Food sufficiency through diversified farming A case of a small farmer

Small land holders can be self sustainable. This was proved by Shri. Santu, a small farmer in Gorakhpur, who started making a decent living from farming by increasing the diversity on the farms and integrating one into another.

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S adhukuti is a small hamlet in Ramchaura village in Campiergunj block of Gorakhpur district. This village is situated on the national highway of Gorakhpur- Sonauli. Farmers in this village have been primarily depending on agriculture for their livelihoods. There are eight households in this hamlet and all of them belong to *sahani* caste. The total village area covers ten acres of land which includes both agricultural land and orchards, majority being mango trees. Monocropping has been the system of cultivation for years. While paddy is grown in the kharif season, wheat with mustard are the rabi crops.

The ill effects of extensive use of inputs was reflected in terms of high production cost, declining incomes and natural resource degradation. These were in turn having impact on the well being of landless, small and marginal farmers. In 1989-90, GEAG, a NGO, started to address the issue of sustainable farming by promoting alternative options. It strongly believed that low input farming or sustainable agriculture is the only and lasting option for sustainable livelihood of the poor and environment conservation. With this belief, it motivated several farmers in the Campiergunj and Sardar Nagar blocks of Gorakhpur district to demonstrate holistic approach of sustainable agriculture. Under this approach, focus was on utilizing their own local resources for development of low cost sustainable agriculture practices. In this approach, small and marginal farmers had to develop as model farmers and demonstrate their agriculture and livelihood sustainability. In December 2004, GEAG started promoting integrated farming systems through its biofarm project in Campiergunj region.

Sri Santu is one of the farmers who benefited from GEAG's interventions. For last three generations, his family has been living in Sadhukuti hamlet. There are ten members in his family. The family primarily depends on agriculture for its livelihood. He has two acres of land with adequate irrigation facility. The type of soil is sandy loam. He has been cultivating wheat and mustard crops in rabi season and paddy crop in kharif season. Being wilt sensitive, plantation of sisso tree and cultivation of pulse crops is not taken up in the area. This has also reflected on the nutritional status of the family. Due to low on-farm employability, Santu sometimes employs himself in transporting people using his bullock cart.

Integrating practices and reaping benefits

Santu along with other farmers in his village actively participated in GEAG's programme. He had curiosity, which motivated him to participate in the planning process. He also started building up his understanding on various conceptual and technical aspects of farming. This renewed understanding helped him to take informed decisions. For example, having understood soil physiology, he started getting his soils tested in every season. He gradually incorporated and integrated various sustainable practices like crop rotation and mixed cropping, integration of leguminous crops, bund plantation, kitchen gardens etc. He also started producing ecofriendly inputs like vermicompost, nadep compost and biopesticides using locally available resources.

Today, diversification is reflected on his farm throughout the year. He cultivates crops of wheat, paddy, oil crop, vegetables along with legumes. Adopting wilt resistant legume varieties has made the availability of pulses for consumption possible, which earlier was a mere dream. Also, planted multipurpose trees like Teak, Sahjan, Neem etc., which yield both fruits and timber wood. Plantation is contributing to water retention capacity of land on one side and checking soil erosion and increasing soil fertility on the other. Other activities include bund plantation and seed production.

Under animal husbandry, along with bullocks, he started rearing buffalo, cow, goats, poultry and fishery. Utilization of organic manure and change in cropping pattern has resulted in remarkable improvement in soil fertility. Consumption of synthetic fertilizer and pesticides has considerably reduced.

Changed cropping cycles and diversification has provided productive employment to all the members of the family. They are now continuously engaged in various activities throughout the year – for eg., irrigation, manuring and pest management, harvesting, selling produces in local market etc.

The adoption of these practices / interventions has not only ensured food security for the family throughout the year but also made nutritious food available to them. His domestic requirement of cereals and vegetables is fulfilled through his own farm production. Additional income is obtained from selling surplus food in local markets.

Other farmers in the village are very much impressed. Motivated by Santu, they are making efforts in terms of adoption of modified agricultural practices. The farmers say that adoption of these practices has helped them to reduce costs of cultivation and earn higher net income.

Santu has also developed himself into a micro entrepreneur. He is involved in activities like selling of vegetable produce in market and development of vegetable nursery in low tunnel system and its marketing. He is also promoting poultry and fishery as additional income generating activities. Honey bee keeping is also fetching additional income.

Presently, he is highly popular among farmers in the district. Farmers who are visiting him are motivated to adopt his ways of success. Thus, Sri Santu proved that small landholders can be self sustainable by adopting integrated sustainable agriculture practices using local resources.

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