Sipringa: A Decade of Growth and Prosperity

SYED LUTFUR RAHMAN

Encouraging farmers to use the SRI method of cultivation, focussing on land and water development, the members of the SHGs bring about socio-economic changes that enable a once-poverty stricken people to become self-sufficient and secure

Sipringa is a remote village situated 22 km away from the district headquarters of Gumla in Jharkhand. Connectivity to the village is very limited. The village comprises about 60 families belonging to the Scheduled Castes (SCs), Scheduled Tribes (STs) and Other Backward Castes (OBCs). The people of the village are mostly farmers and jungle dwellers and only a few of them work as blacksmiths, carpenters and shopkeepers in the local *haats* (small weekly markets).

The landscape of the village is undulating and can be categorized as lowlands, medium lowland, upland, homesteads and fallows in the foothills for grazing. On an average, one family has 0.75 to one acre of medium lowland, one acre of upland and about 0.1 acre of homestead.

THE SOCIO-ECONOMIC SCENARIO OF SIPRINGA BEFORE PRADAN INTERVENED

To understand the past situation of Sipringa, we asked the villagers to share what they remembered of the earlier Sipringa. Families struggled to get two meals a day. Shivnath da, an aged farmer of the village, told us that families with children were forced to send one or two of their children to landlords, who employed them as household workers or farm labour and, in return, the family would get 500–1,000 kg of paddy at the end of the year. This contract labour system is locally known as *dhangad rakhna.* The farmers were dependent on the landlords (*ganju*) for cash and food, but because the interest rates at which they borrowed money were very high, the families invariably fell into a debt trap with these landlords. Selling firewood (those who had a bicycle) was one way of earning cash and food. The villagers also resorted to distress migration. At least one person from a family would migrate for work after the *kharif* paddy transplantation. Some families even told stories about how they ate some tubers from the forest for breakfast and lunch, in the absence of their staple food—paddy.The farmers were growing 16 crops simultaneously to make ends meet. Of those crops, paddy, millets, pulses and oilseeds were grown by all. These crops, however, were rain-fed and low productivity was very low.

STAGE-WISE INTERVENTION BY PRADAN

A. Promotion of Self Help Groups (SHGs)

PRADAN organized community meetings in Sipringa village, to interact with the people and discuss the issues, their concerns and the opportunities available for them. The concept of SHGs was shared with the villagers. They were told that an SHG comprises representatives of 15–20 families of similar socio-economic conditions living in close proximity, who voluntarily saved some money on a weekly basis and who also worked at solving the problems of the village. After two or three meetings with the villagers for convincing them to form their own SHGs, they agreed. Three SHGs were formed in the village by 2002, and the villagers started saving Rs 5 per member, per meeting. By the time the groups were six months old, they had savings of Rs 2000. PRADAN then introduced them to an 'internal loaning process', in which the SHGs began lending money to families within the village. This experience was quite new and exciting for the community. Each family managed to save money, take loans at low interest rates and also shared their issues within the village.

B. Introducing the System of Rice Intensification (SRI) and improved varieties paddy for increasing yields

The fertile lowlands of the village were owned by the landlord and only the less fertile medium lowlands belonged to the villagers. And the combination of low fertile land and low yielding variety of seeds with traditional practices of cultivation had resulted in low yields; hence, the poverty in the village. PRADAN intervened by encouraging and facilitating the farmers to grow improved varieties of paddy (Lalat, Khandgiri), using the SRI method. It was a huge success. The paddy yield increased to twice as much; the farmers had yields of 2,000 kg (2MT/acre) of paddy from one acre of land. Within the first year, 25 families became food sufficient and had food for the whole year. For the first time in the village, farmers earned Rs 5,000 on an average by selling vegetables such as tomato and chillies. From 2003–06, PRADAN worked on food sufficiency and small-scale vegetable farming.

By 2006, almost 80 per cent of the families were food sufficient and another seven families were doing vegetable farming and earning Rs 4,000–5,000 annually. All the families have adopted improved paddy production systems.

FOCUS ON LAND AND WATER DEVELOPMENT

Despite these changes, the community was still dependent on rainwater for farming and not much had happened for land and water development. In 2007, PRADAN started focussing on this area. Proposals were developed, with the support of the SHGs, for the construction of irrigation infrastructure in the village. The SHGs have had a vital role to play in analysing the land-water situation of the village and then planning the activities based on need, effectiveness, etc. The broad steps that were followed were (i) planning for different irrigation structures (ii) submitting plans to the block office and the DRDA by the SHG (iii) implementing the project iv) providing support in crop production and (iv) submitting bills and vouchers for the work done. These efforts led to the sanctioning of two projects. The SHGs were able to draw funds from the Tribal Welfare Commission to construct an irrigation well and a River Lift Irrigation system. The villagers have now started working on the utilization of fallow lands by planting mango

orchards, under MGNREGS. Almost 25 acres of land has been brought under irrigation. Some of the families have started growing a wheat crop after the paddy crop The cash earning of the families have improved. They have started earning Rs 5,000, on an average, by growing vegetables in irrigated areas and homestead lands. Sixteen families have planted mangoes in fallow uplands on approximately 6 acres of land. They also began to grow inter-crops in the mango orchards and earning some additional cash.

2008: THE CHANGING LOCAL SOCIO-ECONOMIC SCENARIO BRINGS AND THE NEW DEVELOPMENT CHALLENGES

By the end of 2008, 80 per cent of the families were growing improved paddy, 10 families were doing intensive vegetable farming and 16 families had planted mango orchards. The entire village was growing crops on their own land and generating revenues up to Rs 6,000 a year plus food sufficiency for the entire year. The SHGs became quite strong financially and socially. In Raidih block, almost 50 villages reached a similar kind of growth as Sipringa. PRADAN had an outreach of 3,000 families by 2009. Approximately, 60 per cent of the families were food sufficient and almost 500–600 families had begun to grow vegetables intensively. The local *haats* were filled with vegetables and sometimes the prices were quite low due to the high supply. There was an imbalance in demand and supply conditions of the local *haats*.

THE RAIDIH WEEKLY MARKET

The Raidih weekly market is in the centre of the Raidih block. It is a small market where farmers from all the areas of Raidih come to sell their produce of vegetables, rice, forest products and to purchase clothes, fish, chicken and household items. The average transaction is almost fixed because the buyers and sellers are mostly from the nearby villages. It operates smoothly, everyone being aware of the trends and the transactions. In September 2009, the entire market place was filled with ripe tomatoes and the farmers helplessly waited for buyers. There were almost 10–15 MT of tomatoes in the market whereas on a regular basis only one MT of tomato is sold in that market. The prices came down to Rs 0.50/kg; this was traumatic for the farmers, many of whom could not even sell the tomatoes; they simply dumped them in the marketplace. This incident recurred the following two or three market days and in other nearby villages as well. The farmers were upset and began to lose faith in vegetable farming. Some of the areas began exploring new ways of marketing by sending the produce to the *mandis* of Ranchi and Rourkela.

PROMOTION OF A VEGETABLE PRODUCTION CLUSTER

Carrying this learning forward, PRADAN promoted a sustainable vegetable production cluster. The focus on production alone, possibly, was not going to help the community. An integrated network of the whole value chain of vegetables and fruits needed to be created to sustain vegetable farming for small farmers. In Sipringa, 10 farmers had prior experience in producing vegetables. During the *kharif* season of 2010, PRADAN promoted a Vegetable Production Cluster there. There were a few considerations for taking up large-scale vegetable farming in Sipringa.

- **All the families would take part in the year-round vegetable farming:** All the families have some uplands suitable for vegetable production. Seeing that agriculture has the maximum potential as a source of revenue generation, efforts were made to encourage vegetable farming.

- **Families would have access to regional markets for selling vegetables in wholesale:** When all the families participate in vegetable farming, there is need for market linkages, otherwise there will be a glut in the local market, resulting in the prices crashing and small farmers incurring huge losses.
- **An entrepreneurial system for input-output marketing will be established:** Given the remote location of the village, businessmen from Gumla or Ranchi will be less inclined to procure the produce, especially because the connecting roads are poor. Someone from the village, therefore, will have to collect the vegetables and contact the commission agents in cities such as Ranchi, Rourkela and Ambikapur. Involving the youth in developing linkages is of huge importance.

EXECUTION OF A VEGETABLE PRODUCTION CLUSTER IN SIPRINGA

The key interventions were:

- *Common nursery in a net house:* A low-cost net house, in which all the families have their own beds, was constructed by the villagers. This helps in disease control, peer learning amongst farmers and getting the produce at the same time for the ease of marketing.
- *Uniformity in production practices:* A standard package of practices for crops was to be followed by all the farmers to enhance their crop yields.
- *Micro-nutrient application (zinc, boron, magnesium, calcium, etc.):* All the farmers were to follow this practice, to enhance soil fertility and sustainability.
- *Establishing market linkage through entrepreneur promotion:* Local youths were encouraged to engage in the marketing of the produce. Three young adults came for marketing. They were trained in marketing and given exposure to the regional markets and are now independently handling the marketing of vegetables for the village.
- *Drawing support from government for infrastructure and land and water development.*

Income Data from Intensive Vegetable Farming for 2010–11 & 2011–12

Year	Families	Crops Taken	Total Crop Area in Acres	Total Income in Lakhs
2010–11	40	Tomato, cabbage, cauliflower, peas	11.5	5.25
2011–12	50	Same as above	20.0	7.55
2012–13	50	Tomato and chillies	20.0 during *kharif*	Still to come

Farmer-wise Production and Income data for 25 Farmers (2011)

No.	Name of Farmer	Tomato		Cabbage		Green pea		Cauliflower		NET IN-COME
		Area (Acre)	In-come	Area (Acre)	In-come	Area (Acre)	In-come	Area (Acre)	In-come	
1	Prem Singh	0.25	12,619	0	0	0.15	15,000	0.15	5,000	32,619
2	Lalit Kr. Sahi	0.25	15,630	0.10	696	0.15	8,615	0.15	10,655	35,596
3	Sunil Kujur	0.25	12,308	0.20	6,228	0.15	6,235	0.15	8,520	33,291
4	Lal Munda	0.25	15,000	0.15	4,000	0.15	300	0.15	5,000	24,300
5	Devnari Pahan	0.35	17,000	0.20	10,000	0.15	5,000	0.15	2,000	34,000
6	Harak Nath Singh	0.25	3,000	0.10	2,000	0	0	0	0	5,000
7	Jitnath Ram	0.25	5,000	0	0	0	0	0.20	6,000	11,000
8	Malo Singh	0.25	9,000	0.40	4,000	0		0.25	5,000	18,000
9	Sibnath Singh	0.25	6,000	0.10	3,000	0.20	8,000	0.15	2,000	19,000
10	Bhukhan Singh	0.25	12,000	0.10	2,000	0.10	2,000	0.10	600	16,600
11	Dhanaswar Singh	0.25	5,500	0	0	0.10	2,000	0.10	635	8,135
12	Bhado Singh	0.25	15,230	0.10	838	0.10	8,920	0.15	5,225	30,213
13	Madhu Singh	0.25	5,620	0.10	2,000	0.15	530	0.10	860	9,010
14	Mangal Ram	0.25	12,260	0.15	6,260	0.15	7,260	0.15	6,520	32,300
15	Lalu Singh	0.25	8,325	0.15	2,950	0.20	9,725	0.15	7,550	28,550
16	Krishna Pahan	0.50	35,950	0.25	10,250	0.15	500	0.25	8,620	55,320
17	Ghandhana Singh	0.25	12,650	0	0	0.20	8,150	0.15	5,620	26,420
18	Krishana Ram	0.25	7,250	0.10	7,120	0.25	9,560	0.15	5,320	29,250
19	Firu Ram	0.25	9,820	0.20	9,560	0.25	6,970	0.15	3,250	29,600
20	Erik Khakha	0.25	8,540	0	0	0.25	7,250	0.20	6,230	22,020
	Total	5.35	2,28,702	2.4	70,902	2.85	0,06,015	3	94,605	5,00,224

IMPACT OF PROMOTING A VEGETABLE PRODUCTION CLUSTER

- Per family income has increased from Rs 5, 000 to Rs 25, 000 from an average 0.4 acres to 1 acre of upland in two seasons.
- Collective action became possible for all the steps in vegetable production as well as in marketing.
- Strong linkages have been established with both Input and Output market stakeholders.
- Farmers are now behaving as farmers with the younger generation taking over the marketing, whereas earlier farming and marketing, both were being done by the farmer. Marketing is now done through aggregating the produce in the village and an entrepreneur takes it to the market and brings the farmers their share of the profit. A huge increase in production has had a great impact on the farmers and now they are investing more in agriculture. About 50 families now have knapsack sprayers, five families have purchased extra land for cultivation and one power tiller has been purchased for the village.
- There has been a change in the investment pattern as the family investment in vegetables has gone up from Rs 500 to Rs 4,700. They are even paying and reviewing their service providers, both for production and marketing.
- There has been a visible shift in livelihoods. Shivnath Singh was a village-level carpenter, who earned approximately Rs 5,000 annually from his work. He is now fully engaged in agriculture and earns more than Rs 15,000 per annum. Bhagwat Singh another farmer in the village has also changed from carpentry to agriculture and earns more than Rs 20, 000 per annum.
- Linkages with the government and other stakeholders have been established. The SHGs have been able to mobilize funds for infrastructure development from the district administration. This year, they have constructed three river lifts, one grading and sorting centre, with 1000 crates from the Integrated Action Plan (IAP) fund through the support of DRDA. They have mobilized a bank loan of Rs 8 lakhs for investments in agriculture from Punjab National Bank.
- A change in lifestyle of the people is coming about. People are investing in assets such as televisions, motorbikes and mobile phones, etc. A change in their dressing style and in their home decoration can also be noticed.
- The growth of the village Sipringa is impacting other nearby villages. The other villagers are also becoming interested in round-the-year vegetable production.

SHGS ANCHOR THE CHANGES IN SOCIO-ECONOMIC CONDITIONS OF THE VILLAGE

In 2002, three SHGs were formed in Sipringa, the Sant Monica Mahila Mandal, the Sita Sumon Mahila Mandal and Saraswati Mahila Mandal. These groups act as a platform to discuss the village-level socio-economic issues and look for ways to solve the issues. SHGs have increased the participation of women in village-level decisions, the establishing of

linkages with different stakeholders and the strengthening of women leaders working for the community.As the SHGs continue their good work, there have been many visits from the representatives of DRDA, Gumla, to the village. This has resulted in enhanced support from the government to the village. In 2011–12, the village was able to mobilize Rs 14.95 lakhs from the IAP fund for irrigation infrastructure and the construction of a vegetable grading and sorting centre. The SHG has become the main forum where grass-roots development workers come and discuss government schemes with *anganwadi* workers, Bank staff, *gram sewak*, as well as schemes from private companies, insurance agents, etc.

KEY MILESTONES OF THE SHGS

- Formed in 2002
- All three groups are linked to different nationalized banks since 2004. They have voluntary savings of Rs 1.5 lakhs.
- Formulation and successful implementation of the MGNREGA-based horticulture plantation with 16 families.
- Accessing loans from the Punjab National Bank for agriculture and successfully managing these loans for agriculture production. The three SHGs have mobilized Rs 8 lakhs.
- Project implementation under the IAP in constructing the vegetable grading and sorting centre as well as a river-based micro-lift irrigation system.
- Execution of the productivity enhancement project with ICRISAT from 2009.

PUSPA KUJUR: AN ENTREPRENEUR

Puspa Kujur is a member of the Sant Monica Mahila Mandal. Her family includes herself, her husband Abraham Kujur, four sons and a daughter. She has 2.5 acres of paddy land and 1.25 acres of uplands. She had hardly been able to feed her family till 2002 because the paddy yields were low and life was quite challenging for her. She is the pioneer of the SRI demonstration in the village. In the very first year, she covered all her lands with the SRI paddy. She was able to harvest three times higher yields that year. Her family now has food sufficiency for the whole year and surplus food grain stored for another year from the same piece of land. She has also started growing mangoes and vegetables in her uplands since 2007. She has irrigation support from a well constructed by Sant Monica Mahila Mandal. In 2012, she sold mangoes worth Rs 40,000 and, in 2011–12, vegetables worth Rs 50,000. Her annual incomes have grown from Rs 5,000 per annum to Rs 80,000–1, 00,000 per annum. Her daughter is studying to be a nurse in a private institute in Patna; all five children are now literate. Her husband, Abraham, has supported her in all the changes that she has made so far. Abraham also works as a Community Service Provider. He has developed a strong understanding of agriculture-based technologies and is a valuable resource in the village. The family is now planning to start a seed and fertilizer shop. This family is an inspiration to all the families of Sipringa.

OVERALL IMPACT AFTER 10 YEARS OF PRADAN ENGAGEMENT IN THE VILLAGE

Life in Sipringa is much better compared to what it was 10 years ago. Passing by the village you see that the uplands are filled with seasonal vegetables and mango orchards, with the families working hard on their land. The children go to schools and colleges to Gumla. Lack of irrigation is no more a barrier for good production for these farmers. Starvation is no longer an issue and migration from the village has stabilized, with the youth of the village taking an active part in agriculture.