

CHAPTER: 05

DYNAMICS OF MAHILA KISAN SASHAKTIKARAN PARIYOJANA: A CASE STUDY OF WOMEN FARMERS' BREAKTHROUGH IN JHARKHAND

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ABSTRACT

Empowerment of women is one of the most pressing elements of inclusive development. They are exploited from the beginning of human civilization. Mahila Kisan Sashaktikaran Pariyojana (MKSP) was launched to empower women farmers across India. It was implemented through the help of the partner NGOs. This study entails the MKSP endeavours of Asian Institute for Sustainable Development (AISD) in bringing pathbreaking economic empowerment among nearly 4000 women farmers through 343 SHGs in Bero block of Ranchi district and Thetaitanger block of Simedega district in Jharkhand. Besides ensuring economically profitable sustainable organic crop cultivation through systems of crop intensifications and enhanced net income at household level, it has also promoted more than thousand women entrepreneurs by initiating marketable organic products which sold like hot cake in local markets. The chapter describes the various initiatives taken under MKSP and how these enabled women farmers to attain breakthrough from traditional ideas and drudgery.

Keywords: Women, Empowerment, MKSP, Organic farming, Jharkhand

INTRODUCTION

In most of the developing nations including India, rural women form the most productive work force. Agriculture is increasingly becoming a female activity. Agriculture contributes sixteen percent of the GDP. Agriculture sector employs eighty percent of all economically active women. They comprise thirty three percent of the agricultural labour force and 48% of self-employed farmers. *Mahila Kisan Sashaktikaran Pariyojana* (MKSP) was launched in 2011 to help and extend support to women farmers. According to NSSO Reports, about eighteen percent of the farm families in India, are reported to be headed by women. According to the Economic Survey 2017-18, a rise in migration of men from rural to urban areas has resulted in feminization of agriculture (Economic Survey, 2018).

Women in Agriculture are generally not able to access extension services and production assets like seed, water, credit, subsidy etc. They are not considered as beneficiaries of various government programmes/services. This is due to the fact they do not possess legal ownership of the land. The wage differentials between men and women are discriminatory. This discrimination is exploitative in nature, discouraging and demotivating. Some of the tasks performed by the women are not valued adequately. These tasks are considered economically less important. Further, due to multiple roles that a woman has to perform within the family and the farm, her access to knowledge and information, is constrained and limited. Therefore, her opportunities get severely restricted. To improve the status of women in agriculture, and to enhance the opportunities for their empowerment, Government of India launched '*Mahila Kisan Sashaktikaran Pariyojana* (MKSP)' as a sub component of the National Rural Livelihood Mission (NRLM) and allocated a budgetary support of Rs. 100 crores during 2010-11. This chapter intends to analyse the programme intervention of MKSP in Bero and Thetaitanger blocks of Jharkhand and its contributions towards empowerment of women farmers.

PURPOSE AND OBJECTIVES OF MKSP

a. Purpose

The principal objective of the MKSP was to empower women in agriculture. Systematic investments were made to enhance their participation and productivity, and to create and sustain agriculture-based livelihoods of rural women. Programme also aimed to enhance the control of women in agriculture by promoting efficient local resource-based agriculture, women based production through appropriate support systems management and better services. It was expected that once the production capacities of women in agriculture is improved, food security is ensured for their families and communities. Specific objectives of MKSP were (a) enhancing the productive participation of women in agriculture; (b) creating sustainable agricultural livelihood opportunities for women in agriculture; (c) improving the skills and capabilities of women in agriculture to support farm and non-farm-based activities; (d) ensuring food and nutrition security at the household and the community level; (f) enabling women to have better access to inputs and services of the government and other agencies; (g) enhancing the managerial capacities of women in agriculture for better management of bio-diversity; (h) improving the capacities of women in

agriculture to access the resources of other institutions and schemes within a convergence framework (MKSP, 2021; Vikaspedia, 2023).

MKSP recognizes the identity of 'Mahila' (women) as 'Kisan' (Farmer) and strives to build the capacity of women in the domain of agro-ecologically sustainable practices. It has a clear vision to reach out to the poorest of poor households and expand the portfolio of activities currently handled by the Mahila Kisan. The focus of MKSP is on capacity building of small holders to adopt sustainable climate resilient agro-ecology and eventually create a pool of skilled community professionals. Its objective is to strengthen smallholder agriculture through promotion of sustainable agriculture practices such as Community Managed Sustainable Agriculture (CMSA), Non-Pesticide Management (NPM), Zero Budget Natural Farming (ZBNF), Pashu-Sakhi model for doorstep animal care services, Sustainable regeneration and harvesting of Non-Timber Forest Produce (Vikaspedia, 2023).

Government efforts were focussed to create awareness about the programme through community resource persons (CRPs), IEC (information, education and communication) strategies and campaigns of national mission as well as the state rural livelihoods missions. The benefits of taking up sustainable practices in agriculture, non-timber forest produce (NTFP), and livestock are discussed in meetings of the self-help groups (SHGs), village organization and cluster level federation meetings. The learnings from the practices adopted under MKSP were scaled up by the Rural Livelihoods Missions of States/Union Territories (UTs) under their Annual Action Plans (AAPs). Under Deendayal Antyodaya Yojana- National Rural Livelihood Mission (DAY-NRLM) till 2018-19, about 38 lakh women farmers were trained under MKSP. The learning of the interventions under MKSP were expanded to various parts of the country under the Annual Action Plans of States/UTs. Accordingly, a total of around 1.44 crore Mahila Kisan (women farmers) were covered under DAY-NRLM till 2018-19. In Jharkhand nearly 14.5 lacs women covered under MKSP³ (Vikaspedia, 2023).

b. Intervention strategy

MKSP intervention strategy involved building a structure on the foundation of sustainability. This involves incorporating climate change resilient and ecologically sound practices into the overall structure. Community Resource Persons (CRPs) play a proactive role in scaling up these initiatives. Major interventions promoted under DAY-NRLM which contributed to climate change resilience a risk mitigation among the poor were (a) community managed sustainable agriculture (agro-ecology approaches), (b) usage of locally available natural inputs – for pest management and soil fertility management, (c) system of root intensification – SRI, SCI, (d) promotion of millets and cereal crops, (e) promotion of multiple crops, (f) tree based farming practices, (g) regeneration of forest species, (h) usage of locally available natural inputs, (i) integrated farming practice with small ruminants, (j) convergence with MGNREGA to create agriculture assets for the community, (k) non-pesticide management, (l) natural soil fertility Management, (m) integrating livestock with agriculture, (n) integration of livestock – promotion of *pashu sakhi* model, (o)

³ Vikaspedia (2023). Retrieved from <https://vikaspedia.in/agriculture/women-and-agriculture/mahila-kisan-sashaktikaran-pariyojana>, 01.12.2023:16.07 hrs.

ensuring the scalability of climate change resilient agriculture practices through Community Best Practitioners (CBPs), and (p) *in-situ* rain water harvesting (Vikaspedia, 2023)

c. Implementation strategy

The program was implemented by DAY-NRLM in partnership with State Rural Livelihood Missions/ Community Based Organizations (CBOs)/NGOs, as implementing partners (PIAs) across the country. These agencies were expected to support and nurture scalable livelihood models in the MKSP intervention areas. In the process, it was expected that a cadre of barefoot community professionals would be created from among the best practitioners. The State Rural Livelihood Missions further replicated the models with the help of the community (Vikaspedia, 2023).

MKSP Intervention in Bero and Thetaitanger Blocks of Jharkhand

The present chapter is based on the performance of MKSP in two blocks of Jharkhand namely, Bero in Ranchi district and Thetaitanger in Sirmedega district. Jharkhand State Livelihood Mission selected Asian Institute for Sustainable Development (AISD) to implement MKSP during 2014 to 2019. AISD has covered 34 villages of 6 panchayats in the two districts. In Bero block the MKSP was implemented in three panchayats namely Jaria, Hariharpur Jamtoli and Nehalu Kaparia while in Tethaitangar block it was implemented in Thetaitanger, Taraboga and Konmenjara panchayats (Table 5.1).

Table 5.1: MKSP coverage in Bero and Thetaitanger blocks

District	Block	Panchayat	Village	SHG
Ranchi	Bero	03	21	181
Simdega	Tethaitangar	03	13	162
Total	02	06	34	343

343 women SHGs were formed by AISD comprising of nearly 4000 women members. Out of these 181 SHGs were formed in Bero block and 162 SHGs were formed in Tethaitanger block. In pursuance with MKSP objectives AISD promoted organic based, diverse holistic sustainable rural development model in six panchayats of the above-mentioned blocs through 343 women SHGs. For the promotion of organic based crop intensification, both traditional and improved varieties of food crops were selected. These crops included paddy, finger millet (ragi/mandua), pigeon pea, wheat, potato and seasonal vegetables. Crop intensification activities aimed at resilient building, productivity enhancement and promoting nutritional food to the tribal households.

Under MKSP, with the facilitation of AISD, nearly 1700 women farmers adopted system of crop intensification (a root intensive cultivation practice), more than 1600 women farmers readopted millet farming, nearly 90% women SHG members adapted to organic agriculture and climate change resilient farming. Through these practices cereal productivity was increased by 1.5 times and millet productivity was nearly doubled.

For implementing the MKSP AISD collaborated with various institutions and agencies. These included Birsa Agriculture University (BAU), Ranchi, Lamps, Krishi Vigyan Kendra of R. K. Mission, Central Tasar Research and Training Institute (CTRTI), CIMAP, Animal Husbandry Department of

Government of Jharkhand (GoJ) , Fisheries Department, GoJ, Digital Green, KGVK and Navdanya PRAN and TRIF. Women SHGs were provided improved seeds of paddy MTU1010, millets, maize, pigeon pea LRG 41, wheat HD 3086, and Mustard RP09.

Through community level awareness generation about nutrition garden, more than 800 women farmers set up organic based kitchen garden to achieve household level nutritional security. Under pulse intensification programme, production of pigeon pea and black gram was increased by 1.5 times in both the block. Furthermore, through organic based intensification of vegetables like potato, french bean, green chilli, tomato, cucumber more than 2000 women farmers achieved crop resilience and productivity enhancement. Community scale livestock management displayed a qualitative shift through the extension of paravet services and ethnovet practices in 29 project villages of Bero and Simdega.



Figure 5.1: Corp exposure on system of wheat intensification at Jahanabaz, Bero

PROCESS OF WOMEN EMPOWERMENT AND KEY LEARNINGS

1. Project outreach

The project initially began with 52 SHGs in 2014. However, by 2018, 343 SHGs were formed and all SHGs consolidated their financial activities and were trained in various MKSP key activities. 36 women were trained as community resource persons (CRPs) who in turn facilitated the project outreach to all the 34 villages.

2. Institution building

The collaborative effort of AISD and JSLPS team towards conduction of SHG drive and building of village organizations since 2015 has been extended towards livelihood enhancement through our prominent capacity building initiative in form of Birsa Ajeevika School (BAS). Appropriate interventions for knowledge extension have been diverse covering all major aspects for organic based strengthening and revitalization of local farming culture. These included training on organic based PoP of different crops as well as demonstration of small farming implements including cycle weeder as well bamboo storage structures for potato. Qualitative change in use of ICT for community awareness generation about all aspects of ongoing crop PoP has been achieved through complimentary use of self generated feild videos projected through pico projector for several crops. The dual requirement of strengthening production

systems and market linkages for the upcoming initiatives is being addressed through setting up of village level PGS groups in the current implementation cycle (Table 5.2).

Table 5.2: Activities and the outcome of institutional building under MKSP

Target	Establishment of BAS in 34 villages
Activities	<ul style="list-style-type: none">• Cluster level Training and planning of activities with CRPs• Supply of inputs for community level bio input preparation and demonstration of modern tools and techniques• SHG level trainings for building PGS
Outcome	<ul style="list-style-type: none">• Building up of community learning platforms for propagation of CMSA Practices in all target villages• Adoption of latest digital tools and processes for propagation and extension activities by the CRPs• Initiation of community scale bio input preparation in 20 villages through BAS

Furthermore, locally generated videos covered major gap in community mobilization based on informed choices. Digital green initiatives for potato was one such outcome of the institutional building and strengthening process. Thematic GPS maps were displayed at BAS/Panchayat level for supporting resource planning by the community. PGS groups are being appropriately constituted for institutional sale and purchase of organic inputs and outputs

3. Capacity building

The capacity building exercises displayed a qualitative shift through application of intensive training module comprising of latest audio visual aids. It was marked by adequate inclusion of principles of farming and theories of low external input agriculture. Principles of community managed sustainable agriculture was included in each training module with centre staging of traditional seeds and locally made organic inputs. Trainings on system of rice intensification (SRI), system of millet intensification (SMI), system of pulses intensification, system of wheat intensification (SWI) and system of oilseed intensification boosted the agriculture yield for small and marginal farmer's land under rainfed conditions.

- a. **Village level trainings:** The project provided the capacity building trainings to all women farmers through adequate support of digitalized PoP and latest audio visual aids. The village level trainings were designed on integrated module covering theory and practical imparted through lecture demonstration method.
- b. **SRI:** Paddy faced the critical challenge of grounding and self-sustenance of the activity in rainfed condition. It was realized that evidence based documentation of the paddy field results had the potential of covering both the challenges of attaining organic growth through SRI method. Village level trainings were carried out in 21 villages. Challenges of delayed monsoon was effectively countered through the promotion drought coping seed bed preparation, locally adaptive varieties, organic cultivation practices, root and tiller promotion and timely weeding.



Figure 5.2: Application of Aushadiya Matka Khad in SRI Field at Hulsri Bero

Major learnings from SRI were (i) there was ample scope of reintroduction of traditional varieties of paddy as exemplified by *Sathi Dhan*, *Charai Luki*, *Kalamdani* etc. (ii) introduction of improved varieties of scented rice from BAU⁴ could be initiated for value addition and income enhancement, (iii) seed bank of traditional varieties could be developed at community level and (iv) the major gap in community mobilization could be bridged in sustained manner.

Table 5.3: Outcome of SRI

Tangible results	More Than 1700 farmers adopted SRI
Achievements	<ul style="list-style-type: none"> • Paddy yield was increased by 1.5 times on average under SRI. • Traditional varieties of paddy like <i>Charai luki</i> and <i>Dhusri</i> were revived through SRI in contrast to HYV and Hybrid rice.

- c. **SMI:** Supporting intensification of millets has been one of the unique interventions promoted by SPWD consortium among all MKSP partners in Jharkhand. Towards this end village level trainings for intensification of millets were carried out in total of 16 villages of Bero since 2014. Both seed and training support was provided by SPWD at both locations leading to spontaneous propagation of improved seed variety of Ragi and organic based intensification practice in the consecutive years. From baseline productivity of about 4 Quintal / acre of Ragi presently on an average 10 Quintal/acre productivity has been achieved through seed replacement and adoption of SMI based PoP. After the first intervention cycle it was realized that productivity enhancement has to be augmented with increase in local level consumption of ragi through promotion of value added products at community level.

Box 5.1: Millet for Value Addition

In 2015 two SHG groups were trained on value addition of millets. They were provided internal marketing support and exposure to organic trade fair at Delhi Haat. These two SHGs pioneered the millet development agenda at local as well as regional level. At least 1800 household spread over 21 villages added ragi as a staple food after consumption of nutrient rich cuisines prepared by these groups. Presently the groups were engaged in local level marketing of four different products of Ragi namely *Balushahi*, *Laddu*, *Nimki* and Nutri mix pakora heading towards a shining cottage enterprise. Master trainers from the

⁴ Birsa Agriculture University

group were also engaged in training of SHG women on value addition of Ragi at village level. Since 2014, the project witnessed a strong comeback of finger millet in farming as well as nutritive food system at local level. This has provided a vision for revitalization of other millets such as *gundli* (local sorghum), *sawan* (barn yard millet) etc.

Table 5.4: Outcome of SMI

Tangible results	1600+ farmers were trained in Bero and Simdega
Achievements	<ul style="list-style-type: none"> • Re-grounding of activity in 25 villages • 1.5- 2 times enhancement in productivity of Ragi in major villages • Market price enhancement along with awareness generation about the benefits of millet intensification techniques and nutrition value of Ragi (Marwa or Finger millets) has led to large scale come back of ragi.

SMI helped in better access to improved seed varieties of Ragi (Marwa or Finger millets) which played key role in organic growth of the prototype. Use of *Aushadiya Matka Khaad* (manures) acted as killing two birds at one go. It has met the nutrient need as well as prevented pest attack.



Figure 5.3: Application of Matka Khaad in wheat



Figure 5.4: Effect of SMI in ragi field

- d. **SWI:** Supporting intensification of wheat was another unique intervention promoted under MKSP in Jharkhand. Village level trainings for intensification of wheat were carried out in 24 village in both the project areas of AISD. SWI helped the farmers to double the crop season by the efficient use of *in situ* residual moisture in a sustainable manner. SWI enabled farmers to use the low land s during the winter season which were traditionally kept fallow after paddy harvest. Use of *Aushadhiya Matka Khaad* replacing inorganic pesticides turned to be great blessing in disguise for the farmer. This reduced the cost of cultivation and increased the crop productivity.

Table 5.5: Outcome of SWI

Tangible results	Around 1600 farmers were trained but 1180 farmers adopted SWI
Achievements	<ul style="list-style-type: none"> • Self sustenance of SWI practices in 16 project villages of Bero • Use of PSB and Azotobacter for third consecutive crop cycle time in seed treatment • Setting up of over 10 acres contiguous SWI patches in four project villages



Figure 5.5: Wheat crop under SWI in Bero



Figure 5.6: Wheat crop under SWI in Thetaitanger

- e. **Organic based potato intensification:** Potato was one of the most popular rabi (winter) crop in Chhota Nagpur. Growing cost of cultivation was worrisome for most farmers as it lowers the net income. Organic means of potato cultivation was widely hailed and farmers were eager to invest for seed treatment and bio input usage after visible results in the field trials. Mass scale *Jeevamrit* preparation with local available cow dung, Neem (*Azadirachta indica*) and Sindwar (*Vitex negundo*) brought viable change in the potato cultivation in the project area. and variation of methods of application. Besides these, there was significant spillover effect of seed treatment in other crops such as wheat, green pea, mustard etc.

Table 5.6: Outcome of organic based potato intensification

Outcome	Community eagerness to adopt a pure organic based potato PoP as evolved through action learning cycle was met with mixed results due to adverse climatic conditions in the month of January
Tangible results	860 farmers were trained
Achievements	<ul style="list-style-type: none"> • Development of local stewardship for supporting farmers in grounding of practices • Bio fertilisers and pest control were popularised



Figure 5.7: Organic potato in a woman farmer's plot



Figure 5.8: Field image of organic potato cultivation

- f. **Nutrition garden:** Nutrition kitchen garden was established at 850 women farmers' houses on and average 1 decimal land (435 square feet) per household. This has helped to each household to get year round supply of vegetables for household consumption. Plants and vegetables were selected in a manner to ensure balanced diet to household members round the year. Kitchen wastes were recycled as manures and waste waters were used for watering the kitchen garden.

Table 5.7: Outcome of nutrition garden

Outcome	Strong community level awareness generation for the need of setting up organic based kitchen garden to achieve HH level nutritional security
Achievements	<ul style="list-style-type: none"> • Establishment of kitchen garden with 850 farmers using local and improved seed varieties. • 900 women farmers trained in the concept of nutrition garden in 33 villages



Figure 5.9: Nutrition garden in Bero block



Figure 5.10: Nutrition garden in Thetaitanger block

g. Composting techniques: Under MKSP, around 240 vermibeds were constructed in Bero and Thetaitanger blocks through partial support from government. Women farmers were trained to prepare vermicompost and market the same at local level.



Figure 5.11: Vermibeds construction and vermicomposting

- h. Animal husbandry:** With active support of animal husbandry department, a drive for vaccination and grounding of ethnovet practices was undertaken in 19 villages of Bero and Simdega. This was preceded by selection and dedicated training of Animal husbandry cadre. These elicited encouraging response of the community for adoption of ethnovet based local management practices of livestock.



Figure 5.12: Vaccination drive in villages under MKSP projects



Training on improved Lac cultivation



Papaya nursery bed



Household level mushroom production



Organic farming brought cheers

Figure 5.13: Miscellaneous promotional activities undertaken by AISD under MKSP project

EPILOGUE

MKSP found to be a success story of inclusive development of women farmers. Women farmers acquired multiple skills of eco-friendly and climate change coping farming techniques. Beauty of these empowerment process was each technique generated marketable products with huge local demands. In

fact, local demand was found to outgrow local supply. Women farmers and their SHGs became local entrepreneur with low investment.

Seeing is believing had large impact on fast adoption of new techniques. All techniques were performed by local women in their own field and household which facilitated in faster spread of MKSP concept and practices among village households.

MKSP also helped breaking some myths. Tribal and other original settlers (*Sadan*) by tradition never cultivated low land after paddy harvest during winter. These lands were kept fallow during winter and by and large used as open grazing land. SWI, organic oilseeds and pulse production converted low land into double cropped land with the benefit of fertility enhancement through organic cultivation and promoting legume cultivation.

Finally, nutrition garden, scientific cultivation of lac, marketing of vermi compost and disease free seedling production have immensely benefitted household food security and income enhancement.

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