MEMOIR

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MEMORIES OF THE TASAR PROJECT

Scouting for locations across states to launch the *Tasar* Project, motivating farmer families to develop plantations, garnering funds from agencies, training farmers in scientific methods of *tasar* rearing, and marketing the collective produce were some of the slow and steady steps in the creation of an alternative livelihood for the villagers of Bihar, Jharkhand and Madhya Pradesh.

अधिष्ठानं तथा कर्ता करणं च पुथ्गिव्ध्म | विविधास्छ पृथ्क्चेश्था देवं चैवात्र पंचमं || (श्रीमद्भागवद्गीता - XVIII/14)

The above verse says that following are the requirements for a successful implementation of any project:

- 1. अधिष्ठान (Objective)
- 2. कर्ता (Doer or nodal person)
- 3. साधन (Resources)
- 4. चेष्टा (Method and inclination to do) and
- 5. देव (The unforeseen or blessings from God, The Supreme)

The younger generation, even in tribal communities living in and around forest patches, was reluctant to pursue tasar rearing as a part-time occupation. I volunteered to work on these objectives.

Fortunately, the Tasar Project was in alignment with all of these. Being a part of the organization and the implementation of the project, and its nodal person, was an enriching experience and journey for me. I learned about the different dimensions that contribute to the success of any project. The dimensions of learning included technical innovations, managerial tactics, understanding the importance of social and inter-personal relations, as well as dealing with the local bureaucracy and politicians.

The project dovetailed from a study on the *tasar* sector, which was financially sponsored by Ford Foundation and conducted by a multi-disciplinary team of professionals from PRADAN. I joined the team to provide the technical inputs because I had experience in working in the *tasar* sector under the aegis of the Central Silk Board (CSB), Government of India.

Once the findings of the study were presented, there appeared an opportunity to take it further towards implementation. It was seen as being implemented as a 'Direct Action Project' of PRADAN, with the objectives of economic development of poor households in North India, conservation of the environment and up-gradation of wastelands. In the long run, the proposed project was intended for the revival of the endangered *tasar* sector.

In view of the growing economy in the country and the so-called modern aspirations, the younger generation, even in tribal communities living in and around forest patches, was reluctant to pursue *tasar* rearing as a parttime occupation. I volunteered to work on these objectives.

The immediate task was to find a location for the project. My first choice was Madhya Pradesh (M.P.), where wasteland is available in plenty and the climate is suitable for rearing. Also, there was already a tradition and practice of *tasar* rearing and weaving in the state, which was popularly known as the kosa rearing and kosa industry. Fortunately, PRADAN also had an establishment at Sukhtawa in Hoshangabad district of the state. We started our search for grounding the project in and around the district of Hoshangabad.

Many chunks of barren land were explored for the purpose. We made intensive visits to the communities living in the hinterlands of Hoshangabad and the nearby Betul district. Ultimately, we saw a possibility of launching the project in the Shahpur *tehsil* of Betul district. Shahpur is 68 km from Hoshangabad and some 36 km from Betul on NH 69. Betul district lies somewhere in the centre of the country between Bhopal (M.P.) and Nagpur (Maharashtra) and is well connected by road and rail. The tentatively selected locations had plenty of wastelands and a sizeable population of refugees from Bangladesh, who were spread out in a number of hamlets. The state government was looking for some sort of occupation or economic activity for their resettlement. We were able to negotiate for 5,000 acres of land for plantation for the purpose of our project.

The project model was designed to promote plantation on revenue land, taken on a long-term lease from the government. This land would then be distributed among the refugee families to undertake *tasar* rearing, with support and guidance from the project. The negotiation for land was in its final stages when we came to know that the land that we had selected was being earmarked "You cannot be a success in any business without believing that it is the greatest business in the world. You have to put your heart in the business and the business in your heart."

for allocation as compensation to families whose agricultural land was likely to be submerged in construction of the dam under the Narmada Valley Development Project.

The District Collector of Betul assured us that even if this happened, we would get compensation for the plantation already raised by us. We did not agree because that would be moving away from our objectives and a loss of our efforts. Simultaneously, we started thinking of options and looking for other probable locations. When God closes one door, He opens nine other doors. It all happened within a period of four to six months. Perhaps, it was 1987. We packed up from Betul and started a new search. This time, it was in Bihar, which at that time comprised present-day Jharkhand as well.

The potential area, with my limited knowledge, was the Santhal Pargana, now a part of Jharkhand and South Bhagalpur (Banka district, Bihar). Lateritic sandy uncultivable wastelands were available in this region. We saw a ray of hope and examined the sites to check whether they were suitable for the plantation of *tasar* food plants, that is, Terminalia Arjuna and T. Tomentosa. *Tasar* rearing was already being practised here in patches of naturally growing T. Tomentosa plants as well as on the bunds of the paddy fields. Land was easily available although many of the patches were owned by the villagers, including small and marginal farmers. Our pre-conceived model, therefore, of raising plantations on governmentowned revenue land was not feasible.

However, we did not lose hope and discussed ways to develop alternative options. We decided to explore the option of motivating farmer families to develop plantations of T. Arjuna on lands that were lying unused so far, and to undertake *tasar* rearing as an additional source of income for their families. Thus, it was necessary to hold, one-on-one negotiations with the owner families about the objectives and the benefits of the project. This was a herculean task. We just wished that we did not have to implement our project differently. Finally, I moved to Bihar with the belief: "You cannot be a success in any business without believing that it is the greatest business in the world. You have to put your heart in the business and the business in your heart."

I started from Baunsi block in Bhagalpur (now in Banka) as well as Mohanpur and Saraiyahat in Deoghar and Dumka districts, respectively. Banka is a district in Bihar, whereas Deoghar and Dumka are now part of Jharkhand. On the one hand, we collected the inventory of available wastelands from the revenue officials and, on the other, we developed contact with some villagers in these blocks, who knew about the available land in their villages, and also had some influence in the local community. The only physical resource I had to move from village to village was my Rajdoot motorcycle. With the help of local contacts. we first conducted door-to-door visits, talked to the people in a few potential villages and held informal meetings.

There were doubts, suspicions and questions about the genuineness of the project. They had had experiences of being cheated by some land development agencies promoting the sale of irrigation pumps, and of under-cuttings, and incidents of harassments when getting benefits from state projects. The underlying questions everywhere were: "What is your benefit? Why are you interested in this? There must be some personal benefit to you In those initial years, Shivdham became the focal point where we organized training events, held meetings and demonstrations.

(PRADAN) by doing this." There was skepticism that this project would bring any benefits to the people of the villages.

In order to convince the people, we decided that we needed to have an office establishment and a demonstration site. Establishing the office was not a big issue except for the fact that it would require one person to be available there at all times. Promoting a demo site would, on the other hand, require a suitable chunk of land accessible by road. We pursued the proposition of a demo-site with all seriousness but had no intention, or the money, to buy land for the purpose. Our hunt for the acquisition of land ended when we met the Anand Shankar Madhavan of Mandar Vidyapeeth (Bounsi).

He was a renowned Gandhian and a disciple of Dr. Zakir Hussain, the third President of India. He was the founder of an autonomous institute for education known as Mandar Vidyapeeth. He had written a number of books in Hindi and was a Rajbhasa awardee. He had 50 *bighas* of barren land in his custody near Bounsi. The land had been donated to him by the local community and he had set up a primary school with a boarding facility there. The place was known as Shivdham. Convinced of the objectives of our project, he agreed to give us five *bighas* of land to establish a demonstration site. A lease agreement, for a period of 15 years on an annual rent of Re 1 (Rupee one only), was signed to this effect. Deep Joshi, the then Executive Director of PRADAN, came from Delhi for the registration of the deed.

Following the registration, we developed a nursery of Terminalia Arjuna at Shivdham and developed a plantation, as per the specifications of the Central Tasar Research and Training Institute (CTR&TI). The site was developed using the internal financial resources of PRADAN. In those initial years, Shivdham became the focal point where we organized training events, held meetings and demonstrations. By the end of the second year, we had a number of nursery growers and plantation sites in the region, which then served the purposes of showcasing plantations and convincing people. Gradually, Shivdham lost its importance as a demonstration site.

The next challenge was to garner funds for the plantation in the following year, 1988. The cost of raising a plantation, as per the norms of CTR&TI, was high and it was expected to give returns only after four years. The plantation cost was treated as a risky proposition (or investment) in financial terms by the people. There were also some 'ifs' and 'buts' related to the survival of the plantation and the success of the rearing activity.

The plantation cost was high because the spacing between the plants and the rows was close. that is, 4 ft x 4 ft. Each hectare of land was expected to lodge more than 6,700 plants. In order to reduce the costs, we considered a proposition of the spacing being 6 ft x 6 ft. This would accommodate 3,000 plants in a hectare. We were guided by the hypothesis that the total leaf yield per unit area increases although the leaf yield per plant decreases in case of a plantation with close spacing. It also meant that the leaf-yield per plant increases when the spacing between the plants is increased. Moreover, considering the available land-holding and the economic condition of the target community, a unit size was agreed at one *bigha* for one family, that is, 1,200 plants.

We were fortunate to have some energetic volunteers in the many clusters of plantations. They were A small team of local workers was assembled and trained to gear up plantation activities, including the selection of sites, the digging of pits, the supervision of nurseries, the distribution of saplings and their transplantation.

of great help in the project. With their endeavour, they came up with a list of farmers with details for probable plantations that was ready for follow-up. However, we had no source of assured funds to undertake the plantation. The key persons in PRADAN, especially Deep and Vijay, were working to organize funds for the project. A silver lining appeared when the National Wasteland Development Board (NWDB) agreed to provide financial support for the nursery activities.

With the help of the local boys in potential villages, we started collecting Arjuna seeds and holding meetings in villages to organize a kisan nursery and finalize the list of plantations. Besides Shivdham, we arranged one-day orientation camps at Haathi-Hariyali village in Poraiya block of Godda district and at Dhobarna in Saraiyahat block of Dumka district. The camps were intended to select farmers, who would be guided to become entrepreneurs of kisan nurseries and who would also be motivators-cum-guides for those who want to develop *tasar* plantations in the catchment of their nursery. Our friend Soumen, who was working in Purulia, came to help organize one of the camps.

Godda, being almost equidistant from Baunsi, Saraiya and Sunderpahari (a traditional rearing zone), was selected as the place to establish an office, with some minimum facilities. Saplings grew in the nursery beds and the time for their transplantation was fast approaching. Efforts to generate financial support to raise plantations were underway; however, any sanction to this effect was yet to come. The NWDB declined support beyond the nursery stage because it was a proposition of mono-species plantation. Finally, the efforts of Deep and Vijay resulted in a sanction for the project from Council for Advancement of People's Action and Rural Technology (CAPART) and Inter Church Organization for Development Cooperation, Netherlands (ICCO).

A small team of local workers was assembled and trained to gear up plantation activities, including the selection of sites, the digging of pits, the supervision of nurseries, the distribution of saplings and their transplantation. Later, the task of cultural operation, and maintenance and protection were also included. Gradually, committed youngsters with managerial qualifications and professional orientation joined the team at different points of time. Some who stayed with the project with commitment for a significant period of time and contributed to its growth and development included Malika, Manish, Uday, Narendra, Nijjar, Satya and Madhu. They made a qualitative difference and contributed to the quantitative growth of the project.

I remember the role played by Uday in the promotion of decentralized grainages. Similarly, the contribution of Malika was outstanding in community mobilization and women's participation. Nijjar was pro-active in the promotion of lift irrigation schemes and Satya in the plantation and the introduction of soil-water conservation models. Madhu was very involved in the quality maintenance and the organization of plantations as well as in spearheading the post-cocoon processing and the strengthening of women Self Help Groups (SHGs). Manish and Narendra were very effective in providing supportive supervision as well as in developing the systems of monitoring and control for streamlining the project activities. The paraprofessionals and the support

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staff, especially Hazarijee, Prabhakar, Avadhesh, Arun, Richard, Nalini, Latif and so many others also deserve mention for their unconditional support and commitment.

Besides working hard in the field, they were helpful in documenting the progress, listing the constraints and also making an analysis of facts, so as to discuss and arrive at a further course of action. This provided progressive directions and approaches to the project. They were effective in putting the systems in place and working on them. Their hard work and dedication also provided motivation for para-professionals and volunteers working in the project villages. By 1988, our work spread to a number of villages in three districts, namely, Banka, Godda and Dumka.

In due course, inter-cropping, dry-land farming with soil and moisture conservation, community owned small lift-irrigation schemes and organization of SHGs of women also became a part of our activities. We then realized that the efforts and achievements of the project were no more than islands in isolation. If we wished to reach and benefit the community on a large scale, we needed to make use of government schemes and partner with other like-minded NGOs. So, we started working with a few select NGOs in Deoghar, Dumka and Godda districts on the theme of *tasar* and for the development of uncultivated land.

At the same time, we started participating in poverty alleviation forums of the District Rural Development Agency (DRDA) in the districts of Dumka, Banka and Godda. This helped us to mobilize financial support from DRDA for the installation of lift-irrigation schemes and also to raise plantations. The offices at Saraiyahat (Dumka) and Bounsi (Banka) were also established to facilitate intense liaison with community members and district officials.

Meanwhile, we discovered that *tasar* rearing in the traditional way was in practice on a sizeable scale in the forest batches and paddy bunds in a number of stretches (pockets) at Sunderpahari (Godda), Kothidinda (Banka) and Bhaljor (Dumka). However, production was constrained due to the paucity of quality disease-free layings (DFLs) to rear *tasar* worms. Support was needed to market the cocoon harvest for a fair return. In order, therefore, to support traditional rearers and intensify project activities, we started a captive grainage to produce and supply DFLs.

We realized that the microscopic examination of a smear taken from the mother moths was a scientific necessity to ensure the production of quality seeds in the form of DFLs. *Tasar* farmers either keep the cocoons at their household for production of laying (not necessarily diseasefree) or procure them from state farms, which were scanty. State farms maintain centralized grainage to preserve cocoons and produce DFLs.

We, on the contrary, decided to promote the concept of decentralized grainages in the rearing dens. They were helped by the microscopic examination of mother moths. Semi-literate village youths with entrepreneurial ability were trained for this. They moved about carrying their microscopes on their bicycles to examine the moths, in return for a small share in the harvest of cocoons, as their charges. Besides the examination of the mother moths for disease freeness, they also provided guidance on the rearing of worms along scientific lines and for

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pooling the harvest of cocoons for better financial returns.

The *tasar* industry has two distinct sub-sectors. One is plantation and rearing, which is land-based and is an occupation in agro-forestry. The other is the reeling and spinning of yarn from the cocoons and the preparation of fabric, which is artisanal in nature and is a part of the handloom and powerloom industry. At the close of the grainage every season, we had a sizeable quantity of pierced cocoons. This provided an opportunity for skill development of SHG women in post-cocoon processing. Consequent to this, the women were provided support in the form of appliances and business acumen. In the first step, only *ghicha* and spun yarn were produced. Later, this was diversified to the production of reeled yarn, which soon opened up entry into fabric-making.

The plantations needed to be protected, to ensure their survival and fitness for rearing. According to the project proposal, there was a provision for trenchfencing. However, this was not found to be so effective. Hence, social fencing was emphasized. Every family owning a part of the plantation was made responsible for protecting the plantation from animal grazing, by rotation. The money available for trench fencing was distributed proportionately among the farmers in the ratio of the surviving plants. Timely cultural operation also contributed to the growth and protection of



A farmer transfers worms onto a fresh plant ensuring constant supply of feed to worms, Dumka district, Jharkhand

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the plantation sites, which were numbered and the progress of which was monitored on a regular basis.

Earlier, cocoons were sold by the individual farmers to private traders, who used to move into the rearers' house to procure cocoons, most of the time on unfair terms of trade. We arranged for the pooling of cocoons through master rearers and grainage entrepreneurs. Then, we negotiated with the Raw Material Bank (RMB) of the Central Silk Board (CSB) for the sale of cocoons. RMB is the designated government agency to declare the minimum support price for the purchase of cocoons. It also buys cocoons based on the silk content and not arbitrarily on the basis of visual considerations and negotiation. This resulted in a higher return of cocoon produce to the rearers.

We encountered a challenging period when we approached CSB for financial support to up-scale project activities. The Member Secretary of CSB indicated that the proposal would be examined for financial projections and, thereafter, sanction would be given. Our financial propositions were much lower than those prescribed in the Package of Practices by the CTR&TI. However, when the proposal was sent to the then Director of CTR&TI, we received untoward comments on our model of operation and projections. Although shocked by the comments, we stood firm on our models of plantation, soilmoisture conservation and DFL production.

We requested CSB to send a team of experts to examine and testify the facts by observing our project fields. Accordingly, a team of experts visited the site and were impressed with our achievements and contributions to the project. They praised our efforts and said that it was an eye-opener for them. Later, the project was evaluated by a joint team of the Economic Development Associates (EDA), New Delhi, and CTR&TI. Based on the findings of the evaluation team, a memorandum of understanding (MOU) came into force for developing *tasar* in Jharkhand by CSB. The rest, as they say, is history.

In my understanding, the project was successful on the following parameters.

• Development of *kisan* nurseries as a village based social enterprise

- Promotion of *tasar* plantation on privately owned uncultivable land
- Introduction of decentralized *tasar* grainages as a microenterprise
- Demystification of research findings for easy adoption
- Nurturing a relationship with the development donors and the government agencies

I am personally grateful to PRADAN for providing me the opportunity to serve the community through promoting an additional source of income generation in favour of otherwise economically disadvantaged households. Needless to mention, I feel happy when I find that the project has met its objectives of community development and environmental amelioration over the last 30 years. I remember that the presence of PRADAN was categorically emphasized as one of the most important assets when we undertook a participatory exercise of drawing up a plan of development in a village near Bhaljore.

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Different Stages in Tasar Rearing



Women tasar rearers making garlands of seed cocoons to be hung in the grainage, Suakati district, Odisha







district Banka, Bihar

Coupling of moths for fertilization of eggs.



Examining samples of mother moths to identify disease



A Tasar rearer dusts mixture of lime and bleaching powder on the worms at the time of transfer to fresh plants. Village Salaiyabaran , Banka district, Bihar.



SHG members produce reeled yarn on a machine from the whole cocoons in Bhusitari Reeling Center, Banka district, Bihar.



SHG member spins yarn from the pierced cocoons on the spinning machine in village Rajdah, Banka district, Bihar



Trainees learn to maintain the temperature and humidity inside grainage in Lilabaran grainage in Banka district, Bihar.