SATYABRATA ACHARYYA

TASAR SILKWORM REARING IN RAJDAH

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Rearing *tasar* worms is a precarious and fragile practice that the Santhal tribals and other villagers engage in, both because this has been their traditional occupation and because a good harvest provides them a much-needed economic support

Introduction

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After spending about six months with a project, I realized that I seriously lacked a good understanding of the traditional tasar rearing practices. This ignorance became more pronounced when one of my colleagues Uday (Kagal) left the project; he was the only person, other than our team leader (Mithilesh Jha), who knew the subject well.

My six-month exposure (I joined in April 1990) in the development sector had altered my earlier belief that technology was the only thing that one should grasp in order to make a contribution to the process of development. Instead, I started seeing technology and its appropriateness in the backdrop of the socio-economic context of an area. Perhaps, this should be the approach to enhance the usefulness of technology and give a real impetus to development. Thus, I decided to learn the biological aspects of traditional rearing practices as well as to make a critical study of the socio-economic factors associated with it.

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I went to Rajdah, a village in the Bounsi block of Bhagalpur district, with one our field staff members, Arun Mandal. We stayed for two-and-a-half months in the house of Lakshmi Ray, a modest farmer of the village. Rajdah village comprised 49 families, all *tasar* rearers, of which 25 belonged to the Santhal community. The rest were a mix of the Pandit, Bhat, Gandharv and Yadav castes. As far as accessibility is concerned, Rajdah is quite remote, at a distance of 6 km from the Dumka-Bhagalpur road. I chose this village for my learning because it was part of the largest *tasar* rearing clusters in Bounsi block.

BIOLOGY OF TASAR AND THE MAIN VARIETIES

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Biologically, the *tasar* varieties grown in the area, Sarihan and Dhaba, are the 'tri-voltine' type (completing three life cycles in a year), in which the moth emerges fresh from the cocoons in the month of June, after a period of dormancy from January to June (six months). The emergence of the moth coincides with the onset of the monsoon and the sprouting of fresh leaves on host plants such as the Terminalia Tomentosa.

The male and female moths mate after emergence and their coupling lasts for six to ten hours, after which the females are free and start to lay eggs. The eggs hatch within eight to nine days and the larva start feeding on young leaves. Being a tri-voltine species, the insect is reared in the months of June-July (first crop), August-September (second crop) and October-December (third crop). The months from January to June are the diapausing period, when the insect remains inside the cocoon in its pupal form. The larval period lasts for 35 days in the first crop, 45 days in the second crop and 60-90 days in the third crop, depending upon the length of the day and the temperature. The larva undergoes four moultings (shedding of the body skin) before it becomes mature enough to form the cocoon, which takes about three to five days to spin.

TASAR CROP AND HOST TREE AVAILABILITY

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The third crop (October to December) is considered a commercial crop owing to the higher silk content in the cocoons, and, therefore, the cocoons fetch a higher price. Most farmers in the Rajdah area grow the commercial crop. The *tasar* silkworm is reared in the nearby natural forest of Asan (Terminalia Tomentosa), under the Banka Protected Forest Division. The natural forest covers an area of 8 sq km, with approximately six lakh *tasar* host plants (source: local villagers).

The non-rearers in the villages surrounding the forest have, in fact, thoroughly destroyed all plants species other than the Asan. They have not touched the Asan because these are protected by the rearers for the *tasar* silkworm. Each rearer has his own share of plants; the number ranges between 250 and 1600. The rearers, in turn, pay a token amount of Rs 10 to the forest guard, often without any document or receipt. Roughly, around 400 families, belonging to 14 villages surrounding the forest, rear *tasar* silkworms. The plants were sparsely located and often the spaces in between were sown with paddy or *arhar*.

SEED COCOON COLLECTION PROCESS

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Conventionally, the rearers of the area gather seed cocoons (from which moths emerge to couple and lay eggs that are then used

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as seeds for the *tasar* crop) from as far as Giridih (about 200 km away). This activity, usually, starts in the months of September and October. The seed cocoons are then sold in a *haat* (market) of a village named Burheit, Giridih district. The seed cocoons are brought to the *haat* from the surrounding villages. Many of the rearers purchase seed cocoons directly from the haat whereas the more experienced ones visit the rearing areas (the forests) in the villages, critically examine the mature larva, which are about to form cocoons and then select the cocoons made by healthy larva for seed purposes. However, this takes time, and one has to spend eight to ten days in the rearing areas. The person carries his ration from his house and cooks his own food during his visit to the forest area. Prospective customers are certainly treated more respectfully in the villages, and seed sellers even accommodate them in their houses.

The act of seed cocoon gathering requires money. That year, the Sarihan (native variety) seed cocoons were being sold at the rate of Rs 20 per *pon* (80 cocoons, means 25 paise per cocoon) and the price of the same number of Dhaba (considered a superior race) cocoons was Rs 25. In addition to this, the cost of travel to and from the village, as well as the cost of food for eight to ten days had to be considered.

Usually, the net expenses for the whole activity vary from Rs 180 to Rs 450, depending upon the quantity of seeds purchased and the number of days spent in the rearing areas. In the years of scarcity, however, the price shoots up beyond the reach of many rearers and they finally return to their villages empty handed, after spending a week or so, trying to coax and cajole the seed sellers.

The question is how do they bear such huge expenses? Rearers, usually, are poor farmers; by the time the act of seed gathering starts, a majority of them have completely exhausted their money because they invest their last rupee of their annual savings in cultivating paddy in the *kharif* season.

In the 1990s, the moneylender entered the scene, with all his insistent and persistent cajolery, very determined to extend financial help. Many of the poor rearers had no other way except to borrow money from these moneylender to meet their needs. I came across a sizeable number of rearers, who were unwilling to take loans from the moneylenders but had got trapped by them anyway, and were compelled to borrow money.

As time rolled by, the situation changed and many rearers flatly refused to take money from the moneylenders, instead taking loans from their wealthier neighbours or relatives on comparatively softer terms. Nevertheless, the role of the moneylender is indispensable in this area. He is the person, who provides money on every occasion, whether it is a daughter's marriage or a child's birth, whether it is during the cropping season or during the distress of crop failure, whether it is for the purchase of draught animals or for gathering seeds for *tasar*.

Whatever the circumstances, the moneylender remains indifferent, firmly sticking to his terms and conditions and charging 10 to 15 per cent interest a month. Quite a few of them, however, are reasonably honest, enterprising, well-trusted and respected in the villages. Recently, I heard of a moneylender, who often helps his poor clients by waiving the interest on their loans.

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INDIGENOUS METHOD OF GATHERING *TASAR* EGGS FROM SEED COCOONS

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After buying the seed cocoons, the rearer returns to his village quickly and organizes the grainage room (room for egg gathering) inside his hut. The room is cleaned, its roof repaired and rat holes plugged. The refurbishing needs to be finished in a couple of days. The rearer then ties bunches of cocoons (each bunch comprising three to five cocoons) on thin threads. These bunches are then placed one above the other, with 15 to 25 of them tied to one thread. The whole arrangement is termed locally as a *mala* (a garland). Several *malas* are tied to horizontal bamboo poles across the roof and allowed to hang vertically.

Within eight to ten days, the moths start to emerge from the cocoons. During that period, the *malas* are taken outside in the night and kept inside the room in the day. At night, the male and female moths couple and their sexual act usually continues until the next afternoon. Very often, the male moths from the natural forests come and couple with their female counterparts on the *malas*, sometimes from as far away as 5 km. This is precisely how the rearers ensure high coupling rates among the moths. During the afternoon hours, the moths are decoupled manually.

There exists a crude method of testing for disease. Normally, after decoupling, the female moth urinates and the yellow colour of the urine means that the moth is free from disease, whereas red-coloured urine is believed to be due to the presence of disease inside the moth. The method may or may not have any scientific justification. The other fact is that the colour of the urine also varies with the variety.

Of course, many rearers don't perform any test; instead, they actually abstain from doing so because the detection of the disease results in the rejection of the moths. This often takes out a sizeable number of moths and causes considerable reduction in seed stocks, which the poor rearers are unable to afford. The female moths that remain free from sexual inception after a day are locally called *baasi* (unfresh). Their wings are usually affixed with thread (so that they cannot fly) and the moths are placed on a plant nearby, to try for a day or two for successful coupling. The unsuccessful female moths are discarded afterwards.

The most disturbing agents for the indigenous grainages are, perhaps, rats and bats. Rats usually come down from the thatched roofs along the horizontal bamboo poles (from which the *malas* are hung) and pierce the cocoons to eat the dormant insect inside. The rearers are constantly on guard about rats and try to prevent them from climbing down the poles by fixing a small earthen plate at the top of the *mala*, which acts as a barrier. Bats are active in the night and eat newly emerged moths or even devour the intact cocoons. Often, a group of rearers take turns to guard the cocoons against bats through the night. Bat attacks can be predicted by observing the air movement. These predictions are often quite effective in checking the menace.

Inseminated female moths, after decoupling, are placed in closed chambers, locally termed as *khonjas*, made up of non-host succulent leaves, and allowed to lay eggs. The *khonjas* are tied to a young twig of the host plant.

There are some interesting popular beliefs associated with the grainage activity. *Tasar* is considered to be a crop of Lord Shiva; hence rearers, before starting the grainage activity, usually worship the Lord for a

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good crop, and for protection against the theft of seed cocoons. There are some restrictions that people follow. The rearers do not eat fried food. Also, young women are not allowed to enter the room or even the rearing fields during their menstrual periods.

Incidentally, I met a Santhal rearer, who was extremely unhappy because the moths did not emerge in sufficient numbers from his lot of seed cocoons at home; he bitterly accused his 'blockhead' wife because she had fried food at home despite his repeatedly expressed disapproval. This superstition could have a valid scientific explanation: the huts are not spacious or well-aired; often, the kitchen and the room where the seed cocoons are hung are adjacent to each other; the acrid smoke being emitted from the frying pan will, in all probability, have a detrimental effect on the dormant insect inside the pupa.

The grainage activity usually continues for as long as a month. Initially, the rearers are very careful about each and every detail; later, they become a little lax in their actions.

Usually, the rearers open the *khonja* after eight days to throw out the female moth, which would have died and decomposed in the process; immediately after hatching, the young larvae crawl over the decomposed female moth. Quite possibly, the larva becomes diseased or contaminated from the decaying carcass of their mother. The smell of the decomposing mass also attracts swarms of red ants, which subsequently kill the young larva.

I was curious to see the process of egg gathering in the *khonja* because crop loss starts right at that point...either the larvae get infected or they are attacked by the predators. I started asking the rearers why they keep the moths in closed chambers for eight days. Many of them explained that the practice is a method of getting the maximum number of eggs because a female moth continues to lay eggs until her death (its life span being six to eight days); yet, sometimes, it fails to live beyond three days, causing all these problems. Some of the rearers said that they saw their fathers and grandfathers opening the *khonja* after eight days, hence they continue to follow the same practice.

In order to check red ants from coming up, the rearers usually, girdle the base of the plant with the sticky latex of the Banyan tree. Whatever might be the reasons for them following this age-old practice, I thought it was more related to reluctance and the lack of knowledge about the egg-laying behaviour because a moth lays 90 per cent of the eggs within 72 hours, and the eggs laid afterwards 72 hours are usually infertile. The number of eggs that a moth lays varies widely, usually between 10 and 250. Some of the female moths are totally sterile and produce no eggs, even after successful coupling.

EGG MOUNTING AND SILKWORM REARING

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After opening the *khonja*, a young twig is bent and inserted into it, so that the young larvae hatching out of the eggs get attached to it, feed and at the same time crawl out of the closed space and proceed to the other branches. Normally, newly-hatched larvae prefer young and tender leaves. As they mature, they start feeding on coarse older leaves. As a young larva proceeds from the tip to the base of the branches, it leaves behind the skeleton of the foliage along the way.

The rearers are usually more attentive and cautious during events such as egg mounting and the harvesting of cocoons.

Very often, small children, even those who can barely walk, are sent to the rearing fields. They protect the worms from the birds (mainly crows), transferring the worms from the exhausted host to a fresh plant, and collecting the fallen worms from the ground and mounting them on twigs.

The mounting continues from the beginning of October until the end of the month. During this period, the temperature in this area remains warm and the presence of a large number of pest predators are a threat. There are also chances of occasional showers or rainstorms, which pose the threat of scattering the young larvae to the ground.

To protect the crop from all these, the rearers come to their fields early in the morning and remain vigilant throughout the day, sometimes collecting the fallen worms from the ground and mounting them again on the host tree. Every rearer carries bamboo sticks dipped in glue, locally called *lattha*, to trap wasps and Sycanus bugs, the two most dreaded predators. Wasps pick up the young larvae while the bugs pierce the body of the tender worm with their sharp long proboscis to suck out the body fluids. In both cases, the worm dies. The *lattha* is prepared by boiling latex from Madhuca or Banyan trees, with mustard oil.

As the weather cools in the beginning of November and the worms enter their third instar stage in two weeks, the worries of the rearers ease up (pest-predator attacks are reduced in the winter). The rearers, then, spend a major part of their time and energy in their fields, where the paddy crop matures at this time. The harvesting and post-harvesting season of paddy continues for about a month.

During this period, a rearer hardly finds the time or seldom shows interest in visiting his rearing fields. Usually, the elderly members of the family or the idle youth remain there. Very often, small children, even those who can barely walk, are sent to the rearing fields. They protect the worms from the birds (mainly crows), transferring the worms from the exhausted host to a fresh plant, and collecting the fallen worms from the ground and mounting them on twigs. I was amazed to see how efficiently some of the small kids handled these odd jobs and how they drove away the birds.

One very interesting object attracted my attention. It was a two-metre long string made up of sun hemp fibres, meticulously intermingled to increase its elasticity. In the middle of the string, the fibres were spread into a flat holder to hold a stone. Before operating the device, two ends of the string are gathered and a stone is placed in the holder. Then the strings along with the stone are swung in circular motion with a whizzing sound, and the string is extended to its maximum elastic limit. One end of the string is suddenly set free and the stone is released at a fearful speed. Using this device, even a small child can throw a stone beyond 75 m. The whizzing sound made by the stone alerts the birds and they do not dare to come within 100 m of the rearing area, which is the maximum possible distance the stone reaches.

The most tedious task is, of course, transferring the worms from one plant to the other. As the plants become denuded of their leaves, the worms, for want of food, crawl down and wander on the ground. Also, because the leaves are now so sparse after the larval feeding, the worms become exposed and conspicuous and their dazzling appearance attracts predators. Thus, the worm requires a fresh plant both for food and a place to hide.

As the plants are sparsely located, it obviously requires human intervention in order to mount the worms on to fresh plants. When transferring them from one plant to the other, the rearers gather all the worms of a plant on a few twigs, and then cut the twigs along with the worms so as

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to place them on a fresh plant. Often, they use ladders to get access to the higher branches. The entire act requires skill and physical capacity and children often cannot do it. It is not an uncommon sight to find frail little kids standing helplessly after an abortive effort to transfer the entire lot of worms from four or five exhausted trees. A large number of worms come down and crawl over the ground for want of food. This is problematic even for the older people.

Consequently, the process of transferring worms takes a heavy toll and is one of the prime reasons for a low yield. In many cases, the rearer lacks interest in minimizing the loss. Once he mounts the eggs, he seems to consider that his duty is over for the next one-and-a-half months, until the time of harvest approaches.

Of course, there are some rearers who are not reluctant but they are helpless. Being the only young male members of their families, they have to look after agriculture and *tasar* rearing almost single-handedly. For obvious economic reasons, the paddy harvest draws much of their attention. In fact, there is some certainty in the paddy crop and they can expect an assured harvest in normal years whereas the prevailing practice of *tasar* rearing appears to be fragile with no assurance of a harvest. I rarely met a person who reared *tasar* worms with any confidence.

The single most important factor responsible for this uncertainty and dubiousness is perhaps disease. Diseases can be caused by many kinds of pathogens, by protozoa, by bacteria or even by viruses. The most serious of all is probably the protozoan kind (Nosema sp.) that is responsible for a disease known as the Pebrine. Occasionally, bacteria and viruses also become equally dreadful. All the pathogens are primarily transmitted through eggs and are expressed in the off-springs.

The ways of secondary dissemination is through body contact, feeding of leaves previously fed on by a diseased worm, or occasionally through air and rain splashes. In such cases, the diseases may not be expressed in the same generation. The worm may appear quite healthy, although it carries the deadly germ inside its system. Thus, even experienced rearers, who have chosen the seed cocoons from apparently healthy worms are very often overwhelmed by the heavy outbreak of disease in the rearing fields. The events appear so mysterious to them that they blame it all on their fate.

Whatever the symptoms of the disease, the obvious consequences are as follows: a sudden decline in health and vigour of the worms, a pale appearance, dropping of worms to the ground, and death. Diseases get often expressed in the later stages of growth, which is even more painful because the rearer (may be an old man, a kid or a youth) has already spent a couple of months, protecting his crop from a number of hostile forces.

The rearers sometimes start dreaming of a good harvest, often considering a bright green vigorous worm to be equivalent to 50 paise (athanni—the price of a large cocoon) and subsequently calculating the expected yield. Suddenly, the dream is shattered. The worm turns pale, its body becoming flaccid and flimsy, it loses its hold on the plant and falls down. As disease breaks out, the falling of worms appears ceaseless. Initially, the rearers count the number of deaths but give up after a while.

Often, the wheel of fortune gives a favourable turn as well, and the rearer comes up with a bulky harvest, sometimes yielding ten or fifteen times more than the investment. This is a very powerful, motivating force for a rearer to take up *tasar* rearing again and again, despite repeated disasters.

The scene abruptly changes in a week or two. Often, heavy outbreaks of disease occur in the early stages and the rearers find it extremely difficult to recover even their financial investments. I remember a rearer telling me that he had not only given his entire harvest to the moneylender but was also compelled to hand over 10 kg of *arhar* from his field in order to compensate the deficit of the loan. What a pity!

Certainly, the situation is not always what I have described. Often, the wheel of fortune gives a favourable turn as well, and the rearer comes up with a bulky harvest, sometimes yielding ten or fifteen times more than the investment. This is a very powerful, motivating force for a rearer to take up *tasar* rearing again and again, despite repeated disasters.

When the mature worms start forming their cocoons, during the second half of December, the young rearers become quite enthusiastic. The paddy harvest is over, and the rearers now have enough time to pay attention to their rearing fields. Also, when the cloud of uncertainty dissipates in the face of a visible harvest, the enthusiasm of the rearers is obviously associated with the prospect of a good crop. For others, whose crops have suffered an early setback due to disease, they are now more concerned with the harvest, in order to pay off their loans.

The rearers usually arrive in the rearing fields early in the morning (at around 5 a.m. in winter), remain watchful through the day and drive away birds that are very keen to eat the newly formed cocoons. Often, rats climb up the branches and pierce the cocoons. To make the crop management intense and effective, the rearers gather all the worms of their fields to a few adjacent plants and spend days sitting underneath. The larval feeding ends before the cocooning.

Before spinning the cocoons, the worms evacuate their gut by passing a green semi-solid mass of last excreta, followed by a colourless slimy substance. They then begin to explore, looking for a suitable place for cocooning, after resting for a while (it could be ten minutes or one-and-a-half hours). A twig as thick as a pencil with a cluster of three or four leaves is the best place for cocooning. The worm settles down there and starts secreting silk threads around the twig to girdle it and then gradually pulls the leaves closer to the twig to form a confined space. Within this space, initially the worm makes a silk hammock that acts as a scaffold/frame of the cocoon; it then enters the hammock and starts spinning around its body to form a cocoon.

COCOON HARVESTING

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As more worms enter pupation, the rearers begin thinking of the harvest. Before the harvest starts, the rearers perform a ritual, worshipping Lord Shiva or the Goddess of the forest or some ghosts (for not creating disturbance) with some offerings to express their gratitude. Even those, most stricken by bad luck, offer things such as puffed rice, sweets and flowers. And others, the more fortunate, offer a pair of fowls.

The harvesting is done by hand. The branches are pruned almost to their bases and the cocoons are separated from the twig by using a sharp sickle. The branches are then gathered and brought to the house. These are later used as firewood for parboiling (*ushna*) freshly harvested paddy crop. On an average, a rearer collects nearly seven quintals of firewood through this process.

Meanwhile, the stage is all set for the traders to enter. The moneylender often turns into a trader. He arrives at the harvesting site to claim his dues as well as to purchase the excess.

The net harvest of the cocoons is counted. The smallest unit of count is *gonda* (four); 20 *gondas* make a *pon* (80); and 16 *pons* make a *kahan* or *khari* (1,280), the ultimate unit. Three to five *pons* of cocoons are harvested in a day, and the harvesting season continues for up to a month, depending upon the yield.

COCOON MARKETING

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Meanwhile, the stage is all set for the traders to enter. The moneylender often turns into a trader. He arrives at the harvesting site to claim his dues as well as to purchase the excess. I saw a few traders taking rounds in the rearing areas, meeting the rearers every day, and purchasing their daily harvests.

At first, the cocoons are graded on the basis of their shape, size, weight and toughness. Then the trader fixes the prices for the different grades. The general tendency of the traders is to send even the good quality cocoons to the lower grades to offer a lower price.

That year, when I was watching the process, the prices of Sarihan varied between Rs 15 to Rs 20 per *pon* (around 25 paise per cocoon) for all grades, whereas for Dhaba Tri-voltine, it was between Rs 20 to Rs 25 per *pon* (25 to 30 paise per cocoon).

The offer price was about 50 per cent to 60 per cent less than the prices offered at the terminal markets after one or two months. However, the poor rearers would not be able to hold on to their harvest for one or two months, to avoid the period of glut. The main problem is storage. Technically, storage needs a clean, well-aerated and spacious room. Arrangements are also needed to prevent the entry of light, since light facilitates the early emergence of moths by piercing the cocoons. The value of pierced cocoons is far less than that of intact cocoons.

The stifling (the act of killing the dormant insect inside the cocoons by exposing cocoons under the sun for two weeks continuously) is an easy way of checking the emergence of the moth from the cocoon, but most of the rearers consider stifling to be a sin.

Rats are very destructive; they pierce the cocoons and eat the dormant insect inside. This also drastically reduces the value of the harvest.

Yet another important reason for selling their harvest early is possibly economic; Bandhana, the main festival of the Santhals, begins within a couple of weeks of the harvest; from the 7th of January to the 14th of January. The Santhals are at that time desperately in need of some ready cash to perform their religious rituals, to buy various articles as offerings for their deities, to entertain their guests and relatives with good food and liquor (nowadays, very often country-made liquor that is sold in bottles is offered), to buy clothes for the whole family, to repair their huts, etc. The only option left for them, therefore, to meet their urgent need of money, is to sell the *tasar*, and no one really drives a hard bargain with the trader; everything is done in a hurry.

CONCLUSION

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Initially, in my two-and-a-half month stay in Rajdah, I used to cover a rather large area of natural forest (rearing field), meeting rearers of seven villages, of a total of 14. I used to walk 12 km a day and meet 20 to 25 rearers daily. I wanted to understand the society, their

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beliefs, their perceptions and experiences with respect to the *tasar* practice. I also tried to learn why they were practising it and how they acquired silkworm-rearing skills. Along with this, it also became important to get to know their economic situation.

I chatted with them casually, deliberately maintaining an informal approach, and was in absolutely no hurry, often sharing cigarettes or *chutti* in the cold winter mornings and trying my level best to reach closer to their hearts. Most of the tribal rearers knew Hindi and the local dialect. Arun *ji* (who was with me for the initial two weeks in Rajdah) helped me understand the conversations in Santhali. From my interactions with the people, I gathered information that helped me understand the socio-economic and cultural conditions of the rearers as well as their inter-linkages with the *tasar* practice better.

Most of the rearers are Santhals; some are Ghatwars, Yadavs, Bhumihars and Harijans. All of them practice agriculture as their primary occupation. The majority of them are poor farmers, with arable landholdings, varying from a few *kathas* to four *bighas*. The poorer ones also do some share-cropping on the lands of the local zamindars. The agriculture that they practice here is primarily mono-cropping, with paddy as the sole crop, though a few of the farmers grow the low yielding autumn pulse *kurthi* on the up-lands or some winter vegetables in their small kitchen yards.

The land topography, in general, is highly undulating and the soil type varies from sandy loam in the lowlands to the coarse gravelly type in the uplands. Agriculture is entirely rain-fed and most of what is cultivated is native, with the average standard yield being only eight *maunds* (320 kg) per *bigha* (about 1.6 tonnes per ha). The output from agriculture barely feeds their families for two quarters of a year.

Hence, all of them have other subsidiary or seasonal occupations such as stone-crushing, rope-making, tiles or *khapra* manufacturing and running indigenous distilleries.

The *tasar* practice, likewise, is treated as a subsidiary occupation by which rearers can earn a good amount of money, provided everything remains favourable. A good harvest sometimes earns them twice the earning from agriculture. For the Santhals, who are the poorer people of the area, a good harvest of *tasar* means a bonanza during the Bandhana festival.

Besides economic reasons, sometimes many rearers, I believe were continuing the practice out of a feeling of obligation. They had a sizeable number of plants, which were being protected and shaped since the time of their fathers or grandfathers; the skill was inherited from their ancestors and was a part of their tradition. They cherished a long history with the practice and considered the crop to be a blessing of Lord Shiva; they, therefore, felt bound to continue with it. It hardly mattered to them whether it yielded a boom or a miserable collapse.

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