPCL	The FGD was attended by 8 shareholders who are engaged in different business verticals of RMFPCL. The FGD with shareholders lasted for about 40 minutes
Master stitchers cum entrepreneurs	They are responsible for stitching operations, supplying to RMFPCL for further molding & training fellow shareholders	The FGD was attended by 6 stitchers cum entrepreneurs. The FGD lasted for about 75 minutes

Table 4.4: Role of stakeholders and description of method of interaction

Stakeholder	Role in Organization/Process	Method of interaction
Supporting institution (District Office, West Bengal Khadi and Village Industries Board)	District Khadi office provided common facility Centre for developing one of the 2 production units by RMFPCL	In depth interview was conducted with Bankura Khadi board district officer for about 30 minutes
Wholesaler cum stockist	Trades in sal leaf products	In depth interview was held with a trader in a market called Mandalkuli. The interview lasted for 45 minutes
Master molder	Molding operation in the main production unit & preparing other shareholders for molding operation	Interview with the master molder in Poradi production unit took place for 90 minutes
Anchor person- Promoting agency (PRADAN, Khatra unit)	The promoting agency that facilitated the entire journey of RMFPCL	The anchor person for RMFPCL from the promoting agency was interviewed for 120 minutes.

The multiple sources of data collection including secondary studies, internal documents, FGDs, in-depth interviews & researcher's familiarity with the context helped in the triangulation process.

c. Ethical Consideration

During data collection, the study team sought approval from PRADAN state & cluster teams, individual respondents & other stakeholders who participated in the study. Individual consents were also taken before capturing any data from the individuals through interviews & FGDs.

RESULTS

a. Baseline findings

Before the initiation of the sal leaf enterprise, a baseline study was instituted by the promoting organization PRADAN. The baseline data indicated that there are 4500 households in 68 villages in clusters like Ranibandh, Barikul, Rautora and Rudra etc. who are engaged in sal leaf collection. On average there are 67 pluckers in each village whereas there are 149 functional stitchers and 12 molders. A cumulative 79 % households earned less than 5000 INR by engaging 3-months per year 2020 & only 21% earn more than 5000 INR per year by engaging between 3months to 9 months per year.

The other details related to person days of engagement and yearly income are given below.

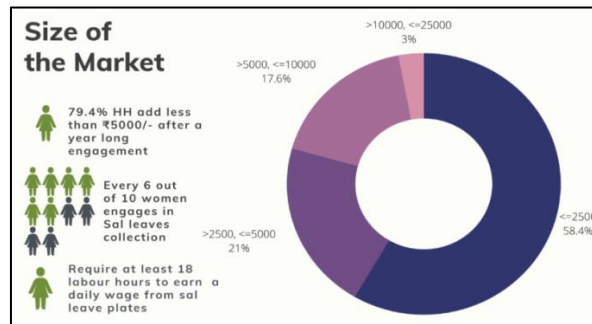


Figure 4.2: Market share of sal leaf producers and products

Similarly, month wise production of sal plates during the baseline survey is illustrated below:

The baseline study was followed by a value chain study by an external consultancy agency. The study revealed that the unit economics of different types of sal leaf plates differs & with each level of higher value addition, the absolute margin increases in a nonlinear way. In the operating area, the collectors operate at the lower end of the value chain & mostly cater to local haats, molders & stitchers. The study further suggested that PRADAN should try to bring these beneficiaries to operate at the higher end of the value chain through improvements in the internal process, technology, quality, broadening market base & final finished products. It further suggested that at the product level there can be 35-36 sal leaf product variants across different dimensions that can serve specific geography and trading hubs.

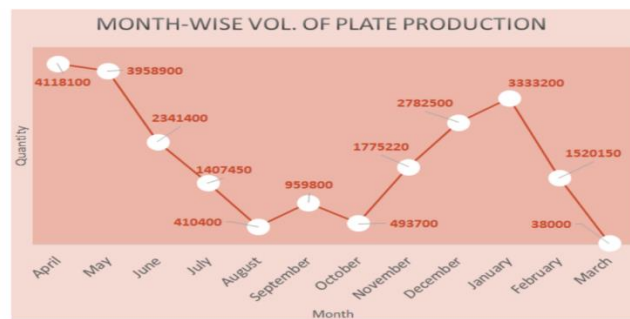


Figure 4.3: Month wise volume of sal plate production

b. Scenario during baseline

Thus, at a broad level, there was a scope for improvement in terms of collectivization & shortening of the multi layered value chain to increase efficiency throughout the length of the value chain. Further there was scope for value addition at the level of quality, skill and technology and organized marketing through placement of regular, semi premium, and premium products and institutional market linkage (Appendix A)

At the specific level, there was scope for the following activities:

- Conduct value-chain and market study:
 - To shape the business development of the enterprise
- Better and fair price realization:
 - Supported for aggregation and produce selling to the TRIFED/alternate market channels.
 - Create value addition for primary products.
- Collectivization:
 - Collectivize the women as the primary collectors of the Sal leaves.
- Value addition:
 - Machine stitching, machine-molding & packaging
- Market Linkage:
 - Strengthened linkage (exploring traders, retailers, consumer)
 - Better price realization than traditional business



Figure 4.4: Process of value addition to sal plate production

c. Institutional structure of RMFPCL

The producer company has 4 business verticals namely paddy, vegetables, fruits and sal leaves. The newest vertical is sal leaf and RMFPCL wants to expand this sustainable business in the coming years. RMFPCL covers 108 PGs (production clusters) across 78 villages in 8 gram panchayats. 11 PGs are predominantly into sal leaf operations. A total of 1688 shareholders are enrolled in the producer company

and 327 shareholders belong to sal leaf PG. All the producer groups are linked with the Ranibandh producer company.

Each PG has 3 office bearers in the form of secretary, president, and treasurer. Each producer group comprises of 20-40 members & there are 2-3 PGs per village. Many PG members are also linked with self-help groups and can access government financial schemes also. The self-help groups can support the members of the PGs by meeting short-term working capital requirements also. The BOD (board of directors) is represented by 5 promoters and 5 directors. They come from different PGs of RMFPCL. In the last FY (2022-23) the company clocked a turnover of 58.58 lakhs with marginal net profit of 0.66 lakhs. The current business operation was devised based on removing the drawbacks of the earlier design.

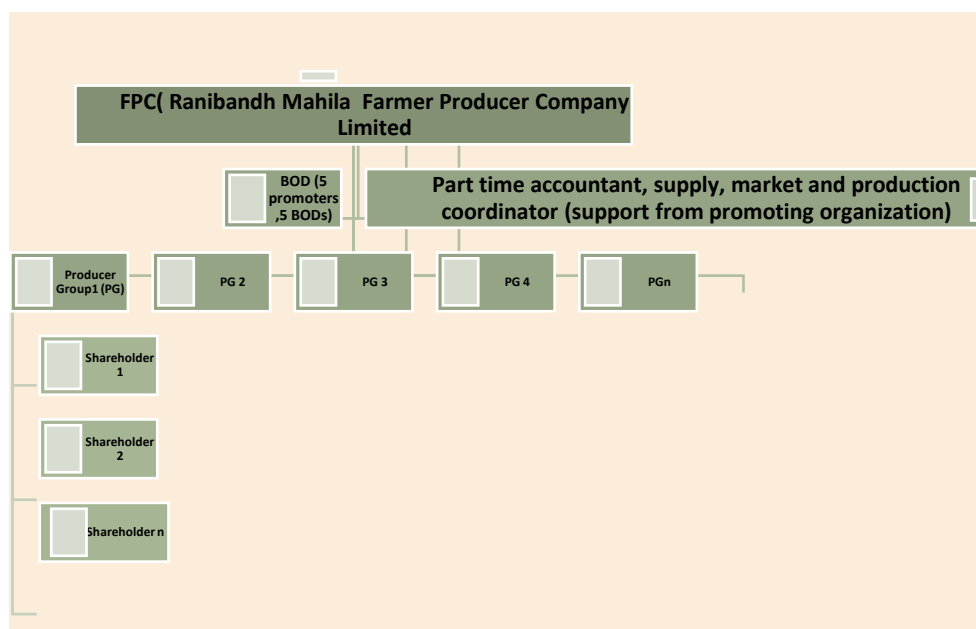


Figure 4:5 Concept of RMFPCL

d. Current operating structure

RMFPCL supports the different tiers of the value chain as under:

1. **Collectors:** Hands-on training in the leaf collection, quality stitching, molding & packaging.
2. Deploy trained women on a contract basis for stitching and molding.
 - To aggregate the raw leaves/rough plates from different villages
 - To get the rough plate stitched
 - To get the stitched plate molded and packed.
 - To sell at market with better price realization
3. Handholding of stitching entrepreneurs for continuous operation of village level aggregation and stitching.

4. Support molders for continuous operation in the processing unit.
5. Need based distribution of surplus revenue as dividends to the primary collectors.



Figure 4.6: Cluster business operation

e. Organic linkage between collector, stitcher, molder, and enterprise

RMFPCL is linked with 1000 sal leaf collectors & each leaf collector can make 200 INR per 1000 plates. A stitcher is a member of a producer group and is linked with 20 collectors. A stitcher supplies the finished products based on the requirement of the enterprise or sells them outside RMFPCL. A trained stitcher can stitch 2000 & above plates per day & earns 100 INR per 1000 stitched plates per day or 200 INR per day. Similarly, the next level of value chain actor like molder can prepare 3000 plates per day. Based on the type of molding through manual and semi-automated machines, a molder can earn 70 to 100 INR per 1000 plates or around 210 INR to 300 INR per day.

The creation of RMFPCL has reduced & consolidated a few intermediate layers between the producers and the consumers. Under the current set up, the intermediaries between collectors and the stitchers are no longer needed & RMFPCL and the associated PGs are playing a central role in reaching out to institutional and retail customers. The value chain has increased efficiency through creation of hub (RMFPCL) & spoke (PGs) model, cost optimization due to transparent shorter value chain & app-based data management of operations.

f. Quotes from the different actors attached to RMFPCL

Box 1

One of the board members, Ms. Pushpa told during a FGD session that *“Earlier we were dependent on the village intermediaries to sell our products. We used to accept whatever prices were offered by the traders. But after the formation of RMFPCL, the PGs fix the price after consulting the shareholders. RMFPCL has given confidence to the shareholders in the price setting mechanism and BOD members like me are actively involved in the whole process.”*

Box 2

Another shareholder cum master stitcher. Ms. Shakuntala became a role model for the community when her name featured in PM’s speech for inspiring other community women members. During one of the FGD discussions she said that *“I had a lot of desire to earn a regular income and do something for my family and*

fellow leaf collectors. But the opportunity was missing due to volatile demand, lack of adequate skills and dependence on the village middlemen who offered their own price with no room for negotiation. After RMFPCL was formed, I grasped the opportunity to skill myself on different types of stitching. I did not want to let go the chance & after training, approached the company for initial working capital. My request was granted by the BODs, and I could secure a working capital loan to start my own stitching operation. The producer company also gave me full freedom to work as an entrepreneur and decide on my own to sell my products either to the company or to the outside traders. I have also provided trainings to other women shareholders and inspired them to runs their own independent operations.”.

Box 3

Pradip, a molder during one of the interviews narrated *“When I look back, I feel very happy because earlier I was engaged in a small business with irregular income & that entailed lots of hard work. After the initiation of sal leaf business in RMFPCL, I was picked up by the promoting agency to get trained on the molding operations. After the training, I have learnt to operate different molding machines. I have also trained several women shareholders to run the manual machines and they are now earning regularly as an operator. After the sal leaf molding operation became full-fledged activity for me, I am getting year-round employment with regular income and fixed working hours.”*

MAJOR CHANGES WITNESSED

a. Value chain improvements

The value chain has shortened after the formation of RMFPCL with the role of aggregators and individual molders no longer playing a dominant role in the sal leaf PG clusters. As a result, the margins have increased with reduced nodes and value chain actors. RMFPCL became the single point contact for the shareholders & became a strong supporting institution. It has increased efficiency and optimized the aggregate cost of the operation with less wastages (due to training), creation of central hubs for procurement, logistics support & good visibility of demand. It also enabled more effective engagement with the market players. The shareholders have reposed great trust and confidence on the RMFPCL, and it has brought about transparency like price setting, operations of other actors in the value chain, visibility of current & emerging market demand, etc. In this business, every level of value addition gives an opportunity for incremental margin & scope for integration with higher order markets.

b. Change in price dynamics

The overall market price in the areas closer to the PG cluster has increased. Earlier the village intermediaries used to offer different prices to different sal leaf collectors in the same village. Now the PGs have set a minimum price ceiling of Rs200 per 1000 pieces of rough plates. As a result of that there has been an increase of 25-30% increase in the income of average collectors/ rough plate makers. The shareholders are getting higher payment due to the improvement in the quality of the finished products. Quality check is done at 2 different levels-At the level of the stitchers linked to a producer group and the molders in the factory.

c. Person-days of employment

Each collector is engaged for 176-225 man-days in the collection of sal leaves (22-25 days a month for 8-9 months). The stitchers who are shareholders and members of different PGs are, however, getting full year employment. The molders too also getting full year employment after formation of RMFPCL. Landless people & small holder farmers with very limited means are getting support from sal leaf business through the producer company.

d. Power structure

System has been set where PGs decide the price on behalf of leaf collectors and rough plate makers. This has equalized the power structure and has created mechanisms for transparent operations, The PGs and RMFPCL are operating on a hub and spoke model basis & this has created a two-tier empowered institutional structure (PGs as spokes and RMFPCL as hub) thereby enabling direct linkage with shareholders. BOD members have started engaging with the market directly. They are trying to broad base the customer base including traders, institutional customers and other producer companies.

e. Reversal of gender role

The formation of RMFPCL has witnessed several gender reversals of roles. For example, earlier most of the molding activities were mostly done by the men in the area. Post formation of RMFPCL many women shareholders started engaging as molders in the production units. Similarly, the BODs and the PG shareholders have started engaging with the market players. They are also taking lead in building capacity of the other women residing in catchment areas of RMFPCL. The members of BODs and stitchers are getting more social recognition from the society and block administration because of their transformative role in developing sal business by engaging women shareholders.

f. Innovations

The production unit of RMFPCL situated at Poradih can prepare 14 different products for catering to different segments of the market across India. It has introduced semi premium leakproof plate by incorporating biodegradable poly, premium buffet plates, compartment plates, bowls of different dimensions, carry bags, different types of stitching and a host of other product variants in different SKUs (Appendix B). In comparison, the local private production units in the district can only manufacture a few sal leaf products with limited SKUs in the mass segment. RMFPCL is also trying to migrate from the conventional agency-based trading to institutional trading. In this regard, it has tied up with district khadi board, other producer companies, trusts etc. Though sal leaf products are still considered commoditized products, RMFPCL has started limited inside and outside branding of PP/BOPP bags for better visibility & product differentiation.

g. Leverage from government institutions

Currently the two production units one in Raipur and another one in the Poradi were provided by block administration and khadi (Appendix C) respectively on a lease basis. This partnership with the block administration and the nodal agency has drastically brought down the fixed costs for the operations. A part of the fixed cost is also being covered by the promoter, PRADAN.

h. Decentralized stocking points

The stitcher entrepreneurs act as decentralized stocking points for RMFPCL. In terms of operational flexibility, each producer group has 3-4 trained stitchers who convert the rough plates to stitched plates & supplies both to the producer company and in the market (as an entrepreneur). The PGs and the network of SHGs linked to nearby *Sanghas* also help in providing flexibility for decentralized stock points for RMFPCL. This provides flexibility on procurement for the producer company without locking capital on centralized inventory. This also eases operations in terms of need-based procurement, especially during peak months.



Figure 4.7: Institutional selling

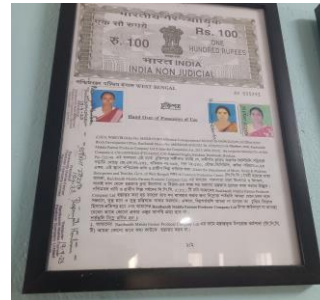


Figure 4.8: Agreement for handing over the possession



Figure 4.9: Handing over common facility centres Agreement for handing over the possession



i. Inclusion of landless, marginal and forest dependent community into the business

The sal leaf business vertical is the most recent line of business for RMFPCL. In the earlier verticals, the major shareholders were small holder farmers who had land parcels at their disposal. However, the inclusion of sal leaf business in the producer company has enabled participation of landless and forest dependent communities. This has made the business more inclusive associating with most marginal people in the business.



Regular Product



Semi Premium Product

Figure 4.10: Sample product portfolio regular and semi- premium

CONCLUSION

Augmenting livelihoods of the forest dependent communities requires some focused intervention on NTFPs. Facilities pertaining to storage, grading, processing and value addition & convergence with existing schemes and programs in private and public sectors should be promoted and created. Communities should be empowered with information about the market, policy and products to enable them to strategize and access better returns from NTFPs.

The case study finds that due to collective marketing efforts there has been 25-30% increase in stable income, assured employment of 8-9 months for leaf collectors, full year engagement for stitchers and molders, creation of entrepreneurship through hub and spoke model, more effective linkage with government nodal agencies, engagement of women shareholders in marketing of the sal leaf products, better price discovery through negotiation by producer groups & empowered community through distributed power structure in producer groups. There are other unintended positive benefits for women shareholders like better education and nutrition for their children due to enhanced income.

At the policy level, the favorable policy regime of the government for this biodegradable product is one of the key enablers. This includes zero GST on sal leaf products, non-requirement of clearance from pollution control board and no specific criteria by bureau of Indian standards (BIS). Moreover, under the forest rights acts 2006, native people living in forest fringes have the right to collect sal leaves from the forests for the purpose of self-consumption, occupation, and sale. At the enterprise level, RMFPCL has received support from regional khadi village development board, block administration, local panchayats, nodal agencies, PRADAN and other stakeholders during different phases of its journey.

Limitations: The study was confined to one category of NTFP products (Sal leaf products) in one geographical cluster of Bengal & hence limits its generalizations.

Implications: The study has helped us in getting a better understanding of the NTFP based industry in general and sal leaf industry in particular. The study will also encourage further research on similar poor social enterprises in other geographies.

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