

# MOTKA MURMU: The Pathfinder



Inspiring the villagers of Ghailapathar with his successful engagement in *tasar* silkworm cultivation, Motka shows his people the way to self-sufficiency and independence

**P**RADAN'S *TASAR* INTERVENTION has changed the lives of many young people in the tribal areas of Jharkhand and Bihar. It has instilled in them an entrepreneurial attitude and they are able to take up many other activities besides *tasar* with eagerness and dedication. They have not only made their own lives better but have also contributed to the socio-economic improvement of their society. One such young man is Motka Murmu of Ghailapathar village in Shikaripara block of Dumka district, Jharkhand.

Motka Murmu, a Santhal, never imagined how his life was going to change when he attended a community meeting organized by PRADAN in Dharampur village, Shikaripara block, in 2002. He was a 17-year-old boy then. The meeting was organized to select grainage entrepreneurs, who would use scientific methods to 'rear *tasar* eggs'.

Motka, the elder son of Jhumri Baskey and Lubin Murmu, is one of eight siblings (four brothers and four sisters). His childhood was spent in deprivation and impoverishment, a situation his family had endured for generations. His father was forced to

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work as a domestic help ever since he was a child because he had lost his father (Motka's grandfather). He lived in a teacher's house near his ancestral village, doing domestic work till he got married at the age of 27, which was quite late compared to his contemporaries. After his marriage, Motka's father returned to Ghailapathar; his elder brother left their one-room parental house and went to stay with his in-laws as *ghar-jamai*. To begin with Motka's parents did not have their own bullocks to cultivate their field and so ploughed others' fields and, in lieu of their services, borrowed bullocks to plough their own field. All the family members stayed in that single room.

The total landholding of the family was three *bighas*, of which only eight *katthas* was paddy field and the rest were uplands. The paddy produced from their marginal arable land supplied food for only two to three months for the family. For rest of the year, they used the maize they grew on their uplands to eat one meal a day. Motka's father used to migrate to Murshidabad district in West Bengal four to five times a year for a span of 10-15 days each, to work as agricultural labour. He brought back some cash and the rice he saved from whatever he was served by the

landlords during his stay. In the agricultural season, both his mother and father used to work as labour in others' fields in their own village as well as in nearby villages. Motka and his younger brother could not get a good education due to the fragile economic condition of the family. His younger brother left school after the 7th and started work as a stone crusher; Motka could not complete 10th standard because he was not able to submit his examination fee in time.

During 1999–2000, PRADAN initiated work in Shikaripara block with the formation of an SHG. Motka's mother joined the SHG promoted by PRADAN in 2001 and started saving five rupees each month. For her, the SHG was a place from where she could borrow money in times of need without mortgaging anything. Motka, being a little educated (by that time he had appeared for his 10th exam), helped PRADAN professionals organize the village women for the weekly SHG meetings and, when the book-keeper was absent, he kept a record of the weekly transactions in the SHG.

PRADAN, in its attempt to eliminate poverty and improve the lives of the families, explored other livelihood options for the

people in the area. It explored the potential of *tasar* host plants, that is, Asan and Arjuna plants, in the forests near the villages. The idea of intervention in *tasar* sericulture with improved scientific practices was being considered as an option for enhancing the income level of families.

Since 1990, Motka's family had been rearing the traditional variety of *tasar* "sarihan" in the adjoining village forest and had started getting an additional income. They collected seed cocoons, or worms, from nearby village forests and the forests of nearby blocks such as Masaliya, Nalha and Kundahit in the month of May; for this Motka's father roamed the forests for 10 to 15 days. Being the elder son of the family, Motka also was engaged in *tasar* rearing with his father. Due to the rudimentary rearing practices, however, production was not consistent.

Motka's family and the other rearers of his village had once been approached by the state sericulture department and were given male and female moths for the production of layings for the first crop in July. However, that year too, production was not better. In 2001, when PRADAN imparted training on the best

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practices of *tasar* in his village, the people were skeptical and did not believe that the new process would help them in any way. By that time, PRADAN had demonstrated silkworm rearing in a nearby village with a few families taking quality DFLs from the Basic Seed Multiplication and Training Centers (BSM&TCs), which had produced a good number of cocoons @ 40–50 cocoons per DFL. The families of Ghailapathar, therefore, were interested more in the DFLs that PRADAN was supplying than in the new technologies.

PRADAN started to venture into in-situ DFL production by initiating grainage (preservation of cocoons for producing quality *tasar* seed in a scientific way) with the help of village youth in a United Nations Development Programme (UNDP) project. Promising youth from *tasar* rearing villages were identified in community meetings so that they could be trained for preparing *tasar* silkworm seeds in their village as an enterprise. In 2002, in a meeting held in Dharampur with rearers from Ghailapathar, Banskhendri and Dharampur villages, Motka and Keshab were nominated from Ghailapathar to undergo the training so that they could conduct grainage operations in their village.

In July–August 2002, Motka and Keshab went with the other selected persons of Dumka district to the BSM&TC Lakha and BSM&TC Boerdadar of the then Madhya Pradesh for a ten-day training on grainage entrepreneurship. They were trained in the different diseases in *tasar* silkworms, the technologies of *tasar* silkworm DFL production and improved practices in *tasar* rearing.

The boys started the grainage jointly that year to minimize the risk and to use each other's learning and knowledge. They were each supplied with two microscopes, one table, one wooden egg-incubation cabinet, 10 sets of mortar-pestle, two stools, three buckets (15 litres), three basins (20 litres), three basins (5 litres) one drum (70 litres), 3,000 egg laying nylon bags and chemicals such as potassium hydroxide and formalin, as per the UNDP project provisions for operating a grainage.

They arranged one room in an old school building in Ghailapathar after taking permission from the teacher and the villagers for processing seed cocoons. They had no seed cocoons of their own; therefore, they had to buy 12,000 tri-voltine seed cocoons

from Dhaniapahari village in the adjacent Kathikund block where rearers had taken up the seed crop with DFLs arranged by PRADAN. Both the boys were new to the activity; they were not aware of the proper process for transportation of seed cocoons and the losses, if not transported correctly, that could occur to the grainage due to the long distance hauling of seed cocoons. And due to the seed cocoons not being transported correctly, some of the cocoons were damaged. That year, they incurred a loss in the grainage activity and produced only 300 DFLs from 12,000 cocoons. PRADAN, seeing this, provided some relief to the young men by arranging the cost of seed cocoons.

The next year (2003), Motka and Keshab decided to operate two separate grainages. Motka took 600 seed DFLs (arranged by PRADAN), which he distributed among two seed rearers of his village and himself reared 200 DFLs—in all producing 13,000 seed cocoons. He did not have any separate room for processing seed cocoons; he therefore prepared a temporary grainage room in the verandah of his own house covering the side walls with a mosquito net and processed the seed cocoons. To purchase

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the seed cocoons from the seed rearers, he took a loan, arranged by PRADAN, of Rs 6,000 from a micro-credit institution called Basix. However, due to the low production of DFLs, he incurred a loss and had to repay some part of the loan from his earnings from the 200 DFLs commercial silkworm rearing. That year, he prepared a total of 1,200 DFLs, of which he supplied 1,000 to seven other rearers in his village and himself reared 200 DFLs.

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In 2004, PRADAN organized a ten-day refresher training for grainage owners at BSM&TC, Kathikund under the Special Swarna Jayanti Gram Swarozgar Yojana (SGSY) *Tasar* Project. Motka attended the training. Motka realized where he was getting stuck and how he could improve the DFL production. He received a grant from the Special SGSY *Tasar* Project of Rs 22,500 for the construction of a grainage building on his own land in 2004.

He constructed a building 25 ft long and 12 ft wide. He invested Rs 10,000 of his own to purchase country tiles and a wooden frame for the grainage roof because the grant was insufficient. He arranged the money by selling his only bullock (Two years earlier, his uncle had given them a bullock and four cows to look after, on the condition that they would retain the first calf of each cow and all other cattle would be returned to the uncle).

It was only in the third year of his grainage that Motka realized a good amount of profit. His family produced 18,200 seed cocoons from 200 seed DFLs in the first crop and he did not have to take the cocoons of other seed rearers. Motka used the newly constructed building and produced 3,000 DFLs from 18,000 cocoons. Rearers from the village and other villages like Dharampur and Chatupara also took Motka's DFLs.

In 2004, the yield from the DFLs supplied from his grainage was very good and the rearers were satisfied with the performance. His reputation as a good grainage owner became established. He did not just limit himself to DFL production and supply; instead, he matured as an entrepreneur and extended all possible services

to other rearers, including in their fields. For this, he received help from PRADAN and together they ensured a good harvest of cocoons to the rearers in the area. Motka's helpful nature made him a familiar figure amongst the rearers and he came into contact with more and more rearers, increasing his customer base. Sometimes, when he found the rate offered by the local traders was low as compared to that being offered in other blocks, he along with PRADAN, arranged for traders from nearby blocks of Raneswar and Kathikund to help in the sale of cocoons produced by the rearers and to provide a fair price to the rearers.

Motka has never looked back after this; every year, he preserved the cocoons and tried to strengthen his customer base. The period from 2007 to 2011 has been the most successful in Motka's life because he conducted two cycles of grainage—Bi-Voltine (having two broods of offspring per year) and Tri-Voltine (having three broods of offspring per year)—to meet the DFL requirement of his block and supply DFLs to PRADAN to support other project areas. For this, he reared the seed crops and commercial crops of both the races and that meant that he was effectively conducting

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four cycles of rearing and two cycles of grainage per year. His average earning from the *tasar* activity exceeded Rs 1 lakh per annum in those days. After 2011, however, after the Department of Sericulture (DoS), Jharkhand banned tri-voltine *tasar* rearing in the state, he stopped the tri-voltine grainage and conducted only bi-voltine grainage with increased capacity. On an average, Motka supplied DFLs to 50–60 rearers of his area, his net income reduced from more than Rs 1 lakh to around Rs 50,000 in 2012. He later recouped the loss in income by preserving more bi-voltine cocoons and concentrated on commercial rearing.

Motka's father and mother are involved in silkworm rearing; his younger brother and sisters helped him in grainage operations and in maintaining hygienic conditions. He had taught his younger brother and one sister how to do microscopic examinations and they help Motka in moth examination in the grainage to produce quality seeds. Motka told us that his family works in such a regimented manner during the grainage period that his little daughter also knows what is to be kept where and how sanitation is to be maintained.

From his *tasar* earnings, Motka prepared a five-bigha paddy land near the banks of the stream in his village forest; he now produces sufficient paddy for year-round consumption requirements of his family. He purchased water pump sets worth Rs 12,000 for irrigating the vegetables he grows on their uplands. He now rents out his pump set to other villagers. He constructed additional rooms in his ancestral home for his family. His ancestral house now has nine rooms; in addition, he constructed a separate house near the main road. He saves Rs 10,000 annually in Life Insurance Corporation. His family members no longer migrate to West Bengal for work.

In 2010, Motka purchased a paddy threshing machine worth Rs 1,50,000. Earlier, either his brother or he had to take the paddy at least twice a week to the threshing mill, 4 km away from his house, arranging for a bullock cart, which entailed recurring costs. Moreover, it required at least two persons to be engaged in the activity; there would usually be a queue at the threshing mill, and they had to wait for long hours because of which they could not do anything else. Considering all these, Motka

thought it wiser to invest in a threshing machine, which has made them freer to invest more time in agriculture.

These days, 27 families of his village are involved in *tasar* rearing and do not feel the need to migrate to West Bengal. With the help of PRADAN, he shares the techniques of improved vegetable and paddy cultivation to the villagers; now many families are involved in cultivating a post-*rabi* vegetable crop.

Earlier, the houses in the village were made of mud walls with paddy straw or grass thatching. In the rainy season, rain water would leak into the homes. Owing to the increased income from *tasar* rearing, all the houses in the village now have tiled roofs. Motka is a well-known in his society now for his loyalty and sincerity. His views and opinions are also considered as valuable by the village pradhan in the village meetings.

Motka's dream is to provide a better education to his younger brother and sisters and to the next generation...the education he was denied because of the fragile financial condition of the family. He, therefore, prohibits

**Table: An overview of Motka's journey in *tasar* rearing**

Year	Grain-age Cycle Per Year	No. of Cocoons Preserved Reared	No. of DFLs Produced	No. of Rearers Catered	Net Profit	Rearing Cycle Per Year	Net Profit from Rearing	Total Income from <i>Tasar</i>	Use of the Profit
2001									
2002		12,000	300	3					
2003		13,000	1,200	8					
2004	1	18,000	3,000	24	5,400	2	38,400	43,800	Purchased 2,000 country tiles for roofing of the old house, prepared one <i>bigha</i> land on the acquired plot.
2005	1	17,500	4,591	24	11,864	2	36,600	48,464	Prepared one <i>bigha</i> land on the acquired plot and bought one water pump set.
2006	1	16,000	4,000	17	9,800	2	32,000	41,800	Prepared 1.5 <i>bigha</i> land on the acquired plot, constructed two rooms for the family members.
2007	2	31,500	10,346	60	25,934	4	56,600	82,534	Prepared 1.5 <i>bigha</i> land on the acquired plot and incurred expenses in the marriage of sister, savings in LIC.
2008	2	51,100	14,400	55	35,270	4	52,000	87,270	Constructed an extra room for grainage, savings in LIC.
2009	2	55,000	14,104	55	31,916	4	65,000	96916	Purchased paddy thresher and installed it in the separate house, savings in LIC.

**Table: An overview of Motka's journey in *tasar* rearing (contd.)**

Year	Grain-age Cycle Per Year	No. of Cocoons Preserved Reared	No. of DFLs Produced	No. of Rearers Catered	Net Profit	Rearing Cycle Per Year	Net Profit from Rearing	Total Income from <i>Tasar</i>	Use of the Profit
2010	2	57,000	14,632	60	42,360	4	70,000	1,12,360	Purchased motor bike, admitted younger brother and sisters in the private school, savings in LIC.
2011	2	1,33,000	31,049	65	12,1094	4	6,000	1,27,094	Purchased gold earrings for wife, savings in LIC, education.
2012	1	30,000	7,156	20	25,936	2	30,000	55,936	Constructed machine house on the roadside, savings in LIC, education.
2013	1	27,000	7,459	21	27,954	2	70,000	97,954	Purchased five tractor loads of bricks for construction of grainage building, savings in LIC, education.
2014	1	36,200	5,064	30	20,032	2	25,344	45,376	Education, savings in LIC
2015	1	46,200	11,296	27	53,240	2	55,000	1,08,240	Grainage building construction, savings in LIC, education
2016	1	50,000	16,000	120	45,290	2	50,112	95,362	Grainage building construction, savings in LIC, education

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He says one should dream of something and aspire to get that and only then can one realize a dream.

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his younger brother and sisters from going to the rearing fields, asking them instead to concentrate on their studies. Motka has put two of his younger sisters, one younger brother and his own daughter in a private mission school in Shikaripara. It costs him an admission fee of Rs 1,500 per child every year as well as Rs 200 monthly fee. Even though the expenditure on education is high, he is happy that his family members are getting quality education. One of his sisters is in the 10th standard, another sister and brother are in the 7th whereas his daughter is in Upper Kindergarten.

Sadly, nowadays, there are several other grainage entrepreneurs, promoted by the state government, in the business of *tasar* seed production; they barely adhere to the quality parameters of DFL production. Motka's concern now is to continue to prepare good quality DFLs so that his reputation

does not get compromised as it did in 2011. That year, his DFLs did not do well because of the heavy infestation of virosis, a deadly disease, for which he faced a problem in the supply of DFLs produced. However, he has managed to re-establish his reputation following the good production of cocoons from his DFLs since then.

Motka is fearful of the rearing field getting contaminated because it will affect his seed rearing fields and his commercial rearing fields. He aspires to have a plantation so that he can maintain sanctity in the seed rearing and produce good quality DFLs from those cocoons. He does not have large piece of barren land, however, to raise such a plantation on his own. He is in negotiations with the plantation owners of the nearby Sonadhab village, where the villagers have raised a plantation under the Tribal Development Fund of NABARD, promoted by

PRADAN. He is very inspired by the double-storey basic seed production buildings constructed at Kathikund and wants to construct a miniature form of that building where he can preserve 50,000 cocoons. He says one should dream of something and aspire to get that and only then can one realize a dream. He says he will continue with *tasar* farming till his death. Truly, his commitment, dedication and willingness to extend to others inspire many of us.

Like Motka, PRADAN has trained and prepared many other grainage entrepreneurs under different projects, now engaged in the production of good quality *tasar* seed for their fellow villagers and in realizing a good income from the *tasar* rearing activity.

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