Sukhsingh's Learning Journey

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Using the resources of the land and experimenting with different kinds of crops and vegetables helped one enterprising villager of Amagara to become selfsufficient, without having to migrate for work as agricultural labour or unskilled labour on construction sites in big cities.

Sukhsingh Mandi is a young enterprising farmer from Amagara, who has invested heavily in vegetable cultivation since 2008. Prior to 2005, he had never contemplated becoming a farmer. Rather, he wanted to settle in a city where job opportunities were aplenty for skilled and semi-skilled labourers. To realize this dream, he used to migrate to nearby cities and do all kinds of odd jobs. But his life took a different course. Let us see what happened.

To understand Sukhsingh, one must know Amagara. Amagara is just like any Santhal tribal village in the East India Plateau region. It comprises 148 households and has a population of 686, of whom 320 are literate. The sex ratio is 971 to 1000. The villagers primarily depended on wage-labour and migration, with the yield from their own lands, providing them food security for 6–9 months. Most families own an average of around 1.5 acres, comprising mainly uplands and medium uplands, which they use for cultivating rain-fed kharif paddy—the only produce in Amagara. The farmers in these villages migrate to the agriculturally developed districts such as Burdwan and Hooghly, where they work as agriculture labour, transplanting paddy, including boro paddy, and work in the potato fields. Some youngsters migrate to places such as Jamshedpur and even Bangalore, to work on the construction sites. Middlemen recruit young boys for this.

The lack of water has been a problem in the area; it made the villagers largely dependent on rain for cultivation. So, in the initial days, all efforts of PRADAN were directed at how to get water all through the year, thereby increasing food security. To ensure a meal a day, the women and men had to travel very far if not to other districts and cities for work. The women had to finish all their household chores before going out to work as daily labourers, leaving their children behind. On returning, they had to resume all the household activities without any leisure time.

Two years back, Sukhsingh's family was no different from the other families in Amagara. His is a joint family, comprising his mother (60 years old), his brother, sisterin-law, a nephew (9 years old) and a niece (4 years old). Their primary source of

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livelihood was wage labour. With a 0.16-acre homestead, 1.5 acres of uplands and 0.3 acres of medium lowlands, the family had rice available for six months. Later, they bought one *hapa* (a large structure for watershed) of 50x5*50x*10 size under the watershed development program. This now provides irrigation to the uplands.

For 7–8 months, two of the family members were engaged in wage labour. Sukhsingh himself went to cities such as Jamshedpur, Mumbai and Bangalore for 6-8 months at a stretch, to work in construction sites as wage labour. He earned around Rs 3,000 each month but he had to spend considerable amount to live there. When he came back, he would bring home about Rs 5,000-7,000. In keeping with the trend in Amagara at that time, they could grow nothing more than paddy and potato in some 1 acres of land. So the two brothers worked hard as wage labourers to maintain the family. Sukhsingh, who was unmarried, was the only person in the family, who could migrate, which he did with some other young boys. He is still not married, because he fears they will not be able to feed an additional mouth in their family. They have also planted mango in the homestead land.

But Amagara has changed today and so h Sukhsingh. After working for some years in various cities, he returned to his village when his father died. He intended to return to the city when the rituals were over. Once he reached home, he felt reluctant to go back. The long working hours with the heavy physical work and the horrible living environment in the workplace was becoming unbearable. His brother insisted that he

cultivate their fields, but Sukhsingh was not at all confident because of his inexperience and also because the state of agriculture was known to him. What he could not see and feel was the growing buzz in village agriculture. This happened with the implementation of the ACIAR project— 'Water harvesting and better cropping systems for the benefit of small farmers in watersheds of the East India Plateau'. The focus in Amagara was agronomic practices.

And this critical change was initiated by the village resource person (VRP) in Amagara, Sukumar Hembrom, who was also Sukhsingh's friend. Sukhsingh started spending considerable time with Sukumar. He attended the Village Core Committee meetings as an observer, in which agricultural experiments with different fertilizers and types of irrigation were discussed avidly. He became aware of the details about the experiments on cropping and irrigation options, and fertilizer trials. These interested him: and when Sukumar. the VRP. offered to help Sukhsingh in cultivation, it was the beginning of Sukhsingh's journey. It helped him overcome his hesitation in taking up cultivation.

He started attending agricultural meetings and learnt every process meticulously. He observed the ACIAR vegetable experiments very keenly. These experiments, mainly to do with agronomic practices, were proposed by the villagers on some cole crops and solanaceous crops such as tomato and brinjal. The results were overwhelming; whereas in other areas, tomato failed because of disease and pest infestation, the experiments were a huge success giving as much as profit of Rs 20,000 in .3 acres of land. This was unthinkable for the villagers because they regarded their

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uplands as the worst of lands, where vegetables could not grow. The experiments unveiled to Sukhsingh the viability of taking up vegetable cultivation as a source of livelihood.

These experiments were conducted by consciously following the learning cycle (Observe-Reflect-Plan-Act). The cycle was initiated in workshops on the use of fertilizers with the farmers, leading to participatory explorations of the most important problems the farmers are facing. The areas of experiment were jointly decided upon by scientists and the community. The farmers were guided through the precision and rigour of experiments by providing on-field handholding support. Field visits were made to make observations and to analyze these jointly. This was a regular process that encouraged analytical thinking among farmers and triggered serious questions in the farmer's mind about every detail of agronomy practices, starting from weeding to dosage and combination of fertilizers to controlled irrigation. At the end of the experiments, a joint review of the results of experimentation were made in the community, to understand what went well, what failed and why.

Sukhsingh was an ardent participant in these meetings and field visits. This helped to shape his ideas on the use of fertilizers such as phosphate and potash in addition to urea. Now, it was his turn to apply this knowledge. He tried his hand on tomato cultivation for the first time in post*kharif* 2007.

He was given all the information and on-field support by PRADAN and Sukumar. The critical steps that brought success to him were good selection of variety, raising a healthy nursery on time, timely transplanting, seed and sapling treatment, adequate prophylactic measures, correct dosage and combination of fertilizer application, and attention to any emergent problem immediately. The rigour and meticulousness in doing things on time made all the difference; this is something that is neglected usually. The other factor that contributed to the wonderful change was the knowledge that Sukhsingh gained. In all these endeavours, Sukhsingh's brother and sister-in-law were most supportive and joined hands with him to maintain the rigour in the agronomy processes. His sister-in-law took a loan from her SHG for the necessary expenses. With all this, the family got a substantial return of Rs 16,000 in their first attempt. This was a particularly encouraging experience for the family. The family opted for DSR paddy cultivation in the medium uplands, where the hapa is located. They got a good yield of paddy, that too harvested early; after that, they cultivated tomato in the same plot using the water from the hapa. The medium uplands, considered the worst of lands, are primarily mono-cropped with paddy. But Sukhsingh made a good earning from paddy and the vegetables. This boosted Sukhsingh's confidence.

His success led him to take up vegetable cultivation on a large scale. But lack of land proved to be a formidable constraint for him. He had only two acres of land, of which 1.5 acres was under paddy cultivation; this provided him food security. He converted 0.2 acres of his land from horticulture to an agro-horti plot. This left him with a small portion of land for vegetable cultivation.

However, this did not deter him from extending his vegetable cultivation. He compensated for the shortage of land by forming a partnership with Sailen, a fellow villager and friend. Sailen had land available for vegetables, but was diffident about cultivating it. Thus, they agreed on shared cropping, in which Sailen provided the land, both invested for inputs equally, Sukhsingh was the main supervisor, and both gave equal shared labour for field operations. The profit was shared equally among the two.

They grew cucumber, radish, cowpea and okra in the summer of 2008. Sailen said, "Sukhsingh is efficient and understands the nutrient requirement of the soil. He earned me good profit with cowpea, radish, cucumber and okra. Our partnership will go a long way." In 2008–09, Sukhsingh cultivated cowpea, radish, cucumber, cabbage and tomato and earned Rs 21,700 in *kharif* only. He made good profit with mustard too. The most interesting part is that these were cultivated in the uplands and medium uplands, the category of land that was, till then, written off as unproductive.

In 2009–10, there was a shortage of rainfall; hence, the number of crops cultivated was less. Apart from paddy, potato and mustard, Sukhsingh and Sailen cultivated tomato. Soon Sailen's cousin joined their venture. Together, they earned a profit of Rs 76,000, considered a sizeable profit. Earlier when Sukhsingh used to migrate for work, he used to earnonly Rs 6,000–7,000. Moreover, he had to suffer the pain of staying away from home.

In 2010–11, Sukhsingh plans to cultivate DSR paddy in .6 acres of land, following which he will cultivate mustard, potato and tomato. He had planned a pre-*kharif* crop; but there was no rainfall, hence the plan did not materialize. He is cultivating tomato in shared cropping on 0.6 acres. He plans to cultivate pulses as well.

Today, Sukhsingh is a confident young enterprising farmer, who believes agriculture is a better option for livelihood than migration. He has purchased a pump set with his earnings. When asked, "So now, are you going to marry?" he smiles shyly and says, "Mother is looking for a suitable match." We wish him all the best.