

ABSTRACT

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LIVELIHOOD PROMOTION THROUGH TASAR VALUE CHAIN UNDER "RESHAM PROJECT"

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> Tasar sericulture is a cottage and forestry-based activity practiced by the tribal population of the central India. It involves all the activities pertaining to rearing of tasar silkworm, Antheraea mylitta, harvesting of cocoons, production of silk yarn from cocoons and weaving of yarn into fabric. Tasar culture is practiced by about 1.5 lakh populace mainly tribal, across the states of Gondwana region of central India, involves continuous chain of several production activities. It starts with either collection of nature grown cocoons from forests or rearing of silkworm on its host plants in forests/ plantations for production of cocoons, which are utilized by reelers and weavers for production of yarn and fabrics. The major producers in the sector include silkworm rearers, yarn producers and weavers. In India, Tasar rearing is carried out in the outdoors, mainly in the forest areas on host trees like Asan, Arjun and Sal, available abundantly in estimated 14.5 million hectares. Utilization of tasar food plants in the forest area add up not only to tasar silk production but also help conserves the forest. Thus tasar sericulture holds a great promise for the forestry as a supplementary activity. On one hand, it can help in arresting forest destruction and on the other; it permits gainful utilization of this vast natural wealth. Resham project empowered the rural poor in general and the women in particular economically, with the introduction of the activities through technologies which are women friendly, hygienic and superior in terms of both quality and quantity production. This would along with introduction of improved machinery and technologies, establishment of backward and forward linkages between various groups would definitely result in self- sustainability of different activities.

Keywords : Tasar sericulture, forest-based activity, Antheraea mylitta, tribal population.

Introduction

This forest-based industry uniquely suited to the economy and social structure of the developing countries because of its minimum investment requirement and high employment potential for tribal, forest dwellers and rural people living in the hinterlands of silk trade centers. The market demand for Tasar has been increasing at an annual compounded rate of over 12%. In the tribal areas with limited employment avenues, Tasar sericulture can offer significant income opportunities through utilization of slack labor and idle assets like fallow uplands.

Having abundant opportunity and promises in the sector, contrary to a substantial number of the producers in the sector have lost their livelihoods from Tasar in the past three decades. This resulted into rapid deforestation in areas with Tasar host tree stock. Low production of cocoons resulted in rapid fall in yarn production and weaving. The sector faces problems of acute shortage of seeds, low penetration of technology for rearing, unavailability of problem-solving services. A nexus of moneylender- traders controls the markets at the level of the producers.

India is the main producer of Tasar silk with Jharkhand being the main state of its production. Producing Tasar is a rural art. Traditionally, the women of the tribal and rural areas were trained in weaving silk out of cocoons and weaving fabrics from the threads hence obtained. Like most of the other textile arts, Tasar too became a fabric of mechanization. The Tasar silk industry makes extensive use of rural and tribal labor. The women who are absorbed by the industry are trained in the production of silk. It takes them 3 days to finish a single 10 meter Tasar silk cloth. For each employed labor, the task is to weave at least 10 silk sarees in a month. Each Tasar silk saree is sold for Rs. 3000 to Rs 3500. While the rural women who are involved in making the saree earn between Rs. 1500 to Rs. 2500 for a single saree, the town women get a higher wage for the same job. Kosa is the sanskrit name of Tasar silk and Jharkhand in India, is the main producer of Tasar silk in India.

The current state of affairs in Tasar sector in the state warrants attention to improve infrastructure support in seed multiplication and post cocoon sector (yarn extraction from cocoons and weaving fabric), effective utilization of existing resources/infrastructure, extension support for effective dissemination of technologies/improved package of practices for cultivation, rearing of silkworms, upgrading skill levels of the farmers to undertake sericulture activities for income generation, generating adequately trained person power with technical knowledge and motivational skills, revamping departmental machineries for implementation of development initiatives and their monitoring, coordinating with line departments, directing efforts for privatization and emphasizing the development of entrepreneurship in Tasar silk sector, with the help of community based oganizations.

Cluster Profile

The project is being implemented in the districts of W. Singhbhum, E. Singhbhum, Khunti, Sahebganj, Dumka, Godda and Deoghar.. Pre cocoon activities are being executed in W. Singhbhum district where 16 blocks are involved. At the same time, reeling, spinning and weaving activities are being implemented in Godda, Dumka, Sahibganj, Deoghar and Jamtara. In total the project is being implemented in 22 blocks of 8 districts of Jharkhand. The demographic profiles of the districts as well as state based on some primary parameters are shown in the following table:



Fig. 1: Project Implementing Districts.

Table 1 : Demographic Indicators of Project Implementing Districts (Source: Census 2011)

Demographic Indicators	State								
	Jharkhand	East Singhbhum	West Singhbhum	Jamtara	Sahebgunj	Khunti	Godda	Dumka	Deoghar
Rural Population (%)	75.95%	44.44%	85.49%	90.42	86.12	70.7	95.10%	93.18%	82.68%
Rural Population (Million)	25.05	1.01	1.28	0.71	0.99	0.53	1.25	1.23	1.23
Sex Ratio (Rural)	961	981	1014	959	962	961	940	983	933
Child Sex Ratio (0-6) (Rural)	957	952	986	953	958	953	962	968	959
Child Percentage (0-6) (Rural)	17.43%	14.47%	18.23%	16.65%	19.40%	16.02%	18.60%	16.88%	18.94%
Average Literacy (Rural)	61.11%	62.86%	54.31%	62.58%	48.45%	63.86%	55.01%	59.28%	60.49%
Density/km ²	414	644	208	437	558	210	580	351	602
Area (km ²)	79,716	3,562	7,224	1,811	2,063	2535	2,296	3,761	2,477
Proportion to Jharkhand Population (Rural to Rural)	100.00%	4.03%	5.11%	2.42	3.49	1.61	4.99%	4.91%	4.91%

Background of Area and Community

Jharkhand being one of the rich states in terms of resources, a mineral rich state, it accounts for 35.5 percent of the country's known coal reserves, 90 percent of its cooking coal deposits, 40 percent of its copper, 22 percent of its iron ore, 90 percent of its mica and huge deposits of bauxite, quartz and ceramic as per the India Brand Equity Foundation Report, 'Indian States- Economy and Business-Jharkhand'. But the state also constitutes more than 75% of its population living in rural areas whereas in case of S.C & S.T, the rural population percentage is more than 90% (S.C-91% & S.T-95%) as per census 2011.

Tribals constituting almost 28% of the state's total population and a home of every tenth tribal in India are historically a disadvantaged community. Irrespective of states 22.3% growth in population over the past decade, population of tribals has decreased over time. This can be attributed to a number of factors such as rising industrialization, urbanization, low birth rate and high death rate among tribals, immigration of non-tribal communities in the region and emigration of tribal people to other places.

Ranked 19 out of 23 states, the state has a dismal human development value of 0.376 as per census of India 2011 (provisional tables). Jharkhand's literacy rate of 67.6 percent is much below the national average of 74.04 percent. Female literacy at 56.21 percent in contrast to the male literacy rate of 78.45 percent is also amongst the lowest in the country. According to the India State Hunger Index (ISHI) 2009, Jharkhand falls into the 'alarming' category, that is, a state with high levels of hunger. With an ISHI score of 28.67, it is ranked just above Madhya Pradesh, which, according to the report, has an 'extremely alarming' hunger problem.

The India State Hunger Index scores are closely aligned with poverty. At 45.3 percent, the poverty ratio of the state is much above the national average of 37.2 percent. However, if factors beyond income are considered, i.e. the Multidimensional Poverty Index, this ratio goes up further to about 74.8 percent as per the MPI (Multidimensional Poverty Index) data and updates for 2011, OPHI.

Status of Women

There are gender disparities in Jharkhand in respect to several human development indicators. As per the Gender

Development Index (GDI) ranking, Jharkhand stands 29th out of 35 states suffer from malnutrition. This in itself is a testimony to the pitiable condition of the health care system in the state.

Participation of women in the formal, organized sector is extremely poor, as most of them are compelled to work in the unorganized sector where they are ruthlessly exploited. Infant mortality for the state ranks 8th and child mortality ranks 14th in all state comparisons according to NFHS II. Jharkhand shows high infant and child (under 5) mortality, which is strongly associated with high fertility of women and specifically frequent pregnancy. There are substantial variations in the infant and child mortality location specific. Children born to women of rural low income, illiterate adolescent mother are at disadvantage than the privileged one. Neonatal death is directly related to mother's health, which continues to account for two thirds of infant mortality. Expressed differently, 1 in 19 children die in the first year of life, and 1 in 13 die before reaching age five. Jharkhand is a state where 72% women suffer from anaemia and 41% Target Area Rural poverty context in the area.

Despite all the external and anthropological challenges, the state has large potential, which are still to be optimally utilized. The progress in Tasar base livelihood option is improving and many new trends have been emerged. There has been thrust by government to improve the economic conditions of the poor by providing access to technology and awareness along with capacity building. Many programmes including MKSP have started working in the state to give special attention to the rural poor especially women. Abundance of resources are available in Jharkhand, many resources are still untapped. These untapped resources are taken up and livelihood options have been introduced under MKSP.

Why Project

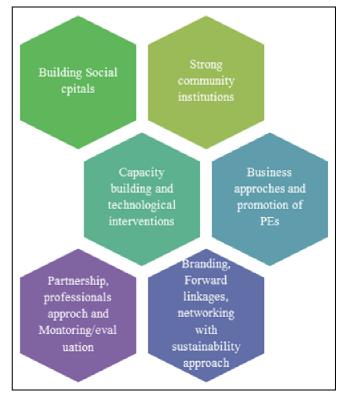
Tasar sericulture is a cottage and forestry-based activity practiced by the tribal population of the central India (12-310 N Latitude and 72-960 E Longitude). Tasar sericulture involves all the activities pertaining to rearing of Tasar silkworm (Antheraea mylitta Drury), harvesting of Tasar cocoons, production of Tasar silk yarn from cocoons and weaving of Tasar yarn into fabric. Tasar culture is practiced by about 1.5 lakh populace mainly tribal, across the states of Gondwana region of central India, involving continuous chain of several production activities. It starts with either collection of nature grown cocoons from forests or rearing of silkworm on its host plants in forests/ plantations for production of cocoons, which are utilized by reelers and weavers for production of yarn and fabrics. The major producers in the sector include silkworm rearers, yarn producers and weavers.

The overall business volume in the sector is estimated around Rs. 650 cr and India is the second largest producer of Tasar silk in the world after China.

This forest-based industry is uniquely suited to the economy and social structure of the developing countries because of its minimum investment requirement and high employment potential for tribals, forest dwellers and rural people living in the hinterlands of silk trade centers. The market demand for Tasar has been increasing at an annual compounded rate of over 12%. In the tribal areas with limited employment avenues, Tasar sericulture can offer significant income opportunities through utilization of slack labor and idle assets like fallow uplands.

Brief project strategy

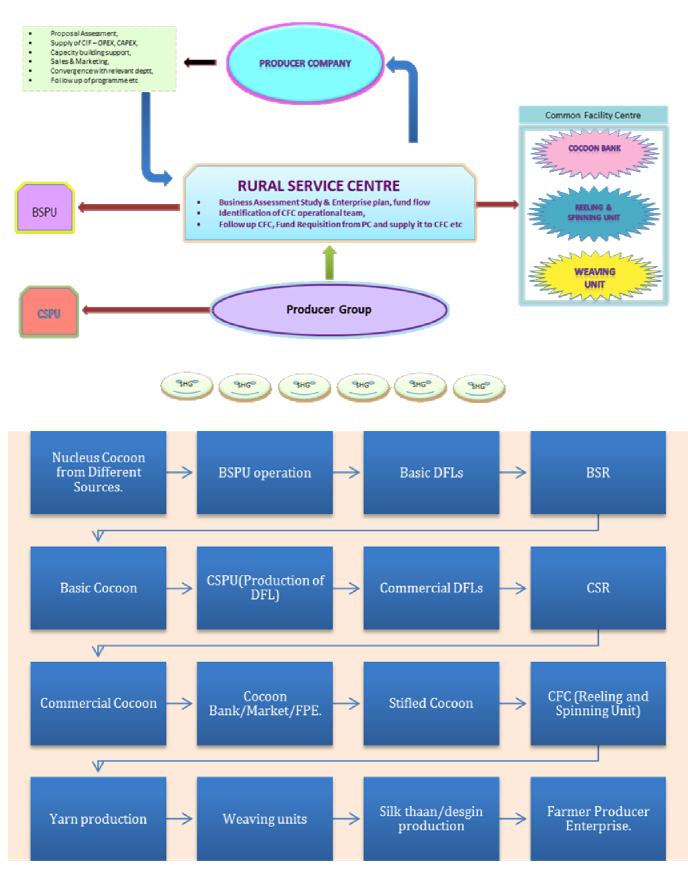
The concept of the project derives from sustainability of sericulture sector in terms of DFL production and its availability among the target and desired communities at their door steps. The project basically conceptualizes with 5 main pillars; Promoting Tasar rearing through scientific pattern of rearing, support to BSPU/CSPU by providing nucleus cocoon from NSR and BSR activities ensure reliable cocoon production through Cocoon Bank, producing silk and fabrication through CFC unit.



The entire set up stands up in a strong institutional architect where the enterprise set up is the major objective. The strategy of the project completely focuses on social capitals and business opportunities through community managed institution. This is the most unique combination, where both business and sustainability of the sector are given equal priorities

The nucleus rearing boosts the cocoon production for BSPU, basic rearing ensures the cocoon production for CSPU, CSPU ensures DFL for commercial rearers and through commercial rearing, commercial cocoon get producer for commercial use and reeling centres use

Similarly, the project look into the post cocoon activities, Santhal zone covering Dumka, Godda, Jamtara, Deoghar and Sahibganj are the highlighted district for implementing post cocoon activities basically reeling/spinning of yarn and weaving occupation. **Institutional Model**



Brief presentation of channel.

Nucleus Cocoon: For BSPU functioning, nucleus cocoons are arranged from different sources like TDF (National Support Organization,) and BTSSO (Govt organization of Odisha).



- Nucleus cocoon rearing initiative has become strength for the successful operation of BSPU. Presently we have 15 BSPUs with cocoon capacity of more than 1050000 and DFL production capacity of 2 Lakh,
- Farmers encourages to take self-produced DFL and do basic rearing in order to produce seeds for CSR
- With support of production of cocoons from BSR, the produce get filter through business institutions like producer group and RSC and sorted cocoons get hanged in the self-promoted CSPU for further production of Commercial DFL s. Currently 261 CSPU centers are active with DFL production capacity of 13 Lakh.



- DFLs that are produced through CSPU are distributed among commercial rearers for production of commercial cocoons. Till date the project has enrolled 18000 commercial rearers,
- The produce is later delivered to 3 cocoon banks established under the project with storing capacity of around 1 crorecocoons. Remaining surplus cocoon gets sold to market with support of FPO,
- In Cocoon Banks conversion processing of cocoons take place and the raw cocoons areconverted into stifled cocoons and transferred to Post Cocoon Intervention centers (CFC) for reeling and spinning.



- In CFC, reeling and spinning are promoted where quality silk is produced. Presently 15 CFCs are under operation,
- Establishment of 5 weaving centers initiated and their Capacity Building activities are under process,
- Forward linkage of cocoon, yarn etc. is done by FPO "Jhar Mahila Resham Producer Company Limited". FPO under this intervention has been formally registered and run by community elected Board of Directors with support of expert professional hired under the project.



Innovations and adoption of technologies

Under the project various technologies and equipment's are being introduced among farmers and institutions to ensure scientific practice in both post cocoon and pre cocoon intervention. These practices not only increase the productivity but also very effective to reduce the consumption of time of beneficiaries and enhance their skills on scientific rearing and operation in institutions.



Rearing related implements like secateurs, sprayer machine, nets and various consumables are being provided to farmers in every cycle of rearing. Traditionally farmers were not using sprayer machine at the time of spray, mosquito net to protect tasar worms and secateurs for proper harvesting and pruning, even many were unknown about these implements and their necessities. Because of this they were unable to protect the worms at the time of outbreak of any fungal disease which result loss of productivity.



With the arrival of these implements among farmers through Project Resham, farmers are very much aware about its uses and necessity. They are capacitated enough to operate these machines with the help of various drive and demonstration training given by technical expert deputed under project. Now farmers are experiencing very good result in cocoon production and are also getting very good patch and pruned tress needed for scientific rearing.



With the launching of stifling machine in cocoon bank, farmers get market place to sell cocoons. These cocoons can be preserved for longer period of time after processing raw cocoon to stifle cocoon efficiently and can able to sell it to post cocoon intervention with keeping profit margin. The cocoon bank is operated by the members of project village and this creates an opportunity for villagers to earn profit and strengthen the institution. It also provides livelihood opportunities for some farmers of village on a daily wage work. Traditionally there was no such scope to preserve these cocoons for a longer period of time. If farmers would not get market at right time then the cocoons get spoiled and its value gets decreased. But now cocoons can be stored for a longer period of time with support of cocoon bank.



Provision of microscope and related machines in Grainage house given opportunities to villagers to produce self-tested DFLs in grainage house, now farmers are not depended on any other source of DFLs rather they are producing their own dfls in their own village. To operate the machine and manage grainage house responsible members received various training and certification course from JSLPS and technical support agency of Resham Project. Presently we have 544 tester didis who are accountable to operate microscope. Now farmers are getting DFLs from the grainage house of their own village and are also making profit through grainage house in order to supply DFLs to beneficiaries.



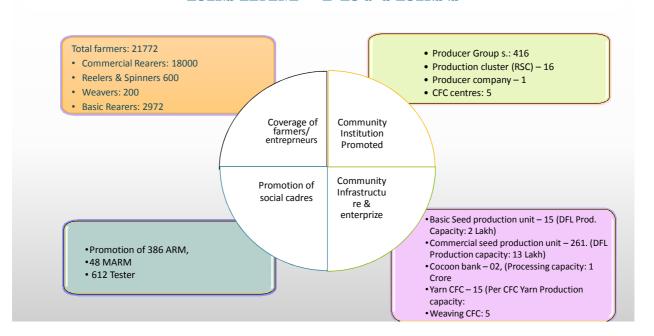
Provision of electronic reeling and spinning electronic machine for Post Cocoon intervention eradicated ongoing practice of thigh silk reeling and promote the profitable production of silk. With this approach, the production of ration of quality silk has enhanced and farmers are experiencing more profit through this practice. Previously they were engaged in thigh silk reeling which were not just slow in production but also leads to thigh and hand injury frequently. Before handover of machine to operator/beneficiaries they have to pass through 50 Days training programme conducted under the project to ensure proper operation of Machine.

Approach adopted to communitised the activities

Scientific way of Silk worm rearing is being promoted under the project, in scientific rearing step by step scientific process are adopted by the community as described below:

- Self-produced Seeds (DFL) are provided to farmers. These DFLs are produced in CSPU (Commercial Seeds Production Unit) a business unit under Resham Project and the unit are being operated by community members. In case, the production would not meet the requirement, then DFLs get produced from Government Institution of Central Seed Board (Sericulture Department). DFLs also get procured by Tasar Development Foundation (TDF) as recommended by CSB.
- Project Resham always encourages farmers to purchase DFL from their Community Managed Institution (CSPU) with their self-contributed amount. However, in some level Project Resham also have provisioned for DFL input under community investment support fund (CIF)
- Promotion of business level institutions at each level. The project has developed various Tasar based institution in project field. Village level institution like "Producer group" (PG) and CSPU/BSPU are established to undertake field level activities. Middle Block Level Institutions like "Rural Service Center" (RSC) and "Cocoon Bank" established at block or cluster for immediate support to producer group and business role and in top level "Farmer Producer Company" is established to supervise and support to village and middle level institution in during project functioning and marketing.
- For Post Cocoon Intervention, Common facility Centre is established for reeling and spinning work.

- ECRP (External Community Resource Person) drive supports are given to farmers in during the cropping period. Each and every steps/process are being facilitated to farmers by trained CRP, in fact handhold support, demonstration training, exposure and several capacity building exercises are being undertaken in during the ECRP-Drive Period. During the initiation period of the project, the project has hired trained ECRP from National Support Agency called Tasar Development Foundation and also taken all the technical support in order to strengthen the project in operational components. Now the project has developed their own Community Resource Person called Ajeevika Resham Mitra (ARM) and they are having the responsibility to conduct drive and facilitate farmers.
- Input support like medicines, consumables, equipments are always being taken care under the project in order to promote scientific procedures. Farmers Producer Company has the responsibility of timely delivery of these inputs once get demanded from the Producer Group and Rural Service Centre established under the project. All institutions are being managed by community in close coordination with Tasar farmers.
- **Capacity Building Activities** are always in the priority list of Projects Resham. Special Capacity building calendar has been developed where detailed quarter wise training exercises are noted with Gantt-chart for timely execution.
- Market support to farmers by Farmer Producer Company Established under the project. The company is strengthening enough to deal with all market related affairs including demand and supply part. Farmers sell their produce like cocoon to Producer Group established at village level and later the produce gets routed to company for further selling. Farmer collects the amount timely with no fraud and 100% satisfaction



RESHAM - PROGRESS

Progress and major achievement

Explanation of progress under the project

• Scientific rearing of Silk Worm under BSR and CSR

Silkworm rearing is one of the core activities of project Resham. Under the project Basic Seed Rearing, Commercial Seed rearing and Nucleus seeds rearing are promoted. Scientific ways of rearing is the operational procedure of the project and is being ensured through expert CRPs developed under the project. To maintain the technicality, the project also hired technical support agency. Till date the project covered and benefited 18000 farmers in silkworm rearing,

• Self production of DFL and Reelable cocoons under Value Chain Approach

DFL production is another core activity of project Resham and to promote this activity and to provide the platform of processing the project has established **261 Commercial seeds production unit (CSPU), 15 Basic Seeds Production Unit (BSPU).** These institutions are treated as village level business institution working under value chain approach and to give strength to the institution and ensure their sustainability. **The project has developed and nurtured more than 600 community cadres of institution (Tester didi)** who are gone through rigorous training programs and certification courses for institution operation and management.

- 3 Cocoon Banks with capacity of more than 1 crore cocoons are in operational condition and are being managed by trained community operators. The cocoon bank is not only benefiting the community as cocoon selling platform but also act like generating some level of employment among the village. In during the seasonal time, around 10-12 worker are required to be hired as per the desired skills and are paid for their labor.
- Intervened to tasar subsector as self yarn production and weaving occupation

The project is now strengthen enough to deliver end to end activity, production of yarn through reeling and spinning and further to weaving occupation and forward linkage shows the strength of business channel operated by community. Till date 600 Machines are installed and 50 days training program are being undertaken.

• Promotion of farmer based producer enterprise and village level business institutions.

To supervise and guide the value chain system and different business institutions working under the project ,tasar based "Farmer Producer enterprise" has been established that is operated by elected community members . The associated members of company are capacitated enough to handle all the business related operations with fund management role. Now the company is strengthen enough to handle all the activities from input supply, production functions to forward linkage.

Project Impact

• Skill, technical, managerial and entrepreneurial capacities of the tribal households in tasar sector was built.

- Women and tribal empowerment besides involvement of youth to take up all the activities across the tasar silk value chain especially Dfl production.
- Scope for basic seed production to take care of future scaling up needs
- Creation of large pool of CRPs and producer institutions like producer groups for effective building of backward and forward linkages for sustenance.
- Environmental protection due to regeneration of tasar host flora.
- Many `passive' rearers became `active' due to better linkages and market support.
- Opening of Bank Account for producer groups, collective purchase of critical inputs and marketing of cocoons and other NTFP items.
- Significant improvement in poverty indicators viz., health, food security, migration through integration of livelihood activities.
- Improvement of primary producers' share in the value chain through conversion, design development and product diversification.
- More than 4809 farmers are reported to earn more than 50,000/- as annual income.

Learning from the field

- Farmer selection is an important process in nucleus seed production. Under this, it is desirable to select such farmers who have more guest plants available for sericulture. For Sericulture activities it is desirable that good number of adults in their family is an added advantage in rearing activity. In this way, intensive tracking of the area becomes possible and later in the production of commercial silk, there is a lot of cooperation. The family gets good profits from both the activities.
- BSR can be done with 150 DFL each farmer in the planting patch of Arjuna host tree. But where sericulture is being done with guest plants available in the forests, then the trees grow and it has to be managed intensively i.e. in this situation it is preferable for a farmer to cultivate silk with 100 DFL and thus, its management has also been considered practical.
- In the preparation of Host plants under BSR, 06 months prior pruning is desirable. In this way, more leaves come out in the Host plants, which is very important for silkworm to have more leaves at one place.
- Socially and economically deprived women selected and trained as Tester Didi under RESAHM project, its resulted dignified life and recognition,

Key challenges of the project

- 2 Years of COVID-19 pandemic has put the depraved impact to the project, the post cocoon starts from months of Oct to May where as the pre cocoon starts from May on-words; Due to lock down and infections both pre-cocoon and post cocoon progress hampered and not able to achieve the project mandates as committed.
- State assembly election also create hurdled in the project in terms of Institutional strengthen.

- Building seed zone to reduce the secondary contamination.
- Finding out economically viable (in context of producer, getting Rs. 150-200 per day) machines for the post cocoon activity.
- Decline in forest flora and climate change
- Marketing is not organised and dominated by middlemen and traders leading to low and fluctuating price.
- Absence of large-scale cocoon conversion, poor remuneration to reelers and weavers making cocoons flow out of state.
- Dependency on substitute and alternative yarns that are cheaper for increased margins

Planning and way forward:

- Despite these challenges, tasar still has the potential to provide the maximum returns for indigenous communities in their home environs.
- Replication and refinement of the project module by involving Community Based Organizations and CRPs with monitoring by DoS.
- To explore possibilities for value addition which are enormous, especially in the post-cocoon sector and also carbon sequestration
- Developing basic infrastructure for seed augmentation and cocoon storage at the community level besides incentivising nucleus and basic seed cocoon rearing
- Increasing block plantations of tasar host plants in revenue and forest lands through effective convergence with MGNREGS, MGNREGS-CFT, and MGNREGA-GIM etc.
- Provide capacity building, demonstrations and exposure to best practices by utilising CRP base for up scaling activities.
- Constitute a dedicated team to ensure zero tolerance on disease monitoring and robust quality control of systems in seed production including quality certification.
- Demonstration and piloting of emerging and sustainable technologies in tasar sector
- Introduce efficient, multiple range of yarn producing machines besides incentivising PCT sector to encourage value addition locally.
- Farmer producers' company in both pre and post cocoon interventions will be the key focus of the project, where sustainable approach and scientific adoption with market strategies being executed in professional approach.

Jharkhand, in spite of being the largest producer of Tasar silk, has lot of unexplored potential besides value addition locally. The post-cocoon sector needs more efficient yarn conversion machines, incentives and higher remuneration to encourage more people to take it up. Based on the lessons and learning's from the MKSP Tasar project, the tasar subsector in Jharkhand needs all out efforts to explore its potential and scaling up. The project required more time to focus on following activities which shall be consider by expert team for the state Jharkhand; a; FPC promotion and establishment of BP, b; Functioning of weaving clusters and production of Tasar Thaan and design products, c; Production of cocoon and storage of 80 lakh commercial cocoon, d; Self sustain model on DFLs production and professional interventions in PEs.

Exit & Sustainability Plan

Tasar culture is an age-old practice in the project area of the rural poor specially the scheduled Tribes. The assured availability of quality commercial seed, improved technologies for processing of yarn and fabric and the means for its adoption provided under the project, increase in the food plant population by maintaining Tasar host flora by using organic compost in natural forests/ private waste lands and chawkie garden leads not only to the increased production and productivity but also to sustain the project beyond the project period.

Organization of beneficiaries and different stakeholders into manageable groups, RBC, and by their integration into Producers Organizations would further strengthen the development of the industry. Establishment of required infrastructure within the project area, capacity building through training programme and exposures, establishment of linkages with different resource institutions helps in sustainability of the project. The increased earning capacity of the beneficiaries with increased productivity and quality, development of viable rural enterprises such as Village based seed units, Seed rearing, reeling, spinning, weaving etc. would take the project beyond simple sustenance to a viable commercial activity. The core theme of the project is

Conclusion

The Resham project empowers rural poor in general and the women in particular economically with the introduction of the activities through technologies, which are women friendly, hygienic and superior in terms of both quality and quantity production. This would along with introduction of improved machinery and technologies, establishment of backward and forward linkages between various groups would definitely result in self- sustainability of different activities. It is massive achievement in field of "SEED TO SILK".

References

Innovation and adoption of technology

- Appreciated by hon'ble Prime MinsterShri Narendra Modi in Radio program Man Ki Baat (22nd Sept. 2020)
- Appreciation to the tribal women of West Singhbhum who are practicing scientific pattern of tasar cultivation with support of scientific technologies.

Approach adopted to communitised the activities

- 100th addition E-Bulletin, JSLPS (Nov. 2021).
- Success story covered in JSLPS magazine on community managed institution (CSPU& BSPU) for self production of DFL.
- IPRD, West Singhbhum tweeted on official twitter handle (27 June 2022).
- Tweet on ongoing community level training program on DFL Production through microscopic testing at BSPU of Hatgamhariya.
- News Wing (Ranchi based Web Portal) on 21st January 2022.
- Story on Microscopic testing and silk production by women Community members.
- Deoghar Jagaran (News Paper).

• Story coverage on training program conducted for women yarn producer in Mohanpur Block of Deoghar.

Progress and major achievement

- Project Resham Progress Report (2022) submitted to MORD on dated 28th September 2022.
- Progress showing in JSLPS Management Information System (MIS)
- Source Data: MKSP.swalekha.in

Project Impact

- Booklet on "Success Story of Project Resham" (2021)
- Launched during the launching workshop of "Integrated Farming Cluster" (IFC) on 24th December 2021 by Respected NN Sinha, Secretary MORD, In the booklet life changing stories and impact in the life of successful farmers are covered.
- Prabhat Khabar (News Paper), 1st February 2022.
- Story on project Resham journey and impact in the life of women farmers benefited with the project.
- Godda Jagran (News Paper), 11th August 2022.
- Story covered on value addition work undertaken by women farmers of Godda through the production of 40,000 Tasar Silk based Rakhi.