



Final Project Report 2020

Strengthening Livelihoods of Women in Agriculture,
through Natural Resource Management

Mahila Kisan Sashaktikaran Pariyojana

DAY-NRLM, MoRD, GoI & Dept. of P & RD, Govt. of West Bengal

Implemented by

Loka Kalyan Parishad, West Bengal



Acknowledgement

We sincerely acknowledge cooperation, guidance & advice received from the following organizations:

- The Ministry of Rural Development, Government of India
- Panchayat and Rural Development Department, West Bengal State Rural Livelihood Mission, Government of West Bengal
- PD, DMMU, Birbhum, Purulia, Uttar Dinajpur, Dakshin Dinajpur and Alipurduar districts
- All Block Development Officers and Gram Panchayat Pradhans in the project area
- The members of the SHG institutions (VLF, GPLF, BLF)s
- Various experts in the field of Agriculture, Animal husbandry, Fisheries, Horticulture etc.
- The commercial banks and Micro Finance Institutes
- Barnamala Credit Co operative Society, Illamabazar (Run by BLF)
- Jamna Nitya Sangha Mahila SHG Co operative Society Ltd., Labpur (Run by GPLF)
- The institutes that extended help in skill development:
 - BCKV, UBKV, RKKV(Visva Bharati)
 - NIRD & PR, Hyderabad, IIT (KgP), IEST, West Bengal
 - BIRD, BRAIPRD, KVKs, WBCADC
 - PRADAN, BASIX, SAMUNNATI, FOSET etc
- For Monitoring and Evaluation
 - Divisional Commissioner, Bardhaman Division, West Bengal
 - World Bank Team
 - NIRD & PR, Hyderabad
- Experts from NMMU, MoRD, WBSRLM
- All dedicated staff members and Mahila Kisans under the project



28/8 Library Road, Kolkata - 700026
Telefax - 24657107, ☎ 65291878
lokakalyanparishad@gmail.com /
lkp@lkp.org.in

Loka Kalyan Parishad

A resource centre for collaborative action initiatives with local self government institutions



On the recommendation of the Panchayats and Rural Development Dept. Govt. of West Bengal, the Ministry of Rural Development, Government of India awarded, in 2013, the Mahila Kisan Sashaktikaran Pariyojana, (abbreviated as 'MKSP') or the programme for empowerment of women farmers to Loka Kalyan Parishad (in short LKP) for implementation in a few identified areas of our state. It gives us immense pleasure to bring out this booklet narrating the story of implementation and achievements of 'MKSP'.

Both the Union and the State governments have been implementing various programmes for development of women over the years but the MKSP was unique as it specifically acknowledged the contribution of women in agriculture and felt that something special needed to be done so that women engaged in agriculture are also recognized as 'Farmers'. LKP with all its experiences in the fields of livelihood development of rural poor based on natural resource management and involving local self government institutions (or Panchayati Raj Institutions) took the challenge of accomplishing the objectives of the MKSP. This publication narrates the story of LKP's journey towards successful implementation of the programme.

From a reading of the book readers will have an idea of the programme objectives, expected outcomes, strategies adopted for implementation, physical achievements, impact of the programme etc. described in separate chapters. It will not be out of place to mention here that most of the targeted 'mahila kisans' being landless, the strategies adopted by LKP for implementing this programme, has been acknowledged by the government as the development model for the landless poor. LKP gratefully acknowledges the support it received from all concerned including the Union and State governments, WBSRLM, district administration and others in successful implementation of MKSP.

Amalendu Ghosh

Kolkata
November 10, 2020.

(Amalendu Ghosh)
Secretary, Loka Kalyan Parishad.



28/8 Library Road, Kolkata - 700026
Telefax - 24657107, ☎ 65291878
lokakalyanparishad@gmail.com /
lkp@lkp.org.in

Loka Kalyan Parishad

A resource centre for collaborative action initiatives with local self government institutions



The MKSP is a well-designed programme implemented by the MoRD to mainstream the role of women in agriculture. The main objective of the project was to empower the women farmers through creation of sustainable livelihood opportunities to address Food and Nutrition Security at the household level based on Decentralized Natural Resource Management to lead a life of economic prosperity. Since the majority of the Mahila Kisans belong to the ultra-poor community under the project were landless, they did not have the potential to contribute any significant income from a single source of activity. Need was felt to engage most of the assisted families around the whole farming system, where a basket of compatible activities was taken up in an integrated manner that really contributed significant enhancement of income following sustainable agriculture practices as the core principle i.e. focusing on ecological relationship within man, animal and plants in the ecosystem.

Benefits that accrued by the Mahila Kisans included availability and accessibility of food round the year, regular cash flow in the household, chemical free healthy food reducing medical cost, enhancing income, production and productivity and most importantly, improved household status and become a part of the decision-making process in the family as well as enabling interactions in the external environment.

It was always a great challenge for the entire project to see a considerable stepping up of reducing poverty with more income generation, sufficient skill building, making provisions of better opportunities for access to additional land, seeds, finance, technologies and market connectivity along with formation of Mahila Kisan Farmers Producer companies by them.

All these happened successfully due to unleashing capabilities and innate desire of the poor to come out of poverty net through institutions that was established for them to provide space, voice and resources in the environment.

I like to express my deepest appreciation to the whole team of field officials, Project Managers, and the Self-Help Group leadership for their immense efforts, dedication and hard work to accomplish the project. My sincere thanks to all technical advisors, who extended their invaluable services in fulfilling the objectives of the project for the poor.

I would like to express my gratitude to the management team of NRLM, WBSRLM, state and district administrations including experts from concerned state departments for their constant support and guidance.

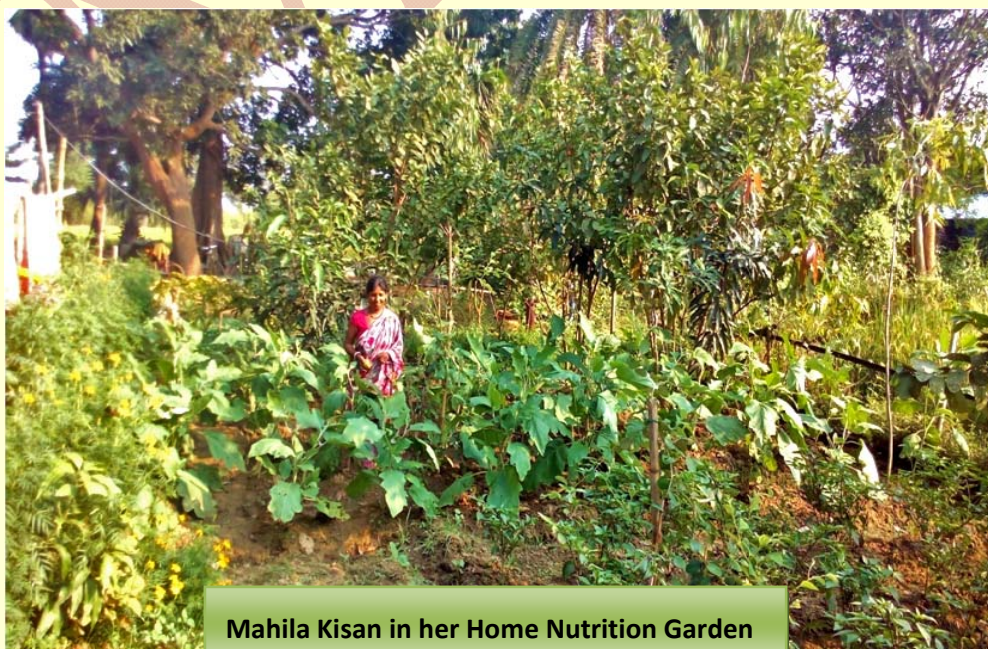
(Shyamal Gar)
Project Director, MKSP
Loka Kalyan Parishad



About Loka Kalyan Parishad (LKP):

Loka Kalyan Parishad (LKP), a Kolkata based non profit organization has been sincerely striving for sustainable development through Decentralised Natural Resource Management (DNRM) with special focus on food and nutrition security of the rural vulnerable sections of the population in general and women in particular since 1977. It was established by Late Sudhangshu Kumar Chakraborty, former Vice Chancellor of the Rajendra Agricultural University and recipient of the National 'Padmashree' award for his work with small farmers in the Gandak/kosi area in Bihar, Sankar Prasad Mitra, former Chief Justice of Calcutta High Court, Pannalal Dasgupta, a great thinker, Narendra Nath Sen, former member Secretary of the West Bengal State Planning Board, Akshay Kumar Koley, Industrialist and other dignitaries having a dream to bring in a qualitative change in the lives of the underprivileged primarily in rural Bengal and also in the adjacent states. LKP's ground level work focuses on people's initiatives through a people's institution framework on sustainable use of local natural resources in collaboration with PRI to reduce food insecurity and mal nutrition prevalent in rural Bengal and improve socio economic status of the poorest of the poor.

Loka Kalyan Parishad is registered under the *Societies Registration Act, 1961*. Subsequently, it obtained registration under the *Foreign Contribution Regulation Act, 1976* and obtained exemptions under Sections 12A and 80G of the *Income tax Act*. It obtained the Unique ID Registration No. - WB/2009/0015010 from Planning Commission, Govt. of India.



Mahila Kisan in her Home Nutrition Garden

Ongoing Projects of Loka Kalyan Parishad:

- Mahila Kishan Sashaktikaran Pariyojana (MKSP) under DAY-NRLM
- Integrated Watershed Management Programme (IWMP)/Pradhan Mantri Krishi Sinchai Yojana (PMKSY)
- Corporate Social Responsibility (CSR) Collaborative Project with ACC Ltd
- Ushar Mukti ,Bharat Rural Livelihood Foundation and Department of P & RD , Government of West Bengal
- Model Partnership project, WBSRLM under DAY-NRLM
- Social Mobilisation and Institution Development Project of SUDA/DAY-NULM
- Accelerated Development of Minor Irrigation (ADMI), Government of West Bengal
- ST Specific Rural Bio Technology Programme, Bose Institute, Kolkata
- Utkarsh Bangla under Paschim Banga Society for Skill Development (PBSSD), DDUGKY



Group based Grain Bank



Key Outcomes:

- Availability of food is ensured to 99.90 percent of Mahila Kisans through PDS.
- Accessibility of food is ensured to 100 percent Mahila Kisan from home production and purchase from market.
- Utilization or absorption of food is ensured to 53 Percent MK households with required calorie consumption(kcal).
- Improved net income (Rs. 63708.00 per annum) of the women farmer (Rs.15000.00 per annum in 2012-13) from sustainable agriculture (SA) and other livelihood resources with reduced cost of cultivation.
- Developed area specific model for the landless on Integrated Farm Intervention for wider replication in the project area (Land based, Pond based and Livestock based)
- Home Nutrition Garden (99.74 percent MKs) is developed in the homestead land to meet the daily requirement of vegetables.
- Access to additional land took place by 58.52 percent MKs with enhancement of production and productivity
- Upgraded the skills of the women farmers in SA practices, management skills of the Self Help Groups(SHG) and its associated tier to access productive resources (land, credit, technology, inputs and services) from the government and non-governmental sources.
- Created and strengthened the platform and institutions for women that enhanced participation in agriculture and related activities
- Drudgery for women farmers is reduced through use of gender friendly technologies and tools available in the Common Facility Centres throughout the project area.
- Mahila Kisans (MKs) have been empowered to raise their voices as an interface with the local governance for just and equitable distribution of resources and enjoy other rights and entitlements.
- Certified seeds have been produced for seed sovereignty and replacement.
- A pool of strong social capital have been developed from amongst the community and nested at the grassroots.
- Producer Groups (PGs) formed under MKSP have been federated into Producer Companies under Companies Act 2013 and Cooperatives under the Cooperative Societies Act, 2011.
- Organic clusters have been formed to enable the women farmers to enhance their income by selling organic vegetables.
- Through a well designed convergence mechanism with the line departments and government schemes, the poorest of the poor (PoPs) were served more efficiently.
- A strong bonding has been established with the Panchayati Raj Institution (PRI) with the SHGs at the village level.
- At the end of the project Mahila Kisans are empowered both in the household level and deal with the issues coming across at the society.



Summary of progress:

Sl. no.	Outcome	Target	Achievement
1.	Mobilisation & capacity building of Mahila Kisans(MKs) into institutional framework(MKSHG, Sub cluster, Cluster etc.).	To mobilize 60000 MKs mobilized into 6000 MK Self Help Group (SHGs)s & build up their institutions upto Gram Panchayat(GP) level.	<ul style="list-style-type: none"> 61109 MKs have been mobilized into 5900 MKSHGs 655 Gram Sansad Level Federation have been formed 50 GP Level Federations formed 5 Block Level Federations formed in 5 districts of West Bengal
2.	Access of additional land & water body under DNRM activities	To cover 24000 MKs under partnership (Pvt-pvt & pub-pvt) model on land, water, livestock & agro forestry	35764 MK (58.52 percent) have been brought under partnerships- Private-Private(Pvt-Pvt) & Public-Private (Pub-Pvt).
3	Attainment of food & nutritional security of MKs at house hold & community level through adoption of area specific, eco friendly SA practices	To bring 48000 families (80 percent) into eco friendly Sustainable Agricultural (SA) practices.	Yearlong food was available to more than 99 percent MKs at the household as well as community level from home/community and school nutrition gardens
4	Orientation & sensitization to the functionaries at the block level and Panchayat Samity level	To orient & sensitize all Block level local governments Panchayat Samities & other support to MKSHGs	11 Panchayat Samities have been oriented and sensitized adequately to provide responsive technical support for economic development of the MK.
5	Orientation & sensitization of the GP level functionaries representatives regarding MKSP.	To 48 GPs orient, train & to create linkages with GP & support them for economic development of the MKS.	100 percent of the target has been achieved.
6	To build up institutions for production and market access	Formation of 200 Producer Groups (PGs) with market linkage from village level to Block level & upwards	307 Producer Groups formed and federated in 3 cooperative societies and 5 producer companies having linkage with local & non local markets.
7	Enhancement of level of income	To earn Rs.3500-4000 Per month	MKs has able to earn Rs. 5309.00 on an average.
8	Creation of physical assets worth Rs.20500 on an average per family	To create assets like additional land, agro forestry tree plantation, live stocks, stock in grain and seed bank	Assets worth Rs. 46131.00 per MK on average have been generated under the project period.

Sl. no.	Outcome	Target	Achievement
9	Drudgery reduction through gender friendly tools for the MKs	To establish 50 Common Facility Centre (Equipment Hub) in 50GPs	48 Common Facility Centre (CFC) have been functional.
10	Development of social capital from amongst the community to provide sustained support to MKs	To develop & engage 450 local CRPs, PPs & Prani Sakhi to extend support to local MKSHGs.	510 CRPs, PPs, <i>Krishi Sakhi</i> , <i>Prani Sakhis</i> , <i>Matsyasakhi</i> , <i>Udyog Sakhi</i> and <i>Jaibo Sakhi</i> , Progressive Farmers, Village Volunteers have been developed.
11	Participation of MKs in bottom up plan process to incorporate those in the Annual GP plan .	To cover at least 75 percent, i.e in 34 GPs in the programe	76 percent of the MKs participated in bottom up planning process i.e 48 GPs under the project





Contents		Page No.
Acknowledgement		I
Foreword by the Secretary		II
From the Project Director		III
About the Organization		IV
Ongoing Projects		V
Key Outcomes		VI
Summary of Progress		VIII
Content		IX-XVI
Chapter 1	Background, Context, Goals, Objectives, Locations, Vulnerability	1-7
1.0	Background & Context	2
1.1.1	Project title	3
1.1.2.	Guiding principle	3
1.1.3.	Vision of success	3
1.1.4	Goal	3
1.2.	Broad objective	3
1.2.1.	Other Objectives	3-4
1.3	Location and coverage	4-5
1.3.1.	West Bengal Map	5
1.3.2	West Bengal Scenario	5
1.4.	Mobilization of Mahila Kisans(MKs) under MKSP	6
1.4.1.	Vulnerability	6
Chapter 2: Intervention Strategies followed along with Key Programme Components		8-16
2.1	Distinguishing Features of the Strategies	10-11
2.2	Strategy for Ultra Poor	12
2.3	Key Components	12



2.3.1	Institution Building under MKSP	12-13
2.3.2	Livelihood based Producer Groups	14
2.4	Roles played by different Community Institutions of Mahila Kisans	15-16
2.4.1	Self Help Groups	15
2.4.2	Upa-Sangha or the Sub-Cluster of SHGs or Village Level Federation	15
2.4.3	Sangha or Gram Pachayat Level Federation	16
2.4.4.	Block Level Federation (BLF) known as Federation in WB	16
Chapter 3: Target, Achievements and Progress under MKSP		17-43
3.1	Bottom up Planning process & Convergence with PRIs	19
3.2	Access to Land: Owned Land, Additional Land (partnership), Common Property Resource Management	20-21
3.3	Access to Finance	21-22
3.4	Access to input and services: all inputs and drudgery reducing equipments	24
3.5	Capacity Building: All Stakeholders	25-31
3.5.1	Capacity building of MKs	25-27
3.5.2	Institutional training for CRPs/PPs	28
3.5.3	LKP as a certified training provider	29
3.5.4	Publication of Training Materials	29-31
3.6	Development of Social Capital: CRP Strategy	31-34
3.6.1	Role and responsibilities of CRPs/PPs	32-33
3.6.2	Roles & Responsibility of <i>Krishi Sakhi</i>	33
3.6.3	Role of <i>Prani Sakhi</i>	33-34
3.6.4	Role of <i>Matsya Sakhi</i>	34
3.6.5	Role of <i>Udyog Sakhi</i>	34
3.6.6	Role of <i>Jaibo Sakhi</i>	34
3.7	Convergence: Line Departments, MGNREGA and Other Government Programmes/ Schemes	36-38
3.7.1	Convergence with Line Departments and MGNREGA	36-37



3.7.2	Participation in Other Governmental Programmes/ Social Welfare Schemes	37-38
3.8	Non Pest Management(NPM) Shop developed under MKSP	39
3.9	Formation of Organic Clusters: Journey to Organic Farming	39-40
3.10	Seed Certification: New Ventures under MKSP	40-41
3.11	Drudgery reduction: Common Facility Centre formed under MKSP	41-42
3.12	Creation of Agricultural Assets	43
Chapter 4: Adoption of Sustainable Agriculture		44-62
4.1	Methods of Sustainable Agriculture	46-48
4.2	Sustainable Activities	48-62
4.2.1	Home Nutrition Garden	48-49
4.2.2	Community Nutrition Garden	49
4.2.3	School Nutrition Garden	50
4.2.4	Group based Grain Bank	50
4.2.5	Group based Seed Bank	50
4.2.6	Introduction of New Crops	51
4.2.7	Common Property Resource Management: Preservation of Biodiversity	51-52
4.2.8	Use of Seasonal Fallows and Fallow Dykes	52
4.2.9	Soil Health Improvement and Plant Nutrition Management	54
4.2.10	Soil Moisture Conservation	54
4.2.11	LKP Model of Integrated Farming: Choice of technology by the MKs	57-60
4.2.11.a	Land based Integrated Farming	57
4.2.11.b.	Pond based Integration with Fish and Ducks, Poultry and Cultivation of Vegetables	58
4.2.11.c.	Small Animal-based Integration in combination of other activities	59
4.2.12	System of Crop Intensification (SCI)	61
4.2.13	Livestock Development	61
Chapter 5: Enterprise Development and Special Achievements		63-66



5.1	Development of Producer Groups, Farmer Producer Companies. Cooperatives	64-65
Chapter 6: Food Security, Income Generation , Production and Productivity		67-71
6.1	Food Security	68
6.2	Production and Productivity	69-70
6.3	Incremental growth through various sources of Income	70-71
Chapter 7: Monitoring, Evaluation and Public Disclosure		72-80
7.1	Monitoring	74
7.2	Internal monitoring by PIB	74
7.3	Monitoring and Review by the Community Institutions	75
7.4	Monitoring through MIS	75
7.5	External Review	75-76
7.6	Impact Assessment by the External Agencies: at a glance	76-80
7.6.1	Jalpaiguri Vivekananda Education Society	76-77
7.6.2	NIRD&PR : Some Observations during end evaluation:	77-78
7.6.3	Ministry of Rural Development	78-79
7.6.4	Observations by A.C. Nielson	79-80
7.6.5	Key Learning and Best Practices	80
Chapter 8: Documentation, Public Disclosure, Seminar, Conference and Special Achievements		81-87
8.1	Project Documentation	83
8.2	Public Disclosure	84
8.3	Seminars/ Conference Attended/Publication	84-85
8.4	Special Achievements	85-86
Chapter 9: Highlights of the Special Study on Food Intake and Women Empowerment under MKSP		88- 100
9.1.1	Objectives of the Study	90
9.1.2	Schedule of Enquiry	90
9.1.3	Definition of Food Security	90-91
9.1.4	Survey Reference Period	91



9.1.5	Availability of Food	91-92
9.1.6	Accessibility of Food	92
9.1.7	Utilization of Food	92-93
9.1.8	Household Expenditure on Consumed Food and Non foods	93
9.1.9	Health and Sanitation	93-94
9.1.9.a	Health: Medical Treatment	93-94
9.1.9.b	Regarding Sanitation Facility	94
9.1.9.c	Safe Drinking Water	94
9.1.10	Calculation of Energy and Household	94-95
9.1.11	Over all Food Security Results	95-96
9.2	Part II: Women Empowerment	96-99
9.2.1	Objectives of the Study	96-97
9.2.2	Reflection from the Mahila Kisans	97
9.2.3	Construction of Individual Women Empowerment Index (IWEI) under MKSP	97
9.2.4	Perceptions of the Mahila Kisans	97-99
9.2.5	Women Empowerment Results	99
Chapter 10: Financial Progress		101-106
10.1	Fund Allocation and Disbursement	102
10.2	Detail of Fund Received	102-104
10.3	Analysis of Expenditure Incurred	104-105
10.4	Quarterly Progress Reports	105
10.5	Cost of Livelihood Development of the poorest of the Poor under MKSP	105-106
Chapter 11: Constraints, Post Project Sustainability & Way Forward		107-108
11.1	Constraints	107
11.2	Post project sustainability	107-108
11.3	Way Forward	108
Abbreviations		109-111



List of Tables

Table no.	Contents	Page no.
1.1	Area of action under MKSP	4-5
1.2	Scenario of most vulnerable section under MKSP	6-7
2.1	Community Institutions: Location and Federations up to Block Level	13
2.2	Producer Groups and Companies	14
3.1	Participation, Submission and Incorporation in GP Plan	19
3.2	Status of Access to Land(acre)of the Mahila Kisan	20
3.3	Access of Land through Partnership at a glance (A +B)	21
3.4	Source wise Availability of Fund by MKs	22
3.5	Access to Input under Project Fund	24
3.6	Capacity Building of Various Stakeholders at a glance under MKSP	25-26
3.7	Trainee days utilized for the stakeholders under MKSP	27
3.8	Institutional Training of CRP/PP/ SHG Leaders, Progressive Farmers	28
3.9	List of Training Materials	29-30
3.10	Social Capital Developed	32
3.11	Benefits from Line Departments	36
3.12	MGNREGA: Participation, Person days & Wages Earned in 2018-19	37
3.13	Benefits from the Government Programmes Enjoyed by the MKs	38
3.14	Distribution of NPM Shops in the project area as in 2018-19	39
3.15	Organic Clusters	40
3.16	Production of Certified Seed in 2018-19	40
3.17	Common Facility Centre(CFC) formed under MKSP	41-42
3.18	Creation of Assets: Agriculture & Livestock	43
4.1	Sustainable Agriculture & its Techniques	46-47
4.2	Adoption of Sustainable Agriculture	47-48
4.3	Cost-benefit analysis of Home Nutrition Garden (8 cents)	48
4.4	Community Nutrition Garden on leased land (0.08 acre)	49



4.5	Participation of MKs : CPR	52
4.6	Seasonal Fallow and Fallow Dykes	52
4.7	Soil Health Improvement and Plant Nutrition Management Under MKSP	54
4.8	Participation in Land based Integrated Farming	57
4.9	Pond based Integrated Farming	58
4.10	Case study on Pond based Integrated Farming	58
4.11	Case study Small Animal based Integration	59
4.12	System of Crop Intensification	61
4.13	Livestock Development	61
5.1	Producer Groups(PG) formed under MKSP	64
5.2	Producer Enterprises formed under MKSP	64
6.1	Food Production and Consumption per Household	68
6.2	Production and Productivity per MK	69
6.3	Year wise Income from various Sources(Rs.)	70
9.1	Availability of Ration cards in Mahila Kisan HHs	91
9.2	Availability: PDS Sources (Cereals) per Month per HH Availability of Cereals per MK HHs per month (Kg)	91
9.3	Monthly Consumption , Home Production and Purchase	92
9.4	Average Monthly Consumption of Common Food Items	92
9.5	Utilization of Food	92
9.6	Household expenditure on Food and Nonfoods	93
9.7	Health and Sanitation	94
9.8	Availability of Safe Drinking Water	94
9.9	Consumer Units (CU)	94
9.10	Household above and below cut off consumption rate	95
9.11	Average Individual Consumption	95
9.12	Over all Status of Food Security	95



Chapter 10: Financial Progress		
10.1	Statement of Fund Received	102-103
10.2	Statement of Audited Expenditure as per Budget Head	103
10.3	Analysis of Expenditure	104
10.4	Performance Coefficients per MK (Investment Vs Achievements) under MKSP as on 2018-19	105

List of Graphs

Graph no.	Content	Page no.
1.1	Caste & Land wise distribution of MKs	6
3.1	Status of Access to Land of the Mahila Kisan	20
3.2	Access of Land through Partnership	21
3.3	Access of Fund by MKSHGs	22
3.4	Capacity Building of Mahila Kisans(%)	26
3.5	Capacity Building of CRP/PP	26
3.6	Benefit from various Government Programmes	38
6.1	Food Production & Consumption	68
6.2	Land in use(acre)	69
6.3	Productivity of major crops	69
6.4	Cropping Intensity	70
6.5	Incremental Growth of Income per MK per month(Rs.	70
10.1	Central and State Share	103

List of Charts

Chart no.	Content	Page no.
1.1	Caste wise Distribution of MKs	6
10.1	Percentage of Expenditure on Total Expenditure	104

Highlights

- The project has been implemented in 691 census villages of 50 GPs under 11 blocks in 5 backward districts of West Bengal namely, Birbhum, Purulia, Uttar Dinajpur, Dakshin Dinajpur and Alipurduar.
- Total 61109 Mahila Kisans have been mobilised under the project in 5900 SHGs.
- Predominant section of mobilized population belonged to marginalized section viz. Scheduled Caste (34 percent), Scheduled Tribe (16 percent), Other Backward Caste (9 percent), Minority (28 percent) and others (13 percent).
- Out of total MKs under coverage, most vulnerable sections (58115 MKs) are distributed in the following categories as landlessness(55189 MKs), women headed families(1960 MKs), differently abled(484 MKs) and single women (282MKs).



Chapter 1: Background, Context, Goals, Objectives, Locations, Vulnerability

1.0: Background and Context:

India lives in villages, but lives of villagers are still continuing to be miserable due to various reasons. Marginal farmers and landless people in the villages in general and women farmers, in particular, are the most vulnerable section of the village community. Nearly 33 percent of the agricultural laborers in India are women and more than 80 percent of the economically active women are engaged in agriculture and allied activities. In spite of the fact that they are responsible for 60 percent to 80 percent of food production and 90 percent of milk production in the country, women in farm in our country are denied the right to property as well as the opportunities to empower themselves. Several farm activities traditionally carried by men are also undertaken by women as men are pulled away for higher income as migrated laborers. Thus, agricultural environment in our country is witnessing a process may be termed as 'Feminizations of Agriculture'. In spite of these, the deep-rooted patriarchal norms and gender bias kept the women as a devalued human being in the society and did not allow the women to own the property. Control over the primary requirements of the Poor farmers in agriculture, in general, do not lie upon them and often remain outside the consideration of many service providers particularly those related to agriculture and allied activities. They have historically played a very important role in the conservation and enhancement of agro-biodiversity. In addition, they have been in charge of fetching water, fodder and fuel wood as well as taking care of farm animals. It has been the concern of the Govt. of India to bring them under focus so that these women can have their rightful place in the agriculture sector. To earn and retain this place, women have to be empowered to take up agriculture to its fullest potential.

At this backdrop Ministry of Rural Development (MoRD) launched a mission mode national programme called NRLM (later called as DAY - NRLM) with MKSP as one of its components making partnership with NGO and CSOs throughout the country. The partnership was guided by NRLM's core belief that the poor has innate desire to come out of the poverty and values of mutual agreement on processes and outcomes as agreed by the participating organizations. Loka Kalyan Parishad (LKP) having sound domain knowledge and relevant experience in rural livelihood development was awarded the project as Project Implementing Agency in 5 backward districts in the state of West Bengal.

Around 11.65 percent of the total rural female population in our intervening area is working as either agriculture workers or cultivators as per Census 2011 out of which 60000 women farmers are targeted under our project. Most of these people hold very small land holdings. The main constraints to alleviation of their poverty are landlessness, unviable land holdings and uncertainties of rainfall, including periodic occurrence of long dry spells, and also disastrous cyclones and floods during the monsoon season. Majority land holders (90 percent) belong to landless, small and marginal farmer categories under the project.



1.1.1. Project title:

‘Strengthening the Livelihood of Women in Agriculture, through Natural Resource Management in the backward blocks of the districts of Uttar Dinajpur, Dakshin Dinajpur, Birbhum, Purulia & Alipurduar in West Bengal’

1.1.2. Guiding principle:

To help the poorest of the poor women in agriculture to help themselves to come out of poverty utilizing their innate capabilities and intense desire through a people’s institutional framework

1.1.3. Vision of success:

Mahila Kisans (MKs) are made self-reliant to have access to the income streams throughout the year by themselves to lead a life with dignity & equity in the society.

1.1.4. Goal:

Attainment of food and nutrition security first for the poor by the poor through sustainable agriculture

1.2. Broad objective:

The main objective of the project is empowerment of the women farmers through creation of sustainable livelihood opportunities based on community managed effective sustainable agricultural practices and thereby successfully address the Food and Nutrition Security issues at the household level based on Decentralized Natural Resource Management (DNRM) (land based, pond based and small animal based) and raising their income level through enhancement of production and productivity.

1.2.1. Other objectives:

- To ensure yearlong food and nutrition security at the household and the community level.
- To improve net incomes of the women farmers from sustainable agriculture and other livelihood resources and reduce the cost of cultivation.
- To create area specific and need based sustainable agriculture practices for wider replication in the project area with specific technical protocol
- To upgrade the skills and capabilities of the women farmers in SA practices, management skills of the SHGs and its associated tiers to support farm and off-farm activities in order to access resources(land, credit, technology, inputs and services)of the Government and non-governmental sources.
- To create and strengthen the platform and institutions for women to establish the community managed system in agriculture and related activities



- To reduce drudgery for women farmers through use of gender friendly technologies and tools
- To increase the social capital like Community Resource Persons (CRPs), Para Professionals (PPs) and community volunteers as service providers to the women farmers

1.3: Location and coverage:

The project has been implemented in 691 census villages of 50 GPs under 11 blocks in 5 backward districts namely, Birbhum, Purulia, Dakshin Dinajpur, Uttar Dinajpur and Alipurduar (previously a part of Jalpaiguri district). In the area, 615 villages in 45 GPs under 6 blocks are called intensive area of action and 76 villages of 5 GPs under 5 blocks are called extensive area of action. Here, the **intensive area of action** includes those areas where LKP has worked for addressing food and nutrition insecurity in its earlier projects and **extensive area of action** formed with new area (1 GP each in 5 blocks) where LKP have developed new groups/SHGs in order to demonstrate a few entry point activities under this project.

Table 1.1: Area of action under MKSP

Intensive area of action				
District	Block	No. of GPs	No. of Census villages	No. of Mahila Kisans
Birbhum	Illambazar	9	109	10194
	Labpur	11	158	14489
Purulia	Jhalda II	5	73	5975
Dakshin Dinajpur	Harirampur	6	112	8312
Uttar Dinajpur	Itahar	9	133	8375
Alipurduar	Kalchini	5	30	5153
	6 blocks	45 GPs	615	52498
Extensive area of action				
Birbhum	Md. Bazar	1	11	2002
	Khairasole	1	11	1705
Purulia	Joypur	1	17	1213
Dakshin Dinajpur	*Banshihari	1	27	2762
Uttar Dinajpur	Goalpokhor	1	10	929



	5 blocks	5GPs	76	8606
5 districts	11 blocks	50 GPs	691	61109

*Shibpur GP under Bangshihari block has been declared urban and formed a part of the municipality by the Government of West Bengal.

1.3.1: Map of West Bengal



1.3.2: West Bengal Scenario:

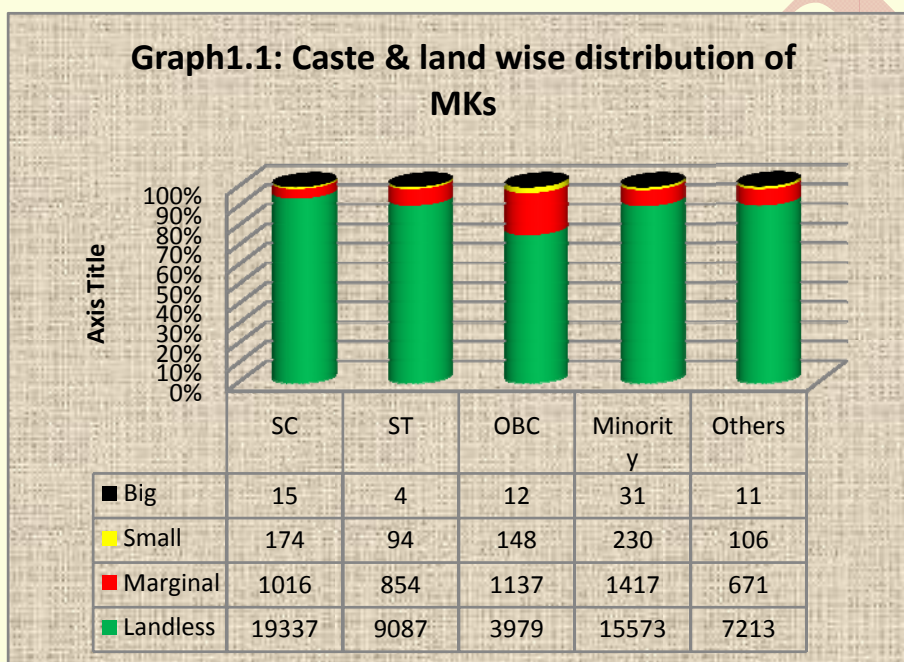
West Bengal comprises of 3 percent of India's land mass and 8 percent of the population is the 4th largest state, with population density above 1029 per sq. km (Census 2011), one of the highest in India. The majority of the population in the state lives in rural areas, most of whom are dependent on agriculture in some way or other for their livelihood. McKinsey Research Report, 2016 remarked that 68.1 percent of population lives in the rural area with agriculture as their mainstay of livelihood that is dominating both the landscape and economy. The land holdings are already very small in size, as over 90 percent land holders belong to small and marginal farmer categories and there is little scope for further increasing the current cultivable area. Although, the state is the 6th largest economy in the country, it witness exodus of huge population every year as the migrant laborer for seeking job to other states.

1.4: Mobilization of Mahila Kisans (MKs) under MKSP:

Identification of Poorest of the Poor (PoP) through Participatory Identification Process (PIP) and bringing them under the coverage of the project was the primary activity. It was done by the village level federation themselves from amongst the ultra poor sections and was mobilized into SHGs and capacitated on group activities following *Panchasutras*. In total, 61109 MKs have been identified and mobilized into 5900 MKSHGs at the grass root level.

1.4.1: Vulnerability:

Graph no. 1.1 represents the distribution of MKs based on their land size and caste. The highest landholdings belong to landless category 90.31 percent (upto 0.5 ha or 1.24 acre) followed by marginal farmers (8.34 percent) and small farmers (1.23 percent). Only 0.12 percent belongs to big farmers.



Graph no. 1.1 represents the distribution of MKs based on their land size and caste. The highest landholdings (55189 MKs) belong to landless category 90.31 percent (upto 0.5 ha or 1.24 acre) followed by marginal farmers (5095 MKs i.e 8.34 percent) and small farmers (752 MKs i.e 1.23 percent). Only 0.12 percent (73 MKs) belongs to big farmers.

The Pie chart no.1.1 indicates that a predominant section of mobilized population belonged to marginalized section viz Scheduled Caste (34 Percent), Scheduled Tribe (16 Percent), Other Backward Caste (9 Percent), Minority (28 Percent) and others (13 Percent).

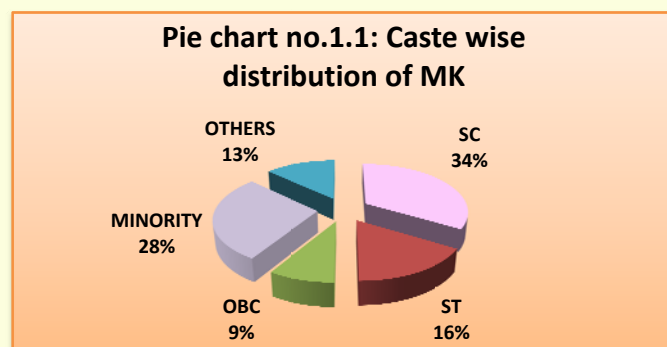


Table 1.2: Scenario of Most Vulnerable Section under MKSP

Types of vulnerability	SC	ST	OBC	Minority	Others	Total	%
Landless	19337	9087	3979	15573	7213	55189	95
Women headed family	776	277	0	588	519	2160	3.7
Single women	54	72	0	103	53	282	0.5

Differently abled	181	18	0	203	82	484	0.8
Total	20348	9454	3979	16467	7867	58115	
%	35.00	16.28	6.84	28.33	13.55		100

The table shows that among the most vulnerable sections with 58115 MKs(95.10 percent of the total MKs under coverage), landlessness is the biggest problem (95 percent) followed by women headed (3.7 percent), differently abled (0.8 percent) and single women with 0.5 percent.



Mahila Kisans on the way to attend a meeting, Harirampur, Dakshin Dinajpur



SHG in a meeting, Illambazar, Birbhum



Weekly meeting of the groups, Itahar, Uttar Dinajpur



Mahila Kisans mobilize into groups, Kalchini, Alipurduar

Highlights

- The Institutions were developed and mobilised 655 Village Level Federations (VLF), 50 GP Level Federations (GPLF) and 5 Block Level Federations (BLFs) in the intervention districts
- Developed group based micro entrepreneurship through formation of Producer Groups (307).
- Farmers Producer Companies (5) and Cooperative Societies (3) have been incorporated as per respective Government acts.
- Financial Inclusion for (5900 MKSHGs) through bank linkage to make funds available through Community Investment Fund (CIF), Revolving Fund (RF), bank loan etc.

Continued.....

A woman in a vibrant, multi-colored sari is working in a lush green rice field. She is bent over, tending to the plants. The field is filled with tall, green rice stalks, and the background is a dense green field under a clear sky.

.....Highlights

- Home/community/school nutrition gardens were used by 61109 households for food and nutrition security following SA practices.
- Access to additional land and water bodies through partnership mode also helped them to procure more food.
- Developed strong contingent of social capital (Krishi Sakhi-160, Prani Sakhi-102, Matsya Sakhi -78, Jaibo Sakhi-96, Udyog Sakhi-25 etc.).
- Common Facility Centres (48) were set up at each GP to reduce drudgery of the women farmers with gender friendly tools and equipment run by GPLF.



Chapter 2: Intervention Strategies followed along with Key Programme Components

Since most of the Mahila Kisan households belong to the marginalized section of the society, it was always our concern to build an empowerment process through creation of sustainable livelihood opportunities with a set of strategies in implementation process since its inception.

2.1. Distinguishing Features of the Strategies:

- **Universal Social Mobilization:** one woman member from the PoP and vulnerable women households from SC, ST, minority and landless families was identified through PIP by the members of the MKSHG themselves under MKSP. While identifying the target group, priority was given to include women-headed, single women; physically challenged households engaged in agriculture and allied activities.
- **Implementation by the Poor:** To mainstream the role of the poor in implementation of the project the **community managed and community owned women institutions** were developed such as SHGs and their federations upto block level; Producers Groups, Producer Co operatives and Producers Companies were also formed to carry out all activities under the project.
- **Intensive capacity building programme for all stakeholders:** It includes SHG management including financial and capital management, production and productivity enhancement, SA technology, knowledge and skill development, inputs and market linkages through proper training protocols, modules and action programmes designed for the purpose. Functionaries, People representatives of the GPs and Panchayat Samitis (PS) and the SHG federations were also capacitated on rights and entitlements of the people as well as on the bottom up participatory planning process and strengthening of women institutions.
- **Universal Financial Inclusion:** Financial literacy were promoted among the poor in order to **access to finance** and credit through bank linkage and make funds available through Community Investment Fund(CIF), Revolving Fund(RF), bank loan etc.
- **Adoption of Sustainable Agriculture (SA) practices was followed** with Decentralized Natural Resource Management (DNRM) and eco - friendly climate resilient technologies. All chemical fertilizers and pesticides were discouraged in agricultural practice under the project.
- **Home/Community & School Nutrition Gardens** were encouraged to optimize its production to mitigate **food security** in the MK households.
- Intervention of small livestock, fishery/other income generated activities was done to **enhance income level** of the MKs as a strategy for strengthening the livelihoods of the women farmers.



- **Access of Additional Land** and water bodies through partnership both Private-Private & Public-Private (Pvt-Pvt & Pub-Pvt) on the basis of sharing of produce was ensured from the seasonal and permanent fallows and other untapped lands lying with the Government as well as private individuals.
- **A strong social capital** was built up in the form of Community Resource Person(CRPs), Para professionals(PPs), from amongst the community as the foot soldiers of change agents to provide required services to the grassroots designated as *Krishi Sakhi, Prani Sakhi, Jaibo Sakhi, Udyog Sakhi* with special emphasis on agriculture and allied activities.
- Community organizations as a **platform for convergence** and partnership with various stakeholders were used to access the rights and entitlements, inputs and services from the governmental (PRIs and line Departments) and non governmental sources at state and national level.
- Emphasis was given on convergence with the programmes of the both Central and State Governments for developing synergies directly or through the Institutions of the poor.
- **Linkages with Panchayat Raj Institutions(PRIs)**: In view of eminent role of the PRIs in development and local governance, successful efforts were made to establish a strong platform for regular consultations, with PRIs in general, and Gram Panchayat offices in particular for exchange of mutual advice, support and sharing of resources for the livelihood development in the area.
- Developments of individual/group based **micro entrepreneurship** through formation of Producer Groups with backward forward linkages and empower the MKs to enter into profitable marketing.
- **Bottom UP Plan**: Participatory approach being the core value of the project, preparation of bottom up plans by the Self Help Groups(SHG) themselves in which demand and needs of the women farmers are to be integrated from the house hold level through SHGs upto the GP level for incorporation of those in the annual GP plan were emphasized.
- **Common Facility Centre (CFC)** were set up as a strategy of the project to reduce drudgery of the women with gender friendly tools and equipments to use in agriculture.
- **Convergence** with line departments and MGNREGA played a significant role to meet the practical as well strategic needs of the women farmers in course of the livelihoods development under MKSP.
- The centre point of the strategy was to ensure **increase in the income** of the target MKs, and thereby ensure their families' food and nutrition security and also to enhance their importance in the family.

2.2: Strategy for Ultra poor

Enhancement of livelihood of the PoPs through a basket of activities with reduction of risks

1. Every poor household has been supported on at least 2 primary sector activities i.e. Agriculture and livestock
2. Home and community nutrition garden will be developed in each household to secure household level food security.
3. Opportunities have been provided to enable every MK to earn some income from additional sources like, nursery, seed bank, grain bank, agro forestry fisheries etc., wherever available.
4. Identification and mobilization of PoPs into groups and access to finance (micro credit planning) for them have been done by the women institutions like Village Level Federations(VLFs), GPLF and BLF.
5. Women institutions took active role in the whole process (input, technology, production, marketing, convergence etc).
6. Capacity building and hand holding through CRP strategy to scale up the production and productivity.
7. Introduction and replication 0.5 acre model by sustainable agriculture practices on wherever the land is available for them in addition to her own land.
8. Access and utilization of natural resources of various kind like fallow (seasonal and permanent), degraded land, land on embankment, road side, canal side etc., waste land, water bodies lying with public and under private ownership

2.3: Key Component:

The major component, i.e, institution building of the poor is being discussed here. Other important components have been reported in the next chapters.

2.3.1. Institution Building under MKSP



Building institutions of the poor was one of the non-negotiable aspects under the project activities. 5900 MKSHGs have been formed in village/hamlet level. These small MKSHGs are federated at village, GP and block level. The SHGs & their federations are very important platforms for empowering the women that provides livelihood opportunities, confidence for raising voices against social injustices,



particularly against women. The SHGs have been federated at village level (Village Level Federation or VLF), at GP level (Gram Panchayat Level Federation/GPLF) and at block level (Block Level Federation/ BLF/*Mahasangha*). Mahila Kisans are the members of these SHGs, and their representatives manage the Sub-Clusters, Clusters and Federations. Beside these, another institution known as Producer Groups have also been developed in our project area with a view to organize **group based production and marketing of commodities**. In a larger scale the MKs have formed Producers' Companies also and five such companies have been registered under the project.

Table 2.1: Community Institutions: Location and Federations up to Block Level

District	Block	GP	No. of MKs	No. of MKSHGs	No. of VLFs	No. of GPLF	No. BLFs
Birbhum	Labpur	11	14489	1425	116	11	1
	Illambazar	9	10194	986	97	9	1
	Md. Bazar	1	2002	195	7	1	1
	Khairasole	1	1705	172	8	1	0
Purulia	Jhalda II	5	5975	512	54	5	0
	Joypur	1	1213	123	11	1	0
Dakshin Dinajpur	Harirampur	6	8312	807	98	6	1
	Banshihari	1	2762	268	27	1	0
Uttar Dinajpur	Itahar	9	8375	820	167	9	1
	Goalpokhor	1	929	84	5	1	0
Alipurduar	Kalchini	5	5153	508	65	5	0
Grand total		50	61109	5900	655	50	5

It may be seen from the above table that there are 655 VLFs at village level, 50 GPLFs and 5 BLFs have been developed in GP level and Block level. Block level federations or Mahasanghas have been formed in Illambazar, Labpur and Md. Bazar block of Birbhum district, Harirampur block of Dakshin dinajpur district and Itahar block of Uttar Dinajpur district.

2.3.2. Livelihood based Producer Groups



Members of Producer Groups with their Marketable Surplus
Kalchini, Alipurduar

Producer Groups based on farm & and other supplementary activities were formed to facilitate the willing SHGs members to start collective production and marketing with their marketable surplus. They had been provided with appropriate customized training, handholding and support for village and GP level management of enterprises, productivity & quality enhancement, risk mitigation, and value addition upto linkage of markets.

Functions of the Producers' Group at the collective level:

- Purchase or procurement of inputs for production through a “core committee” and get ready for collective production as well as collective marketing.
- Local processing and storing of inputs and outputs
- Marketing and selling of the produce

Table 2.2 Producer Groups and Companies

Sr.no	District	Block	Producer Group	Cooperative Society	Producer Company
1	Birbhum	Labpur & Illambazar	261	2	3
2	Dakshin Dinajpur	Harirampur	12	0	1
3	Purulia	Jhalda II	8	1	1
4	Uttar Dinajpur	Itahar	21	0	0
5	Alipurduar	Kalchini	5	0	0
Total		6	307	3	5

Table 2.2 reveals that a no. of 307 Producer Groups (PGs) have been promoted at the village level with 4812 members with an intent of developing a business acumen and bring a business orientation in the current livelihood activities of the members of the PGs. They are interested to sale or market their produce to generate more income. Further, 3 Cooperative Societies have been formed having registered under West Bengal Cooperative Society Act, 2006 and 5 Farmers Producer Companies have been incorporated under Companies Act, 2013.

2.4: Roles played by different Community Institutions of Mahila Kisans

2.4.1 Self Help Groups:

- Awareness generation and mobilisation of women from the farmers families for inclusion into the SHGs
- Assess their livelihood practices, vis-a-vis natural resources available locally
- Assessment of families requirements for ensuring food and nutrition security
- Assessment of other needs of the families and members' special acumen if any
- Preparation of livelihood plan compiling individual member's needs and submission to the higher institutions.
- Generation of fund, by way of savings, government grants, loans etc. and ensure its fruitful use.
- Development of bondages among the members to enable them to stand by one another and confront social evils.



SHG members attend meeting

2.4.2. Upa-Sangha or the Sub-cluster of SHGs or Village Level Federation:

- As per standard practice of the SHGs are organised as a body of SHG representatives at the "Gram Sansad" level, which is generally co-terminus with the villages and called Upa-Sanghas.
- Imparts trainings for proper management of the SHGs, ensure compliance of "Panchasutra"
- Attends to particular problems if arises,
- Complies SHG plans and makes the up-sangha plans for onward submission to the Sanghas.
- Supervision and Monitoring implementation of the plans
- Works as a conduit between the Sanghas and the SHGs.



Village Level Meeting, U.Dinajpur

2.4.3. Sangha or Gram Pachayat Level Federation:

As the name suggests this is the body constituted by representatives of Upa-Sanghas.

- Main function of the Sanghas is to maintain liaison with the Gram Panchayats
- Consolidate the livelihood plans of the SHGs through Upa Sangha and try to integrate with GP plans so that support from appropriate government schemes can be obtained
- Assessment of training needs of the SHG members and arrange the same.
- Help SHGs obtaining financial assistance, grants and loans etc.
- Monitoring the performance of the CRPs engaged by LKP in this Project.
- Sanghas have been capacitated to manage the fund flow under the MKSP. As a matter of policy LKP ensured that whatever fund, inputs in kind other benefits are given to SHGs are routed through the Sanghas. They lived up to the LKP's expectation very successfully.
- Dissemination of information & awareness generation on issues as Gram Sabha, livelihood enhancement, health, nutrition, sanitation, education etc.
- Providing immediate support to the vulnerable and the destitute.



Meeting of GPLF, Jhalda II, Purulia

2.4.4. Block Level Federation (BLF) known as 'Federation' in WB

- Facilitate need based guidance regarding technical & managerial assistance to the GPLF, VLF and MKSHG members.
- Problem solving and conflict resolution at all levels.
- Undertaking social audit
- Promoting & facilitating all support to newly formed producer groups/ livelihood groups through livelihood resource pool & partnership with all relevant stakeholders.
- Quality management of MKSHGs
- Maintaining MIS, arranging review meetings & field visit with PIA & block level government officials.
- Undertaking financial linkages, micro credit, insurance etc.
- Resource generation through convergence/ partnerships with govt. & non govt. agencies.
- Mobilisation of community professionals <https://youtu.be/QtPMHgQwt6U>



GPLF members meet at BLF meeting, Labpur

Highlights

- Mahila Kisans (76 percent) participated in the bottom-up planning process in 2018-19 compared to participation of 65 percent in 2013-14. Out of the total plans submitted, 81.06 percent were incorporated in 2018-19 in place of 61.82 percent in 2013-14.
- Land owned and accessed in lease per MKs was 0.26 acre in 2013-14 that was enhanced to 0.76 acre in 2018-19.
- Additional land (road and canal side, unutilized land, culturable waste land, seasonal fallows etc.) were accessed by MKs in two modes, (i) Public -Private partnership and (ii) Private -Private partnership.
- Access of total land by these kinds of partnership was found in 7361 families using 1102 acre of land in 2013-14 while that was turned into 12211 acres of land to be used by 35764 MKs at the end of the project.
- In case of Public -Private partnership, 1529 MKs were found to procure 113 acres of land which was enhanced to 1395 acre and used by 12372 MKs in 2018-19.
- SHGs accessed institutional credit facilities to avail fund per MK amounting Rs. 14400 (2018-19) which was Rs. 8500.00 in 2013-14.
- Total 6936 training programmes were organized for the MKs with 10 trainee days per MK on an average and for the CRPs and PPs it was 133 and 162 days respectively.
- LKP has been recognized as a certified training provider by the Govt. of West Bengal under Utkarsh Bangla, PBSSD, under DDUGKY.

Continued.....

....Highlights

- LKP has developed theme based distinct modules, AV training materials, books etc. that has been utilized by the project staff, community institutions, capacity builders and other stakeholders.
- Institutional trainings received by the CRPs/PPs/Progressive farmers, village Volunteers (939 nos.) from eminent institutes at the state as well as national level such as NIRD &PR, BIRD, NABARD, BCKV, UBKV, WBCADC, KVKs, FOSET etc.
- Resource pool of 510 personnel have been developed, out of which 104 nos. of CRPs/ Master Trainers have been deployed by the WBSRLM in different districts.
- Maximum number of MKs were benefited (50,259) through convergence from ARD department followed by MGNREGS (29872), Agriculture (38072), WBCADC (18478), Horticulture (9131) and Fishery (8056), Health (38996) and PDS(60253) during the project period.
- It was found that 29872 MKs earned total wages amounting Rs.3921 lakh in 2018-19 i.e., average earning per MK households Rs. 12943.00 at the end of the project.
- MKs (93.04 percent) have practiced Non-Pest Management system in their field as well as sold products in the locality.
- Twenty 'Organic Clusters' were formed in the districts of Birbhum and Purulia under MKSP.
- MKs (577) participated in Certified Seeds production programme following the stringent protocol under the Seed Certification Authority, Govt. of West Bengal.
- In 2018-19, 105 MKs produced 462 qtl of paddy seeds with Rani Dhan, Sahabagi and Gotra 1 varieties in Birbhum and Purulia districts with a turnover of Rs.973000.00
- Common Facility Centers (48) have been established in 48 GPs that was utilized by 38318 MKs in lieu of paying hiring charges.
- The average value of assets created by each MK worth Rs. 46131.00 at the end of the project.

Chapter 3: Target, Achievements and Progress under MKSP

MKSP, a special programme for livelihood enhancement and recognition of role of women in agriculture demanded a concerted effort for its successful implementation. Efforts have been made to enhance their capacities, increase their income, encourage their participation in agriculture and allied activities. It also ensured food and nutrition by securing the primary livelihood basket with increasing production and productivity. It is difficult to portray the entire journey since its beginning. Hence, only certain milestones and progress are reported here that would highlight empowerment scenario of Mahila Kisans under the project.

3.1. Bottom up Planning Process & Convergence with PRIs

Preparation of Bottom up plans is a unique process of participatory approach as practiced by LKP to prepare the seasonal livelihood plans by the MKSHGs themselves in which demand and needs of the women farmers are integrated from the house hold level through SHGs upto the GP level for incorporation in the Annual GP Plan. It helps facilitate support and sharing for the livelihood development of the poor by the Panchayat. This is also a process of empowerment in which Mahila Kisans from the disadvantaged section raise their voices as an interface with the local governance in decision making process for just and equitable distribution of resources.

Table 3.1 Participation, Submission and Incorporation in GP Plan							
2013-14	2018-19	2013-14			2018-19		
Participation of MKs		No. of Plans					
		Submission	Incorporation	% of incorporation	Submission	Incorporation	% of incorporation
19733(65%)	46389(76%)	12244	7569	61.82	33940	27511	81.06



The table shows that the percentage of Mahila Kisans participated (76 percent) in the planning process in 2018-19. It was 65 percent in 2013-14. Out of total number of plans(33940) submitted /by the MKs, 81.06 percent were incorporated in 2018-19 making a huge difference than that took place in 2013-14 with 61.82 percent of incorporation. The highest number of plans incorporated in the district of

Dakhshin Dinajpur (85.86 Percent) followed by Birbhum (85.56 Percent), Uttar Dinajpur(75Percent), Alipurduar (81.02 Percent) and Purulia(68.42 Percent). For detail [click here.](#)

3.2. Access to Land: Owned Land, Additional Land (partnership), Common Property Resource Management

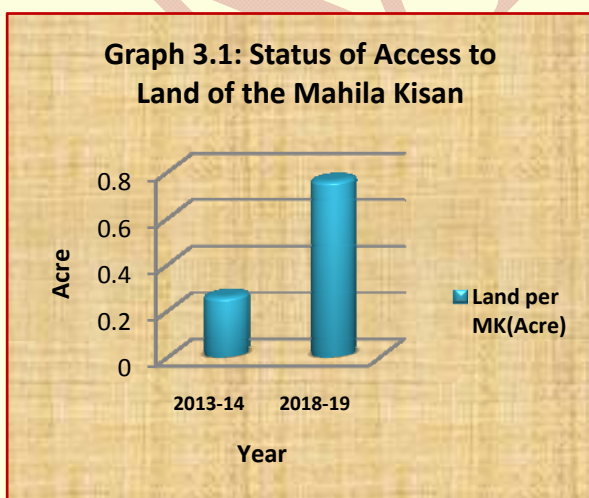


Land is the most critical component in any kind of agricultural activity but it is scarce in terms of availability while 3 percent of landmass is only available for this purpose in the state of West Bengal. It is a great bottle neck for the majority (90 Percent) of the Poorest of the Poor MKs under this project that turned into a great challenge for LKP

to find out of land where ever it was available. In this case, LKP followed a unique practice to procure and use any type of untapped and unutilized fallow land through [Public -Private](#) and [Private-Private Partnership](#) mode and generate additional income to meet the challenges of land scarcity.

Table 3.2: Status of Access to Land(acre)of the Mahila Kisan						
Particulars	Land size(acre)2013-14			Land size (acre)2018-19		
	Owned	Leased in land	Total land	Owned land	Leased in land	Total land
Land(acre)	6832	1102	7934	34025	12211	46235.27
Total MK (No.)	30145			61109		
Availability of land per MK(acre)	0.23	0.03	0.26	0.56	0.20	0.76

The table above shows the average quantum of land held by MKs either owned or leased in at the end of the project period. The size of land accessed by MK in the year 2013-14 was 0.26 acre which was increased to 0.76 acre at the end of the project.



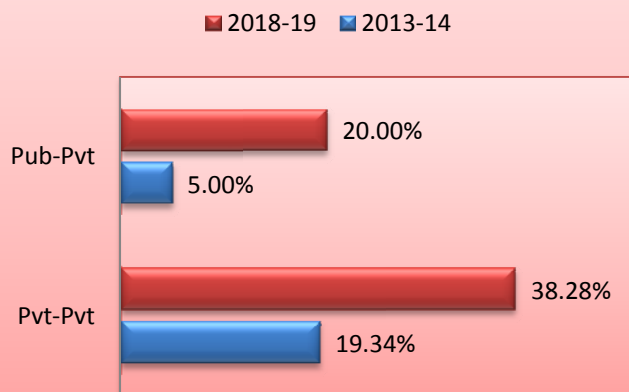
Partnership Mode: The constraint of landlessness was overcome by taking the fallow, (permanent and seasonal), culturable waste land, road side and canal side unutilized land on lease on the basis of sharing. Private lands which remain fallow in between two

seasons are taken on seasonal lease in **Pvt-Pvt Partnership mode(A)** for a duration of short period and public land on the basis of Public – Pvt partnership (B) on long term lease.

Table 3.3: Access of Land through Partnership at a glance (A +B)

Particulars	Private - Private Partnership (A)				Public - Private Partnership (B)			
	2013-14		2018-19		2013-14		2018-19	
	MK	Land (acre)	MK	Land (acre)	MK	Land (acre)	MK	Land (acre)
MK participated	5832	989	23392	10816	1529	113	12372	1395
MK covered	30145		61109		30145		61109	
%	19.34		38.28		5.00		20.0	

Graph 3.2: Access of Land through Partnership



The table depicts that there was a considerable change in participation that took place by MKs (5832) in 2013-14 with 989 acres of land, while the figures jumped into 23392 MKs possessing 10816 acres of land in 2018-19 followed Private- Private partnership. Similarly, In case of Public - Private partnership, only 1529 MKs procured 113 acre of land in 2013-14 that was enhanced to 1395 acres of land by 12372 MKs in 2018-19.

Calculation on total access of land by different mode of partnership finds out that 7361 family accessed total 1102 acre of land in 2013-14 while 12211 acres of land was accessed as additional land by 35764 MKs (58.52 percent) under MKSP. It may be mentioned here that the target fixed at 24000 (40 Percent) for this purpose in the DPR exceeded by 11764 i.e by 19 percent. Birbhum stands in the highest position followed by Dakshin Dinajpur, Uttar Dinajpur , Purulia and Alipurduar. For detail [click here](#).

3.3. Access to Finance: It was important to bring out the MKs out of the debt-trap in the process of alleviation of poverty. The primary duty of the community institutions, therefore, was to enable the SHGs to access the credit facilities from the banks and also other available government funds like Community Investment Fund (CIF), Revolving Fund(RF), VF etc, besides loan from their own sources of funds . It has been possible for the SHG Federations to establish strong linkage with the financial institutions and DRDCs to avail the financial support in the forms of loan or otherwise and utilize the fund in livelihood activities on the basis of their Micro-Investment Plans (MIP). Under MKSP, the SHGs were trained to prepare MIPs and seek financial assistance as mentioned below.

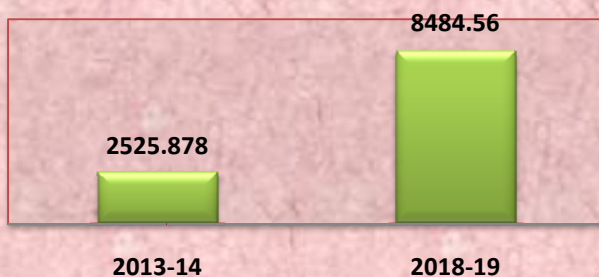
Table 3.4: Source wise Availability of Fund by MKs

Source of fund	2013-14				2018-19			
	Fund received Rs. in Lakh	No. of SHGs	Fund receive per MK(Rs.)	% on total SHG covered	Fund received Rs. in Lakh	No. of SHGs	Fund receive per MK(Rs.)	% on total SHGs covered
RF	265.62	2354	1100	79	402.37	3158	1300	54
CIF	154.5	634	2400	21	1426.60	2596	5500	44
Bank loan	2105.76	2108	10000	71	6655.60	4463	14900	76
Total(Rs.in lakh)	2525.88				8484.57			
No. of SHG covered	2980				5900			
Fund per SHG(Rs. In Lakh)	0.85				1.44			
Fund per MK (in lakh)	0.085				0.144			

The funds mentioned in the table above include RF, CIF and bank credit only. The total amount of fund received amounting Rs. 8484.57 lakh in 2018-19 that was 3.36 times than that was received in 2013-14. Sources of fund was found to be highest from bank Loan (76 percent) followed by RF (54 percent) and CIF (44 percent). The fund accessed by each SHGs amounts Rs. in 1.44 lakh in 2018-19 which was also 1.7 times than that was received Rs.

Graph no.3.3: Access of Fund by MKSHGs

■ Fund received(Rs in Lakh)



85000 in 2013-14. It reveals that availability of fund per MK received at the end of the project was Rs. 14400 on an average.





Women in Dharu Kalan sarai in the CUS meeting. In the CD Uttar Division. (11/11/2019)



Various activities of MKs in the intervention area (in MKSP)

3.4. Access to Input and Services:



Distribution of mushroom spawn as Kalchini, Alipurduar

Under MKSP, Mahila Kisans were provided with some material inputs in participatory cost basis such as seeds, saplings of fruit tree, chicks, ducklings, piglets, materials for pit, trellis, mushroom spawn etc. Almost every individual MK has received some kind of inputs besides training, handholding etc. Cost was calculated that Rs.2072.00 per MK was given on an average during the project period, These apart, Equipment and machinery supports to all the Common Facility Centres and logistics support to

Mahila Kisan Producer Companies have been provided as community investment support. Following materials are provided as inputs to the women farmers from MKSP fund only:

Table 3.5: Access to Input under Project Fund

Sl. No	Type of Input material	Beneficiary type	No. of beneficiaries
1	Seeds, fence, materials for trellis etc.	Individual/SHG	60053
2	Chicks, ducklings, goat kids, piglets for small ruminant rearing	Individual/SHG enterprises	57640
3	Fish lings , fish spawn for fishery	SHG enterprises	5723
4	Materials for vermi / NADEP pits	Individual/SHGs	49519
5	Mushroom spawn etc.	Individual/SHGs	10640
6	Saplings for horticulture, agro forestry etc.	SHGs	11098
7	Gender friendly drudgery reducing equipments	VLF/GPLF	48
9	Container, weighing machine, sealing and stitching machines, bottles for NPMs, etc. for Producer Groups and Producer Companies	Producer Groups and Producer Companies	4812
10	Shed net, naturally ventilated poly house etc. and logical infrastructure support for Producer farmers and organic clusters	Producer Groups and Producer Companies	5

Financial contribution for this purpose has been calculated as Rs.1265.92 lakh which is 94 percent of the total project cost.

3.5. Capacity Building: All Stakeholders

3.5.1: Capacity Building of MKs: The long-term self-reliance and sustainability of the



Skill building on book keeping and interlending Jamna GP, Labpur

community people critically depends on the knowledge gained, awareness generated and capacities developed of the members, leaders of SHGs and their federations at the first instance in the project implementation framework. This, in turn, calls for systematic training of a whole range of

stakeholders also. More importantly, the capacity building of Community Resource Person(CRPs), Para Professional(PPs), *Krishi Sakhis*, *Jaibo Sakhis*, *Udyog Sakhis*, Progressive Farmers, are important as these community cadres will in turn undertake capacity building of the MKs at the grassroots. Therefore, appropriate architecture for capacity building of the women farmers, community level workers and community institutions has also been developed to suit the purpose.

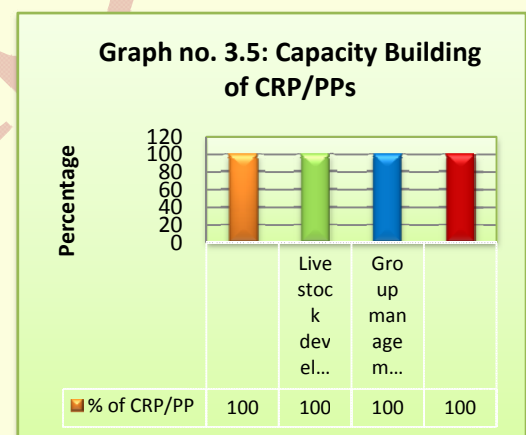
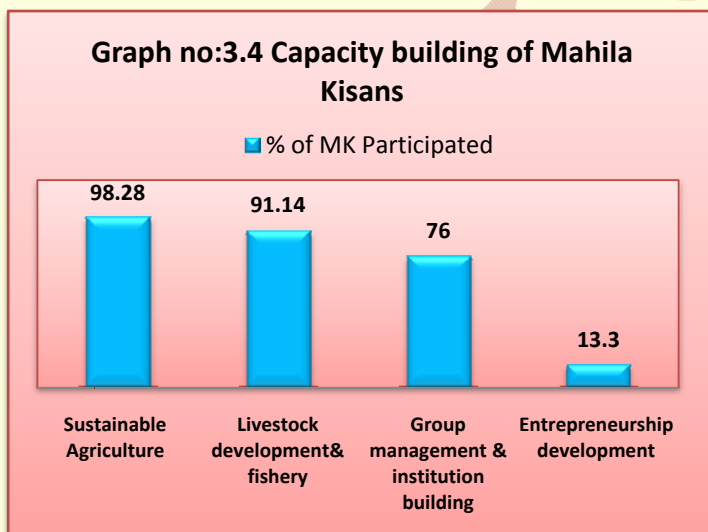
Hence, a series of structured training programmes both theoretical and practical were organized to enhance the skill of women in agriculture , small animal rearing, fish culture, bio fertilizers and pesticides etc. to enable them pursue their livelihoods on a sustainable basis. Suitable and distinct training protocols, training modules, materials and training schedules have been developed for the stakeholders. Experts, master trainers, community best practitioners in different fields were engaged for the purpose. Efforts were also made to transfer agricultural technologies through institutional, non institutional training and handholding programmes through the community resource person of various categories.

Table 3.6: Capacity Building of Various Stakeholders at a glance under MKSP

Main Topic	Participants	No. of training	No. of Participants	% of target beneficiaries
MK, SHG leaders, Progressive Farmers and Village Volunteers				
Sustainable Agriculture	MK, SHG leaders, Progressive farmers and village volunteers	6936	60057	98.28
Livestock development& fishery	Same as above	5472	55695	91.14
Group management and institution building,Bank linkage	Potential MKs, SHG leaders	7280	46379	75.90
Entrepreneurship	MK, SHG leaders,	556	8127	13.3



development (Producer Group and companies)	Progressive farmers and village volunteers			
Handholding	MK	6734	59984	98.15
CRP/PP/ Master Trainer				
Sustainable Agriculture	CRP & PP	195	436	100%
Livestock development& fishery	CRP & PP	282	436	100%
IB & CB, enterprise development finance , rights and entitlements, Relation with PRIs etc.	CRP & PP	174	436	100%
PRI members and representatives				
Orientation of the project, PRI rules & regulations, livelihood development of the PoPs, Bottom Up Planning etc.	GP Pradhan, Panchayat (GP & PS)Representatives & Functionaries	6	172	100%



The table above shows that total number of 6936 training programmes were organized on sustainable agriculture and related topics for 60057 nos. (98.28 percent) of MKs, SHG leaders, progressive farmers etc followed by 91.14 percent MKs have been capacitated on rearing of small ruminants and fishery activities, 76 percent on Group management and institution building. Besides, 98.15 percent of beneficiaries have received handholding support simultaneously. Apart from these, training on rights and entitlements, entrepreneurship development also organized for the MKs. Training for all the CRPs and PPs (100 percent) were organized on sustainable agriculture, livestock development and other related issues. The training imparted on a wide range of sustainable agricultural issues to the Mahila Kisan, SHGs as well as the CRPs and Para Professionals which includes Soil Health Improvement, Plant Nutrition Management,

Bio Pest Management, Soil Moisture Conservation, Seed Treatment and Seed Preservation, Seed Production, System of Crop Intensification, Crop Diversification, CPR Management, Pitcher Irrigation, Drip Irrigation, Water Conservation Techniques etc. All MKs and their leadership were capacitated to join in the bottom up planning process, attend Gram Sansad and Gram Panchayat meetings and raise their voice for their rights and entitlements. MKs, in particular, were trained to maintain the food security at home, caring her own health, care of children and their education, prevent early marriages and domestic violence, abuse of liquor etc. in a group with united face.

Table 3.7: Trainee days Utilized for the Stakeholders under MKSP

Particulars	No. of trainee days	Trainee days per participants
Mahila Kisans	585123	10
Para Professionals	26594	133
Community Resource Persons	42977	162
Panchayat Functionaries	688	4

The above table shows the number of trainee days for the stakeholders under MKSP. It depicts that MKs have been provided with minimum 10 trainee days on an average as classroom training. Handholding programmes were done separately. The trainee days in case of CRPs and PPs were 133 and 162 days respectively for intensive training programmes.



Capacity building at a glance under MKSP

3.5.2. Institutional Training for CRPs/PPs

Table 3.8: Institutional Training of CRP/PP/ SHG Leaders, Progressive Farmers		
Name of institution	No. of trainees	
National Institute of Rural Development & Panchayat Raj (NIRD &PR)		29
B .R. Ambedkar Institute of Panchayat & Rural Development(BRAIPRD)		132
Bidhan Chandra Krishi Viswa Vidyalaya(BCKV)		119
Uttar Banga Krishi Viswabidhyalaya(UBKV)		32
NABARD and BIRD, Lucknow		16
WB Comprehensive Area Development Corporation(WBCADC), GoWB		393
Krishi Vigyan Kendra (KVK)		208
Forum of Scientists, Engineers & Technologists(FOSET)		10
Total		939



Training of CRPs/PPs in UBKV, Coochbehar

improved farm practices, , disease management, primary health care, animal rearing process, ethno veterinary medicinal practice etc. in the farm station of the agricultural institution and Panchayati Raj, Livelihood Planning, Financial Inclusion, Convergence in BRAIPRD, NIRD &PR, BIRD etc.

The table presents slew of various academic and institutional training programmes that was organized for the CRPs, progressive farmers, SHG leaders etc. It included 939 participants to receive residential training from the institutions already mentioned in the table above. Both theoretical and practical handholding already took place on sustainable agriculture,



Training of MKs& Progressive Farmers , Itahar,Uttar Dinajpur



3.5.3. LKP as a Certified Training

Provider: LKP has been recognized as a certified training provider by Department of Technical Education, Training and Skill Development, Govt. of West Bengal under **Utkarsh Bangla** under the central programme Deen Dayal Upadhyaya Grameen Kausalya Yojana, NRLM. 96 participants from the



Training of Jaibo Sakhis' at Bolpur training center, LKP

MK


community have successfully undergone training programme on organic grower, Vermi Compost Grower that provided with 200 hrs. training in each batch and assessed successfully.

3.5.4: Publication of Training Materials: Empowerment of women required enhancement of their own knowledge, skill and managerial capabilities to reach its fullest potential through proper capacity building architecture. Strategies for dissemination of knowledge for skill up gradation of Mahila Kisans in all spheres of life were the focus in this endeavor. Staggered handholding (both theoretical and practical mode), induction/orientation programmes, training, workshops, exposure visits outside and within the project area were arranged for learning and sharing experiences. LKP resource cell developed and adopted various modules and training material required for project staff, community institutions, social capital and other stakeholders which includes trainer handbooks/toolkits for different potential groups of trainees such as members and leaders of SHGs, leader of sub-committees of VOs and CLFs, CRPs, PPs, PGFs, and livelihood professionals in farm and non-farm sectors. Further, IEC materials like pocket books, PPTs, modules, theme based training books, stories, case studies, games, audio visuals, video clips, pictorial charts and other sources were developed which are mentioned in the following table:

Table no.3.9: List of Training Materials		
Sl. No	Type of material	Subject
1	IEC	<ol style="list-style-type: none"> 1. Empowerment of women in agriculture 2. Seed Sovereignty 3. NRLM protocol 4. Guidelines for Seed Certification 5. Producer Group 6. List of assets of women farmers under MKSP 7. Crop Calendar 8. Ultra Poor Strategy



		<ol style="list-style-type: none">9. Seed sowing10. Information paddy seed grower
2	Modules	<ol style="list-style-type: none">1. Basics of agriculture2. Sustainable agriculture,: Azolla, NPM , Soil Health Management, Vermi Compost Producer, Organic farmer,Home Nutrition Garden, Onion cultivation(Khariff & Rabi)3. Animal Resource Development: Goatery, Duckery and Poultry farming, Small Poultry Farmers, Veterinary Clinical assistant4. Sustainable Agriculture for Community Resource Person5. Organic Grower, Vermi Compost Producer, Small Poultry Farmer6. SRI, SMI, SWI etc.
3	Power Point	<ol style="list-style-type: none">1. Mahila Kisan Sashaktikaran Pariyojana2. Institution Building: Self Help Groups and its Federation in different Tiers3. Animal Resource Development: Poultry Farming, Goat farming4. System approach: SRI, SMI, SCI, SWI5. Soil health management, NADEP Compost, Ghana Jeevammrit6. Water Use management7. Summer vegetable cultivation8. Bio fertilizers and pesticides9. True Potato Intensification10. Certified Seed Production(Paddy)11. Certified Vegetable Seed Certification12. Shade Net based cultivation13. Organic cultivation and its process14. Commercial Vermi Composting15. Formation of Cooperative Society and Farmers Producer Company
4	AV materials	<ol style="list-style-type: none">1. Loka Kalyan Parishad-MKSP Project2. Vermi Compost3. Agneyastra4. Amrit Jal5. Brahmastra6. Certified seed(F&F)7. Jibhammrita8. Vermi Compost9. Panchagabya10. Sangharak

		11. Sanjivak 12. Uddipak
5	Books	<ul style="list-style-type: none"> • Sustainable Agriculture and Natural Resource Management • Soil and its Health • Soil nutrient Management • Plant nutrient management • Food Security & Grain bank • Crop calendar • Crop rotation, Mixed Cropping • Water Use efficiency • Pest management • Natural resource Management • Pulse Cultivation • Multiple farming • Technical Protocol • Books for CRPs/PPs • Farm Livelihood Intervention Model • Seed Certification Programme under MKSP 
6	Pocket book	<ul style="list-style-type: none"> • On various vegetable and fruits Chilli, Garlic, Ginger cultivation such as Potato(TPS) cultivation, Brinjal, Peas, Pumpkin, Bottle Gourd, Ground Nut, Mustard, Seasom, Banana, soya bean, SMI, SRI, SWI, Organic Grower etc.

3.6. Development of Social Capital: CRP Strategy: Since the primary stakeholders in MKSP



Training on production of NPM, Itahar, Uttar Dinajpur

were women farmers, LKP's strategy was to develop a cadre mostly of women service providers at the grass-root level, from the community itself. They are called Para-Professionals (PPs) and Community Resource Persons (CRPs). After selection, these women were provided with training in different thematic



area and were designated as the *Krishi Sakhi* for Sustainable Agriculture, *Matsya Sakhi* for fishery, *Prani Sakhi* for livestock development, *Udyog Sakhi* for Farmers Producers Organizations(FPOs) and Producer Groups, *Jaibo Sakhi* for organic farming. They have been imparted training from district KVKs, WBCADC, BCKV, UBKV, BRAIPRD, NIRD, BIRD and LKP itself in different activities and capacitated. CRPs and PPs have played a very crucial role to bring out the SHGs as the change agents in the process of development. They have emerged as valuable social capital who would continue to serve the community even after the completion of the project.

Table 3.10 : Social Capital Developed

Description	No.
State Resource Person	10
District Resource Person	10
Senior CRPs/CRPs:	
Master Resource Person	29
Krishi Sakhi	160
Prani Sakhi	102
Matsya Sakhi	78
*Jaibo Sakhi	96
*Udyog Sakhi	25
Total	510

**25 members of Board of Directors of the Mahila Kisans Producer Companies are designated as Udyog Sakhi.*

From the above table it is seen that a resource pool with 510 personnel have been developed and nurtured by LKP under MKSP and received advance training who include 436 CRPs and PPs. Out of this pool of social capital 104 nos. of CRPs/ Master Trainer have been deployed by WBSRLM to promote sustainable agriculture based livelihood activities in their Community Managed Sustainable Agriculture(CMSA) Project in different parts of the state. Besides, 10 experienced personnel associated with LKP were utilized in a regular manner for smooth and efficient running of the project activities particularly in capacity building.

3.6.1. Roles and Responsibilities of CRPs/PPs:

- To disseminate necessary information in every season to the MKs at the grass root and update knowledge
- To visit individual farmers field and attend Farmers Field School on regular basis
- To demonstrate various steps of the improved agro ecological practices and transfer technology
- To assess farmers need and help contacting relevant line departments or Panchayet
- To facilitate preparation of bottom up plan in every season in order to incorporate them in Annual GP Plan for convergence.

- To mobilize farmers into trade based Producer Groups for collective production and marketing
- To visit individual farmers field at different stages of operation/cultivation and provide technical guidance for intercultural operations.
- To extend help the Mahila Kisans to be covered under various insurance scheme in general and agriculture, livestock related scheme in particular

Apart from the above, the social capital delivers some distinct field specific services as below:

3.6.2. Roles & Responsibilities of *Krishi Sakhi*:

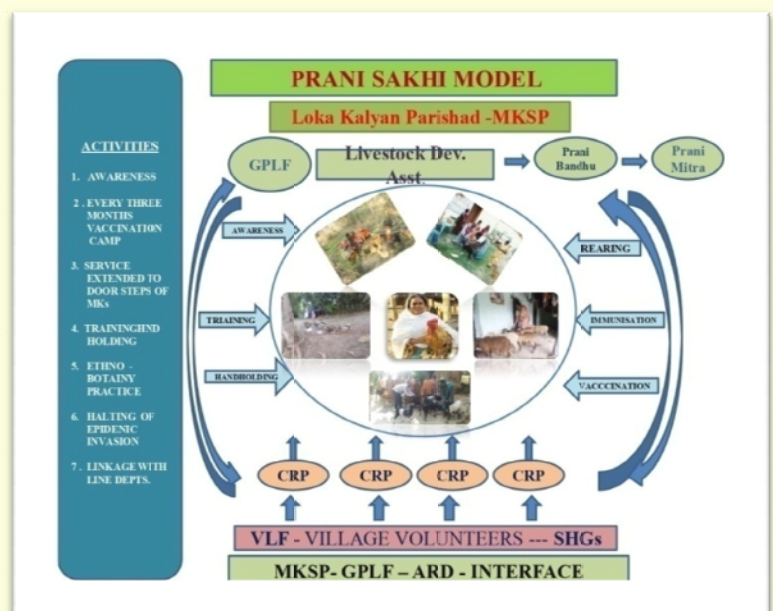
1. To build up a system to conduct the functions of the project activities by VLF and GPLF
2. To demonstrate various steps of the improved agro ecological practices and transfer technology at both household and community level.
3. To prepare annual crop calendar which include home nutrition garden, community nutrition garden, field crop , horticultural activities etc.
4. To build up Home Nutrition Garden in each house hold with all necessary arrangement for organic input in it that would produce minimum requirement of vegetables of a family in a regular manner.



3.6.3. Roles and Responsibilities of *Prani Sakhi*:

The intention of creating *Prani Sakhi* is to guide the resource poor households lacking modern technical knowledge on animal rearing.

1. To collect necessary information of each individual farmer/producer member and update the data on number of livestock at HH level, nearest veterinary aid centers and practitioners.
2. To organize animal health camp in association with *Prani*



Mitra and other officials of the Animal Husbandry Department in a regular interval

3. To demonstrate various steps of the improved practices, feed and fodder program and treatment.
4. Actively participate for de-worming and vitamin-mineral supplementation program of the available livestock of the GP.
5. To aware people to adopt ethno botanic best practices
6. To facilitate escalation of animal farming in the form of group enterprises.
7. Document the local innovative best practices / case studies in the area

3.6.4. Roles and Responsibilities of *Matsya Sakhi*:

1. To map pond in the intervention area and mobilize women farmers to take pond on lease and practice integrated farming
2. To motivate them to cultivate fish, agriculture in the embankment and duck rearing in pond .

3.6.5. Roles and Responsibilities of *Udyog Sakhi*:

1. To facilitate post-production support to the PG (aggregation, storage/ grading, cleaning, packaging etc).
2. To prepare monthly activity plan on, off and non-farm interventions.
3. To ensure the follow up action taken by the PG members after each training
4. To provide hand holding support to each member for marketing of their produce in proper marketing at appropriate price structure
5. To federate the PGs or merge the PGs in FPOs

3.6.6. Roles and Responsibilities of *Jaibo Sakhi*:

1. To disseminate knowledge and information regarding vermi compost, azolla, NADEP, Farm Yard Manure, Green Manure etc. along with demonstration and handholding
2. To make plan and mobilize farmers for organic farming
3. To help farmers for selection of crops, seed treatment, crop rotation, crop planning
4. To guide farmers for soil testing card and advice farmers for proper quantity of organic manure accordingly.



Preparation of Nimastra, Itahar



Udyog Sakhi of Agragami MKPC Ltd. Birbhum



Shareholders meeting of MKSP Producers Company Ltd., Jhalda II, Purulia



Workshop on Soil moisturizer meter by IEST, Shibpur



Vaccination of chicks at the door steps by PP



Drip Irrigation, Purulia



Distribution of Betel plants, Kalchini



Training workshop on farming, Khoyrasol , Birbhum non-chemical



Jaibo Sakhi applying Bio-Pesticide in her own garden, Md. bazar, Birbhum



3.7: Convergence: Line Departments, MGNREGA and Other Government Programmes/ Schemes

3.7.1. Convergence with Line Departments and MGNREGA

MKSP, though primarily a livelihood development programme could not be successful if implemented on stand-alone basis. Funds from other programmes of the government departments was essential to leverage that was highly beneficial to the MKs. Individual Benefit Scheme under MGNREGA, came out very useful for individual asset creation that was availed by MK households including land leveling, nursery raising, plantation in barren land, development of water harvesting structure, poultry animal shelters, rural housing etc. Support from department of Agriculture for soil health card, soil testing, seeds and agriculture tools and expertise was provided. Vaccinations, de-worming, medicines, improved feed and technology from Dept. of Animal Resource Development (ARD) were ensured. Through a well designed convergence mechanism, the poorest of the poor were served more efficiently. The whole livestock intervention was being done purely through convergence. The strategy of LKP was very successful in terms of leveraging opportunities of training from various departments which was worth adopting. A collaborative atmosphere was created for the women farmers participated in that influenced bringing the interventions successful.

Table 3.11: Benefits from Line Departments							
Department	2013-14(Rs.)			2018-19(Rs.)			Remarks
	MK(No.)	Benefit (Rs.in Lakh)	Benefit per MK(Rs.)	MK(No.)	Benefit (Rs.in Lakh)	Benefit per MK(Rs.)	
Agriculture	8841	33.63	380.43	38072	503.7	1323.12	5.7times
Horticulture	4836	10.12	209.38	9191	106.3	1156.62	5.5 times
WBCADC	1612	17.78	1103.24	18478	266.05	1439.85	1.3 times
Fishery	3041	3.14	103.28	8056	100.53	1247.93	12 times
ARD	7871	15.8	200.67	50259	150.31	299.08	1.5 times
MGNREGA	8643	540.7	6256	29872	3920.67	12943	2.06 times
Others	1141	0.65	56.79	6318	147	232.526	4 times
TOTAL		621.82			5194.56		

As a result of systematic and timely planning and their incorporation in the Panchayat Plans it was possible to achieve significant convergence of activities in the field on a regular basis. The above table depicts the scenario of convergence that leveraged during 2013-14, as well as in 2018-19 from the various departments, organizations, schemes like agriculture, Horticulture, Animal Resource Husbandry departments, WBCADC and MGNREGA. It may be observed that maximum number of the MKs were benefitted (50,259) from ARD

department followed by MGNREGS (29872), Agriculture (38072), WBCADC (18478), Horticulture(9131) and Fishery(8056) during the project period. It is interesting to note that financial benefit from MGNREGS only in 2013-14 amounting Rs.6256.00 per household got enhanced more than double i.e Rs.12943 in 2018-19. It may also be noted that the amount of convergence activities amounting Rs. 621.82 Lakh that took place in 2013-14 turned out to be Rs. 5194.56 lakh at the end of the project.

Table 3.12: MGNREGA: Participation, Person days & Wages Earned in 2018-19						
District	2018-19					
	No. of MK Participated	Av. Person days(no.)	No. of person days(Lakh)	Wage rate per day (Rs.)	Total wages(Rs. in lakh)	Average Earning per MK HH(Rs.)
Birbhum	15567	78.8	12.27	185.65	2277	14629.22
Purulia	3618	62.93	2.28	167.23	381	10523.78
Dakshin Dinajpur	4098	68.8	2.82	167.76	473	11541.89
Uttar Dinajpur	6285	61.67	3.87	190.98	740	11777.74
Alipurduar	304	85.14	0.27	190.78	49	16243.01
Total	29872		2.15		3921	64715.64
Average per MK						12943.13

Here the scenario of participation, person days and wages earned under MGNREGA has been presented for the concluding year of the project period, i.e 2018-19. The table depicts that, 29872 women farmers, i.e, 49 percent of the total MK covered (61109) have participated in MGNREGA generating a total 2.15 lakh person days in that year. It is observed that average earning per MK households comes to be Rs.12943.13 in 2018-19.



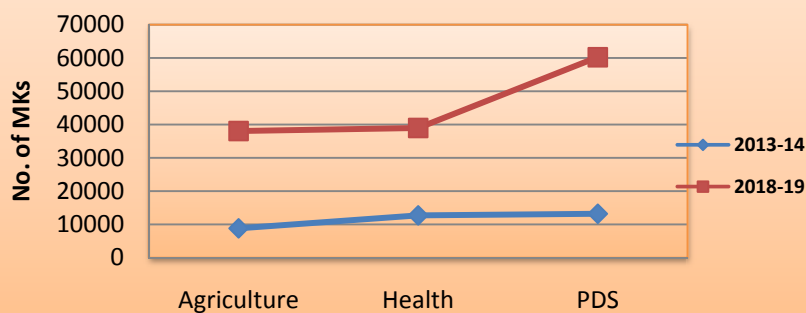
3.7.2. Participation in Other Governmental Programmes/ Social Welfare Schemes:

Apart from above, Government of India and State Governments are implementing a wide range of programmes to address different dimensions of poverty and deprivation. Effort was made to collect information on accessing major government programmes impacting on the poor. In the table 3.13 figures mentioned under health column those are covered under Janani Surakhsha Yojana, Rastriya Swastha Bima Yojana etc. and Public Distribution System (PDS) it includes figures on Antodyoy Anna Yojana, KhadyaSathi, Annapurna Yojana etc.

Table 3.13. Benefits from the Government Programmes Enjoyed by the MKs

Particulars	Health		PDS	
	2013-14	2018-19	2013-14	2018-19
MKs participated(No.)	12728	38996	13223	60253
Enhancement		3.06 times		4.5times

Graph 3.6: Benefit from various Government Programmes



The table shows that, the number of MKs availed different benefits from health (38996) and PDS(60253) in 2018-19 that are 3.06 and 4.5 times more than that was availed in 2013-14. The district wise figures represent that Birbhum is ahead of other districts followed by Dakshin Dinajpur, Uttar Dinajpur,

Purulia and Alipurduar. For details please [click here](#).



Bose Institute: Small animal shelter



Bose Institute: Innovative water conservation



MGNREGA: Seedlings Preparation For Social forestry



Dept. of Agriculture: Distribution of new variety paddy seeds

c
o
n
v
e
r
g
e
n
c
e

s
c
e
n
a
r
i
o

3.8: Non Pest Management(NPM) Shop developed under MKSP

Table 3.14 : Distribution of NPM Shops in the project area as in 2018-19

Particulars	No. of villages catered	MK intervened	% of MK	No. of technology adopted (min)
Total	652	56853	93.04	4



NPM ready for use

This was one of the non-negotiable components under the project which was to be learnt and practiced in their agricultural activities by the MKs. The table above shows that NPM shops/centres are available in 652 villages to provide NPM materials like Vermi Compost, NADEP, Azolla for soil health management, Sanjeevak, Uddipak, Amrita Jal etc, for plant nutrition and Nimastra,,

Agneyastra, Brahmastra etc. for pest control & Management. Total number of 56853 MKs have been catered through the shop. The extracts that are prepared as prophylactic or curative measures aimed to restore the disturbed natural balance and used by 93.04 percent of the MKs for application in their field as well as selling it locally. For details [click here.](#)

3.9. Formation of Organic Clusters: Journey to Organic Farming



Organic cultivation under shed net, Birbhum

Adoption of agro ecological techniques without chemical intervention in fertilizer and pesticide were mandatory under MKSP. The MK families themselves have been preparing bio compost and pesticides using natural resources and apply them in cultivation. There was a great potential found in the women farmers that triggered set up '**Organic Clusters**'

by the PIA. In fact, it was assumed that the next logical progression in the post MKSP journey would be full blown Clusters equipped with organic certification, marketing and related activities. In order to enable the women farmers to attain better opportunities, 20 nos. of Organic Clusters consisting of 400 Local Groups have already been set up in the district of Birbhum and Purulia. It would help cultivate high value crops to enhance the income of the MKs by selling organic vegetables.



The table below shows the locations of the Organic Clusters. The MKs, mobilized into Producer Groups under MKSP got associated with such clusters and connected to the Producer Companies that has been formed under MKSP too.

Table 3.15: Organic Clusters		
District	Block	No. of Clusters
Birbhum	Illambazar	4
	Labpur	9
Purulia	Jhalda II	7
Total		20

Bhalas Jaibo Dal from Labpur block and Sahebdanga Jaibo Dal from Illambazar block of Birbhum district have already been registered and uploaded in the PGS portal (<https://pgsindia-ncof.gov.in/>) through the Regional Council (Jalpaiguri Vivekananda Education Society).

3.10. Seed Certification: New Ventures under MKSP

Quality seed is one of the most critical inputs to enhance the level of production as well as productivity in any kind of cultivation. Under the project, LKP has facilitated MKs to produce Certified Seeds from foundation class seeds following the stringent protocol under the Seed Certification Authority in West Bengal. These has been done in a Producers Group mode and produced, marketed and managed by the Gram Panchayat Level Federation (Cluster) in the district of Birbhum, Uttar Dinajpur, Dakshin Dinajpur and Purulia.

In 2015, LKP started production of certified seeds by 272 MKs in 22 GPs, 6 blocks under the project having 155 SHGs participated in the programme. They produced certified seeds with varieties such as MTU 1010, MTU 7029, GB 1 and Pratiksha in 87.58 acre of land complying all protocols as prescribed by Govt. of India. Production of various varieties have had to go through germination test process in the State Govt. laboratory that came out with desired success. The venture has come out as an ongoing activity since then.

In 2016, 200 MKs have been engaged to produce from B- F & F-C class of Pulse (Khesari) seeds using 4 qtl 37 kg seeds procured from West Bengal State Seed Corporation. MTU 1010 variety of certified seeds produced from the foundation class are also being multiplied in other places under the project area, namely, Illambazar & Kalchini blocks (from C1 to C2) For details [click here](#).

Table 3.16: Production of Certified Seed in 2018-19						
Sl. no	Name of Producer Enterprise	Variety of seed	No. of MK involved	Volume(qrtl)	Turn over(Rs.)	
1	Mahabir Sangha Mahila SHG Cooperative Society	Rani dhan	35	62	93000.00	
2	Nowahatu Vivekanda Sangha Samabaya Samiti	Sahobhahi, Gotra 1	70	400	880000.00	



At the end of the project, three varieties called Rani Dhan, Sahabhagi & Gotra 1 have been found stable to continue production in Birbhum and Purulia districts. The producer farmers are selling their produce which facilitated not only achieving seed sovereignty for them but also seed replacement in the local area by other farmers.

<https://www.youtube.com/watch?v=giAQXkpz8BI>

3.11: Drudgery reduction: Common Facility Centre formed under MKSP

Table 3.17.Common Facility Centre(CFC) formed under MKSP

Sl.no.	District	Name of block	No. of GP	No. of CFC	No. Gram sansad benefitted	No. of women farmers benefitted	Name of machine/equipments (No.)
1	Purulia	Jhalda II	6	6	49	3042	Sprayer(12) ,Paddy thrasher(18),Cono weeder (36),Marker (24),Water pump (18), drip irrigation (130 plot) & Spice grinder(6)
2	Birbhum	Illambazar	9	9	97	9520	Sprayer (18),Paddy thrasher (18),Cono weeder(63) ,Marker(18) , leaf color chart (18),sealing machine(2), &Spice grinder
3	Birbhum	Labpur	11	11	139	10878	Cono weeder(69), Marker(50), Sprayer(23), Paddy Thrasher(23), Leaf colour chart(46), Spice Grinding Machine(1), Pulse Mill with Motor (2), Pulse grinder (2), Papad rolling machine (1), trolley van(3), drip machine (10), handloom(4), mushroom autoclave(4), pump set (3), Jute Bag Sewing Machine(1), Sealing machine(1)
4	Birbhum	Khairasole	1	1	34	1435	Marker(1), Cono Weeder(5) , Sprayer(2), Paddy Thresher(2), Sal leaf plate machine(1)



5	Birbhum	Md.Bazar	1	1	29	1890	Marker(2), Cono Weeder(4), Sprayer(2), Paddy Thresher(2)
6	Dakshin Dinajpur	Harirampur	6	6	98	5556	Sprayer(12), Paddy thrasher(12), Cono weeder (43), Marker(10), leaf color chart(24), pump set(6), van(3), spice grinder(2), dal mill(3), rice mill(1) bhutbhuti(2)etc
7	Uttar Dinajpur	Itahar	9	9	135	5490	Marker, Cono Weeder(42), Sprayer(18), Paddy Thresher(16)
8	Alipurduar	Kalchini	5	5	12	507	Marker(4), Cono Weeder(42), Sprayer(12), Paddy Thresher (12)
			48	48	593	38318	



Custom Hiring Centre, Harirampur, Dakshin Dinajpur

Drudgery reduction through effective use of gender-friendly tools and transfer of technologies to women in agriculture was one of the key features of the project. The table shows that 48 CFCs has been established in 48 GPs which are run by the GPLF leadership. The machineries include cono weeder, paddy thresher, sprayer, marker, rice mill, pulse mill, spice grinder, pump set, autoclave, sewing machine,

sealing machine, sal leaf plate making machine, weighing machine etc. which are mentioned in the above table. These are utilized by 38318 in lieu of paying hiring charges. A separate fund has been created by the GPLF to utilize for repair and maintenance of the equipments and replacement of depreciated machines.



Cono-weeder by MK, Khoyrasol

3.12: Creation of Agricultural Assets

The target that LKP had committed in the DPR was 60% of 46000 MKs, in intensive project area only

Table no: 3.18: Creation of Assets: Agriculture & Livestock				
Name of asset	2013-14		2018-19	
	No. of MK	Value (Rs.)	No. of MK	Value in Lakh (Rs.)
Purchase of land	6955	1191.39	13828	6985.16
Trees in Agro Forestry	10695	1006.00	45178	8230.27
Livestock	27061	2153.50	56374	12074.98
Others	2373	22.09	32715	900.04
Total value (Rs.)		4372.97		28190.45
Total no. of MKs	30145		61109	
Value of Asset/MK(Rs.)		14506		46131

to acquire physical assets worth Rs.20500/- each family at the end of the project.

The major types of physical assets include purchase of land, agro forestry trees, livestock and others. Other category includes vermi/NADEP pit & compost, seed and grain in seed bank and grain bank, drudgery reducing equipments etc. The average value of assets at the end of the project created by each MK comes to Rs. 46131.00.

To calculate the value of benefit per MK, the

average of 61109 only is taken because each MK has been doing multiple activities to develop their livelihoods. Besides, MKs have procured some non agricultural assets also. A special study conducted by LKP observed that 84 percent MK households have mobile phone, 70 percent have bicycle, television (46.75 percent) and electric fan (70.22 percent) in the project period.



"Rural Women's Bank"
Backyard Goat Rearing (Home scale) by landless families-remunerative enterprise.



Asset creation by MK under MKSP

Adoption of Sustainable Agriculture

Highlights

- Each Mahila Kisan has adopted minimum three agro-ecological techniques in agriculture and allied activities. In order to produce vegetables, 99.74 percent MKs have utilized their multi layered home nutrition as well as community nutrition gardens.
- School nutrition gardens were developed by 3056 MKs of 1118 SHGs to provide mid-day meals in 235 schools.
- MKs adopted sustainable practices like bio pest management (80.45 percent), soil moisture management (63 percent) and system approach of cultivation (46 percent) in agriculture.
- LKP helped adopting 14 kinds of indigenous technology-based activities throughout the project period and trained the MKs intensively.
- Major activities are Individual and Community Nutrition Garden, Soil Health Management, Plant Nutrition Management, Seed/ Grain Banks, Bio Diversity Enhancement, Land/pond/small animal based integrated farming, system approach and CPR Management. For details click [here](#).
- LKP has developed 830 group-based grain banks being maintained by 10,942 MKs and 4904 nos. group-based seed banks by 13948 MKs under the project.
- Introduction of new crops and revival of extinct crops were adopted by 24750 MKs to maintain dynamic equilibrium.

Continued....

.....Highlights

- MKs (99 percent) applied vermi compost, Azolla, NADEP compost, green manure and homemade fertilizers (Uddipak, Sanjeevani, Panchagabya, Taral sar, Ghono & Draba Jeevammrita etc.) and bio pesticides like Neemastra, Agneyastra, Brahmastra etc.
- Livestock development activities practiced by 94.32 percent MKs as the secondary source of livelihoods with goats, chicks and ducks of improved varieties.
- 1395 acre of land were utilized by 12372 landless women farmers (20.24 percent) in Common Property Resource Management through Public-Private partnership for agro forestry plantation to produce fruit-fodder-fuel-fertilizer and timber.
- MKs(25422) have utilized seasonal fallows and fallow dykes through Private-Private partnership to produce vegetables, pulses, ground nut etc.
- MKs (38340) have practiced various agro ecological methods like pitcher irrigation, recycling domestic waste water, drip irrigation, bio mulch, cover crop etc. for soil moisture management.
- LKP introduced potential livelihood models to strengthen the livelihood of the MKs with land and pond based multiple agriculture integrated with livestock development in 5 districts of West Bengal in various agro climatic zones.
- Other practices that were followed by the MKs namely, crop rotation, cover crop, zero tillage, summer ploughing, Poiracropping, inter cropping, companion cropping etc.
- As a measure to reduce the input cost in agriculture, 28110 MKs followed SCI in 5071.55 acre of land for cultivation of rice, wheat, maize and mustard.



Chapter 4: Adoption of Sustainable Agriculture

The primary objective of the MKSP is to enhance the participation of women in agriculture and production and productivity through transfer of knowledge and technology to create sustainable agriculture based livelihoods of rural women. Consistent efforts on the part of LKP have encouraged the Mahila Kisans to adopt environment friendly sustainable agriculture and allied activities for enhancement of their livelihoods. By applying agro ecological practices, the risks are mitigated, productivity is enhanced, food security has been ensured at house hold level and hence the net income of family has been increased. Poorest of the poor women farmers has come out of the menace of the rampant use of chemical fertilizer and poisonous pesticides guided by the local agent of the multinational companies occupying rural market outlets. It has been possible through the adoption of agro ecological exercises under the guidance of MKSP.

The key elements of adoption of sustainable agricultural practices are:

- Development of appropriate model in farm intervention
- Reduction of cost of cultivation
- Enhancement production & productivity through non chemical pest management & zero chemical fertilizer
- Enhance of income through SA based livelihood intervention
- Multi tier poly cropping
- Up scaling of production through technology transfer by the community best practitioners
- Capacity building through structured module & protocols
- Preparation of agriculture development plans
- Connect the MKs to various service providers

4.1 Methods of Sustainable Agriculture

Table no.4.1: Sustainable Agriculture & its Techniques		
Sl.no.	Particulars	Name of activity/technology
1	Soil nutrition management	Summer ploughing, Vermi compost, NADEP compost, Farm Yard Manure, Azolla, Green manuring, popularization of legumes, , <i>Poira</i> cropping
2	Plant nutrition management	Taral sar, Uddipak, Amrita Jal, Ghana and Draba Jeevammrita, Sanjeevak etc.
3	Soil moisture management	Pitcher irrigation, Cover crop, Mulching, Drip



		irrigation, Zero Tillage etc
4	Seed management	Seed selection, seed preservation(individual seed store/Group based seed bank, seed treatment, seed production, seed replacement etc.
5	Pest management	White, yellow sticky traps, bird pearcher, Border crop, Nimastra, Brambhastra, Agneyastra, ash-kerosine, etc.
6	Other intervention	Home nutrition Garden, School Nutrition Garden Community Nutrition Garden, Integrated Farming, Companion Cropping, Mixed Cropping, Cropping in fallow land, border cropping, dykes, agro forestry etc.
7	System Approach(SCI)	SRI, SMI, SWI
8	Post Harvest practices	Sorting , grading, Sunning, Storing

The following table shows the picture of Mahila Kisans adopting agro- ecological in broad head. Each Mahila Kisan have adopted minimum three methods in agriculture.

Table no. 4.2: Adoption of Sustainable Agriculture			
Sl.no	Name of activity/technology	No. of MK involved	% of MK
1	Home Nutrition Garden	60958	99.74
2	Community Nutrition Garden	22144	36.23
3	Group based seed bank	13948	22.80
	Group based grain bank	10942	18.00
4	School nutrition garden	3056	5.00
5	Soil Health Improvement & Plant nutrition management (FYM, Nadev/Vermi, liquid fertilizers, Green manures, legumes, Jeevammrita, Uddipak, Amrita jal etc.	60958	99.74
6	Soil moisture conservation (Pitcher Irrigation, Bio Mulch, Poiria Cropping etc.)	38340	63.00
7	Bio pest management/NPM	49167	80.45
8	Bio diversity enhancement(Introduction of new crop, agro forestry, Fruit vegetable nursery	24750	40.50
9	Land based integrated farming	39627	65.00
10	Pond based Integrated farming	5723	9.30
11	Livestock/small ruminant development	57640	94.32

12	System approach(SRI, SWI, SMI etc)	28110	46.00
13	Mushroom cultivation	10640	17.40
14	Common property resource management	24488	40.07

The table depicts that 99.74 percent of MKs have home nutrition garden in their home stead land applying soil health and plant nutrition management techniques. Next engagement with livestock development activities (94.32 %) as the secondary source of livelihoods followed by the other sustainable practices like bio pest management (80.45%), soil moisture management (63%) and system approach of cultivation(46%). A moderate section of MKs (36.23 percent), having very small size of land have been engaged in community nutrition garden on a sharing basis. Among the MKs 65 percent are engaged in land based integrated farming and 40.07 percent of those, in common property resource (CPR)management while 9.3 percent of MKs are found to be in pond based integrated farming. <https://youtu.be/ZK0h78wQi68>

4.2. Sustainable Activities

4.2.1. Home Nutrition Garden: LKP facilitated for preparation of multi layered home nutrition garden for production of healthy and nutritious food through sustainable agriculture to ensure year long food and nutrition security at household level. It was used to produce seasonal vegetables (root and tuber based, leafy vegetables) along with fruit and herbal medicinal plants. No chemical fertilizer and pesticides were used in home nutrition garden as a mandate. LKP had developed a [unique model of home nutrition garden](#) for the MKSP beneficiaries which shows that income amounting Rs. 11940.00 may be earned annually from a parcel of land of 8 cents only.



Home Nutrition Garden, Jhalda II, Purulia district

Table no.4.3: Case study on Home Nutrition Garden (8cents) Name: Sumita Murmu, Vill: Lohadda, Labpur block, Birbhum			
Season	Vegetable (Qtl)	Investment(Rs .)	Income(Rs.)
Pre khariff	2.5	350.00	3750.00
Khariff	3.0	535.00	4550.00
Rabi	4.5	425.00	4950.00
Total	10	1310.00	13250.00
Net income (Rs.)		11940.00	

Most of the families under MKSP have adopted our Home Nutrition Garden Model in small plot about 2-10 decimals as per the land available near their houses. Seasonal crops are grown to make the food available throughout the year. LKP has developed four different kinds of model appropriate for the MKs.

- Individual members doing it on their own land or on the land taken on lease from others
- Community Nutrition Garden in leased land taken up by a group of landless SHG members following integrated farm model
- Some are engaged in pond based farming activities along with fish farming.
- School nutrition garden run by SHGs are promoted for vegetable cultivation which helped the school children to get chemical free nutritious mid day meal. In all these gardens sustainable agricultural practices are followed. Vermi compost, Azolla, NADEP are also integrated along with natural pesticides in this practice.
- Nutritious fruit plants like guava, drum stick, papaya, mango etc. in the border of the plots and seasonal vegetables along with cripplers and leafy vegetables on the subdivided plots are all the integral part of each garden.
- Crop rotation has been followed in regular manner.



Home nutrition garden of MK

4.2.2. Community Nutrition Garden: Agragami SHG group of Illambazar had opted for community nutrition garden on



Working together in Community Nutrition Garden Itahar, Uttar Dinajpur

Pvt-Pvt lease land partnership due to lack of sufficient land for nutrition garden, they ensured a net income of Rs. 33000.00 from the year long vegetables and fruits cultivation. Under MKSP , 2725 nos. of such gardens have been developed by 22144 MKs belonging to 3043 SHGs.

Table 4.4: Community Nutrition Garden on leased land (0.08 acre) Name of MKSHG: Agragami Swanirbhar Dal Vill: Brahmandihi, PS: Parui, Birbhum			
Crop	Production(Qtl)	Investment(Rs.)	Gross Income(Rs.)
Vegetables(3 seasons)	12	3000.00	36000.00
Net income	33000.00		
Benefits accrued	<ul style="list-style-type: none"> • Availability of vegetables throughout the year • Chemical less food in the families • Confidence in group based activity • Reduction of production cost 		



4.2.3. School Nutrition Garden:

School authorities are motivated to allow a suitable patch of land within the boundary of the school to the SHGs who are engaged for cooking the mid-day meal over there. 3056 MKs from 1118 SHGs have engaged in maintaining 235 school nutrition gardens and prepare chemical free mid day meal for the children.



Mid-day meal from school nutrition garden

4.2.4. Group based Grain Bank:

People in groups saved small amount of grain in the grain bank and utilized these grain in their difficult times. The amount taken as loan has to be returned with 1.5 times more than that she had taken. In recent times, it is found that many MKs attained food security and started



Group based Seed Bank, Birbhum

entrepreneurship by selling grains when market price was high. It strengthened their economic status in turn. LKP has developed such 830 grain banks being maintained by 10942 MKs under 878 SHGs.

4.2.5. Group based Seed Bank: The preservation of seed is of paramount importance to attain the seed sovereignty and maintaining bio diversity. During the project period, 13948 MKs from 1248 SHGs formed 4904 nos. Group based Seed Bank. LKP has facilitated to produce certified seeds under the project to have quality seeds in their own hand.



Group Grain Bank of ST group, Purulia



4.2.6. Introduction of New Crops: Introduction of new crop and reintroduction of traditional crops



Introduction on of new crop-Pakchoi, Kalchini

has been initiated to choose crop alternatives for increased productivity and enhancement of nutrition as well as income. 24750 MKs have practicing such activity. It also improved soil health and maintained dynamic equilibrium. During the project period, LKP has introduced 11 types of vegetables like Pigeon Pea-veg type, Groundnut, True Potato Seeds, Onion (Sukhsagar), Kavoov (OL), Pakchoi, Broccoli, Red Cabbage , Soyabean, Garlic and Capsicum .

4.2.7: Common Property Resource Management: Preservation of Biodiversity: Unutilized natural resources both land and water bodies become an opportunity to the landless people. LKP has evolved a mechanism which combined the users with the local governance with a set of guidelines agreed to by both sides. These untapped resources brought good return through decentralized natural resource management on the basis of [sharing through formal agreement between the SHGs and GPs](#). This activity pertains to practice of climate resilient technology also reduce drudgery for the women in terms of access of fodder and fuel to their reach and control. These group-based activities in



Ground nut cultivation

collaboration with PRIs have gained momentum specially under the scheme of MGNREGA adding extra income to the practitioners under MKSP.

Case study: Group CPR Management(60 MKs)

In Labpur, Birbhum district, West Bengal, 6 SHGs consisting of 60 number of landless farmers were engaged in CPR management after persuasion with local GP. They took a 8km stretch of roadside land on lease for 7 years and entered into an agreement with the Panchayet on sharing basis @ 70: 30, but 70% lying with the group itself. They planted 18000 trees in total (Fruit-Fodder-Fertilizer-Fuel-Timbers) under MGNREGA along both sides of the road in three rows. After the end of the lease period 10000 trees were sold out @ Rs. 392.00 per tree, amounting Rs. 3920000.00(Rs. Thirty nine lakh twenty thousand only). Mahila Kisan group earned Rs. 2744000.00 while GP's share was Rs.1176000.00. Each MK earned Rs. 45734.00 after elapsing a 7 years' period of time.

Name of SHGs: Saraswati, Maa Koichara, Bishnupriya, Jai santosima, Jatadhari, Gopinathbaba Swanirbhar Dal of Labpur block, Birbhum district



CPR Management: Group based nursery, Birbhum

A view of common land accessed through the partnership mode is presented in the table below:

Table no 4.5: Participation of MKs : CPR		
District	MK	Land (Acre)
Birbhum	5788	744
Purulia	337	124
Dakshin Dinajpur	420	109
Uttar Dinajpur	5816	417
Alipurduar	11	1
Total	12372	1395

Calculation on the total land used under CPR depicts that 1395 acre of government fallow and untapped land are utilized by 12372 MKs through partnership programme in the intervention area. Under this activity the beneficiaries are involved mainly in agro forestry plantation for production of Fruit- Fodder- Fuel- Fertiliser- Timber plants in close collaboration of the GPs..

4.2.8: Use of fallow dykes and seasonal fallows:

Table no 4.6: Seasonal Fallows and Fallow Dykes	
District	Use of Seasonal fallows/fallow dykes(No. of MK)
Birbhum	16869
Purulia	1597
Dakshin Dinajpur	2778
Uttar Dinajpur	4015
Alipurduar	163
Total	25422
Area (Acre)	
Total area	10326.71
%	41.6

To address the problem of scarcity of land, the Mahila Kisans utilized the seasonal fallow land i.e the land remained unutilized in between two seasons to produce vegetables and pulses . The dykes also utilized for cropping pulses. The table 4.6 reveals that MKs(25422) used these types of land (10326.7 acre) to produce vegetables, ground nut, pulses etc.



Use of seasonal fallow and fallow dykes



Mixed vegetable



Community garden: usage of fallow land



Community garden: Mixed vegetable



Sharing the vegetables between the group members



School Nutrition



Mixed crops: Pulses & Mustard

4.2.9: Soil Health Improvement and Plant Nutrition Management:

Table no: 4.7: Soil Health Improvement and Plant Nutrition Management Under MKSP

Name of activity	Total no. of units	SHG involved	Mahila Kisan involved
Farm Yard Manure/ Bio compost	49758	5429	60839
Vermi compost	48596	4820	59519
Plant nutrition	51731	5553	56026
Green manure	45944	4403	46405
Azolla	52110	5333	55267
Popularization of legumes	22952	4166	24750
Crop rotation	32563	3421	36426

The MKs were properly trained to understand the prime importance of maintaining health of soil for plant nutrition and MKs applied intensely vermi compost, Azolla, NADEP compost, green manure and bio fertilizers (Uddipak, Sanjeevani, Panchagabya, Ghono & Draba Jeevamrita etc.).The practices of popularization of legumes and crop rotation are also adopted to maintain good health of soil.

4.2.10. Soil Moisture Conservation: In order to reduce amount of water loss, preservation of soil moisture and minimize irrigation needs, 38340 MKs have adopted various agro ecological practices like surface irrigation with pitcher, recycling domestic waste water, drip irrigation, bio mulch, cover crop, zero tillage, crop rotation, contour ploughing, mixed cropping, inter cropping etc. in general and particularly in the areas that have scarce rainwater and /or groundwater resources available for normal irrigation.



Bio Mulching, Birbhum



Pitcher irrigation



Drip irrigation, Jhalda II, Purulia



Farmyard manures



Vermi compost pit using tires at home



Deep compost



NADEP compost



Preparation of Nimastha for their own use



Agro ecological intervention under MKSP



Ghanajeebammrita



Application of Agneyastra

Agro ecological practices for soil health and plant nutrition management



SRI



Grafting



Poiria cropping (zero tillage) in seasonal fallow



Light Trap



Shed net cultivation



Bird Percher



4.2.11. LKP Model of Integrated Farming: Choice of technology by the MKs

The **main objective** of the project is empowerment of the women farmers through creation of sustainable livelihood opportunities to address Food and Nutrition Security at the household level based on sound farming system to lead a life of economic prosperity.

The core principle of agro – ecology in the principle include recycling nutrients and energy on the farm without application of chemical inputs, integrating crops and livestock, focusing on ecological relationship within man, animal and plants in the ecosystem.

LKP introduces different modes of [Integrated Farming system](#) such as Land based Integration, Pond based Integration, Small animal based Integration and also Integration of these said systems. It has developed three kinds of integration models under MKSP to strengthen the livelihood of the MKs.

4.2.11.a. Land based Integrated Farming(Land + Livestock): Optimum and judicious utilisation of natural resources and production of multiple crops in different seasons and

Table no: 4.8: Participation in Land based Integrated Farming					
MKs(No.)	2013-14		MKs (No.)	2018-19	
	Land (acr)	Av. Land/MK(a cre)		Land (acr)	Av. Land /MK (acre)
6183	1336.33	1.45	39627	13611.34	1.89

also in single season from the same land along with rearing of small ruminants is integral part of [land based integrated](#)

[farming.](#)

Case study: Integrated farming(land, livestock,, non farm & off farm)

Sumita Murmu hailing from Lohadda village, Adibashipara para, Indus GP, Labpur block of Birbhum district. She owned 0.4 acre homestead land and possessed 0.3 acre of additional land on lease. Having cultivated cereals and vegetables in 3 seasons. Along with rearing of animals like hen, duck, cow and goat She earned Rs.78650.00 in a year.

Content	Investment(Rs.)	Return(Rs.)
Agriculture in 0.7 acre(3 seasons)	8450.00	46350.00
Livestock	7100.00	42850.00
Vermi compost	0.00	4400.00
Non farm	0.00	600.00
Net income(Return- Investment)		78650.00

Benefits accrued:

- **Production cost reduced**
- **Soil health improved**
- **Income level enhanced through multiple source of livelihoods**
- **Organic nutritious food available in the family**

The number of MKs practicing land based integrated farming is increased to 1.89 times in 2018-19 than that of it was in 2013-14. Simultaneously, land per MK has been raised by 10.48 times in i.e , 13611 acre in 2018-19.

4.2.11.b. Pond based Integration (Fish and Ducks, Poultry and Cultivation of Vegetables):

Table 4.9: Pond based Integrated Farming					
2013-14			2018-19		
No. of MKs	Land (acr)	Av. Land/M K(acre)	No. of MKs	Land (acr)	Av. Land /MK(acre)
1267	236.44	1.02	5723	1184.64	1.78

Those who have no sufficient land with them but scope is there for generation of more income in pond-based interventions have opted for this kind of integration.

Besides, fish cultivation, poultry birds also can be reared on the embankment with feed available there making this integration highly remunerative for the community cultivation along with vegetable cultivation. During 2018-19, 5723 MKs have been practicing pond based integrated farming which is 4.5 times of number of MKs practiced in 2013-14. At the same time the area of water body is also increased by more than 5 times in totality. Birbhum is in highest position both in access of water body and participation of MKs.

Table 4.10: Case study on Pond based Integrated Farming			
Name of SHG: Ma Chanchala Mahila Samity			
No. of Members:11			
Address: vill: Bundia Hirr, Block : Jhalda II, Purulia district			
No. of animal /Qty of land owned	Expenditure	Investment((Rs.)	Return(Rs.)
Pond with water area 4 bigha and embankment 1 bigha	Fish feed, leveling of land, cleaning of pond	9600.00	55000.00
Agriculture(Paddy in 0.01 acre)	Organic manure, pesticides	2100.00	19500.00
Duck(90)	Feed, shelter etc.	5900.00	26000.00
TotalRs.)		17600.00	100500.00
Net Income (Rs.)	82900.00		
Income per member (Rs.)	7536.00		
Benefits accrued	<ul style="list-style-type: none"> • Availability of nutritious food, vegetables , fresh fish and eggs through out the year. • Reduction of cost • Enhancement of status in the society 		



Pond based Integrated Farming, Birbhum



4.2.11.c. Small Animal-based Integration in combination of other activities (CPR management, Non farm activities) for acute landless farmers:

LKP is working with the people belonging to ultra-poor households. These households have little access of land and dependent on wage earning as agricultural laborers with no or less irrigation facility. During post monsoon season, the MKs remain unemployed and also there is lack of scope for wage earning. To address food insecurity as well as sustenance for this kind of landless community, a model has been developed. Introduction of newer variety of goats, chicks, ducks, pigs etc.e.g, for chicks- Banaraj, Rhode Island Red etc. for ducks- Khaki Cambel, for goats- Black Bengal, for pigs- Ghunghroo etc, hatching of ducks by the country hens, ethno botanical practices in disease management, vaccination through convergence with line Department give a good return in this stream of income generation.

The whole programme of integrated livestock is run in close collaboration of the concerned state department. Besides, they engage themselves in some off farm and non-farm activities

Table no. 4.11: Case study Small Animal based Integration Name of SHG: Abhijan swanirvar Dal Village- Fatepur, P.O – Baragram Block – Harirampur, D/ Dinajpur No. of Members:11			
No. of animal /Qty of land owned	Particulars of expenditure	Investment (Rs.)	Return(Rs.)
Cow(7), goat(12), duck(22) & chick (50)	Feed, medicine etc.	206800.00	41000.00
CPR Mgt		10300.00	3000.00
Non farm activities		4600.00	800.00
Total income(Rs.)		221700.00	44800.00
Net Income (Rs.)	176900.00		
Income per MK (Rs.)	16081.00		
Benefits accrued	<ul style="list-style-type: none"> • Availability of vegetables along with milk, meat and eggs • Reduction of cost 		

like production of vermi compost and kantha stich material specially by the minority women members for sale.

In addition to these activities, a special approach was made in this kind of integrated model to address the livelihood issues successfully by LKP that is partnership approach (Private- Private & Public – Private). The private land that remain fallow in between two seasons

is taken on lease basis in Private-Pvt mode of partnership for a short period. The public land(road side, canal side, untapped land etc) in Public -Private partnership mode is adopted by the landless SHGs to take up agro forestry plantation for fruit, fodder, fuel, fertilizer and timber(FFFFT). Ponds and other water bodies are taken on lease for integrated farming with agro forestry and livestock. Gram Panchayat authorities played an important role.

Land based integration



Small animal based integration



Pond based integration



LKP- Integrated Farm Livelihood Intervention Model under MKSP



4.2.12. System of Crop Intensification (SCI):

Table no 4.12: System of Crop Intensification		
Content	Land used(acre)	No. MK involved
SCI for rice	1569.46	14752
SCI for wheat	1132.00	1429
SCI for maize	1681.26	7712
SCI for mustard	688.83	4217
Total	5071.55	28110

To combat the adverse effect of climate change, 28110 (46 percent) MKs have adopted SCI in 5071.55 acre of land for cultivation of rice, wheat, maize and mustard. The highest number of farmers (14752) have practiced SCI

for cultivation of rice followed by maize, mustard and wheat.

4.2.13: Livestock Development: It is one of the core activities for enhancement of livelihoods and nutritional security under MKSP. The landless farmers reared small ruminants such as cow, goat, chicks, ducks, pigs etc. of improved varieties as secondary/tertiary source(s) for enhancement of their livelihoods.

Table no. 4.13: Livestock Development						
Name of animal	Birbhum	Purulia	Dakshin Dinajpur	Uttar Dinajpur	Alipurduar	Total
Cow	79466	14749	18670	22851	4756	140492
Goat	99797	21987	25818	29003	4081	180686
Sheep	16582	3967	979	449	0	21977
Pig	7434	627	1225	910	1132	11328
Poultry	204877	48769	23972	72604	10183	360405
Total	408156	90099	70664	125817	20152	714888
No. Of MKs	28456	7105	8446	8875	4758	57640
Per MK availability of animal	14	12	8	14	4	12

Table 4.13 depicts that 57640 no. MKs(94.32 percent) possess various types of small ruminants. They are capacitated on disease management, improved rearing practices and on the need of vaccination. Each MK possesses 12 nos. of animals on an average.

Poultry farming



Integrated livestock activities



Animal vaccination camp



Goat rearing



Hatching of ducks by the desi hens



Sheep rearing



Enterprise Development and Special Achievements

Highlights

- Under the project, 307 Producer Groups were formed from amongst the interested MKSHGs to roll out collective production and collective marketing by the MKs.
- Out of these groups, 281 PGs have been federated into 5 Producer Companies under Companies Act 2013 in Birbhum (3), Purulia (1) and Dakshin Dinajpur (1) and 3 Cooperatives under the Cooperative Societies Act, 2011 in Birbhum (2) and Purulia (1).
- Business plans were made, marketing network both local and non-local to upscale their business activities established along with various value addition activities.
- Efforts have been made to establish a combination of traditional and modern marketing including online marketing.



Chapter 5: Enterprise Development and Special Achievements

5.1: Development of Producer Groups, Farmer Producer Companies. Cooperatives:

LKP developed a business model to provide the primary producers an end to end solution starting from organizing the producers into producers' organizations to productivity enhancement and building market linkages. Under the project LKP provided knowledge, information, some useful components to support business which helped the FPOs to emerge as business enterprises. At the first instance, 307 Producer Groups were formed from amongst the interested MKSHGs to roll out collective production and collective marketing. A district wise scenario is presented here.

Table no:5.1 Producer Groups(PG) formed under MKSP			
District	No. of PGs	No. of MKs	
Birbhum	260	4131	
Purulia	9	150	
Dakshin Dinajpur	12	153	
Uttar Dinajpur	21	289	
Alipurduar	5	89	
Total	307	4812	

The table shows a district wise scenario of 307 PGs formed under MKSP with 4812 Mahila Kisans distributed over 5 districts under the project area that deal with 12 types of trade activities. Among the districts, Birbhum is having the highest number of PGs consisting of 4131 MKs followed by Uttar Dinajpur, Dakshin Dinajpur, Purulia and Alipurduar.

Table no.5.2: Producer Enterprises formed under MKSP				
Sl. No.	District	Block	Name of Company/ Cooperative Society	Date of incorporation
1	Birbhum	Labpur	Nitya Sangha Mahila SHG Co-op Society Ltd.	14.03.2017
2	Birbhum	Labpur	Mahabir Sangha Mahila Society co. op. society Ltd.	14.11.2014
3	Dakshin Dinajpur	Harirampur	Biratnagar Mahila Kisan Producer Co. Ltd	13.07.2019
4	Purulia	Jhaldall	Nowahatu Bibekananda Sangha Samabay Samity Limited	11.10.2017
5	Birbhum	Labpur	Jamna Mahila Kisan Producer Company Ltd	26.06.2019
6	Birbhum	Labpur	Aragami Mahila Kisan Producer Company Ltd	25.06.2019
7	Purulia	Jhalda II	Kangsabati Mahila Kisan Producer Company Ltd	14.06.2019
8	Birbhum	Illambazar	Ghurisha Farmers Producer Company Ltd	03.10.2019



Out of these groups mentioned above, 281 PGs have been federated into 5 producer companies under Companies Act 2013 and 3 Cooperatives under the Cooperative Societies Act, 2011. The companies formed under MKSP, were further provided with intensified training, support for logistics, technical, financial and operational issues in order to push them for an initial kick start to go ahead. The number of shareholders has been increased gradually. Post incorporation compliances have been made. The highest number of shareholders participated in Jamna Mahila Kisan Producer Company Limited, Birbhum followed by Atragami MKPC Ltd, Birbhum, Kangsabati MKPCLtd, Purulia, Ghurisha FPC Ltd , Birbhum and Biratnagar MKPC Ltd, Dakshin Dinajpur. Apart from these



Products collection by Producer Company

business plan was made, marketing network both local and non local to upscale their business activities along with various value addition activities took place such as aggregation, sorting, grading, storing, processing, packaging, selling etc. **Value Chain** study was under taken in collaboration with VSO International in the project area. They identified a few major commodities namely,

Certified Seeds, bio pesticides and bio fertilizers and selected vegetables in the study. Snippets of such study in the district of Birbhum are appended. Various modes of marketing are being pursued including a model developed as market at home named ' [Barite Bazar](#). Efforts have been made also to establish a combination of traditional marketing and modern marketing including e-marketing. Under the project the producer farmers members have connected with local market, nearest *kisan mandi*/ *Krisak Bazar*(Dept. of Agri Marketing), Sufal Bangla(Dept. of Agri Marketing), *Sammunati* (e marketing)etc for direct marketing of their produce by the FPOs. <https://youtu.be/kro6ZLgS94w>





Various activities of MKs Producers groups and companies

chapter Six

Food Security, Income Generation, Production & Productivity

Highlights

- Food was secured with the net availability with 6.50 kg per day per household at the end of the project.
- Total agricultural production enhanced as 33.57 qtl. per MK household in 2019 in comparison to 7.63 qtl in 2013, while productivity of the major crops for cereals (11.05qtl.), pulses and oilseeds (7.12qtl.) and vegetable (13.77 qtl.) found in 2013 per acre have turned out to be as 11.48qtl, 7.66 qtl and 28.65 qtl per acre respectively at the end of the project in 2019.
- Land was utilized judiciously to produce crops in three seasons (Pre-kharif, Kharif, Rabi) and diversification of multiple crops took place in every season on a single plot. Thus, cropping intensity along with volume of production increased throughout the year.
- The MKs undertook multiple income generating activities (agriculture, livestock development, off farm and non-farm etc.) to enhance their income 3.4 times as Rs. 5309.00 per month in 2019 compared to Rs.1557.00 per month in 2013-14. It may be noted that income per MK as Rs. 1250.00 per month was estimated in the Baseline Survey in 2012-13.
- Major source of average income per MK per annum from agriculture reached Rs.41532.00 in 2019 which was only Rs.7478.00 in 2013-14. Average income from livestock rearing and fishery enhanced from Rs.6254.00 in 2013-14 to Rs. 14186.00 in 2018-19 per annum. Average income from other sources (off farm/ non farm etc.) per year per MK also increased from Rs. 4950 in 2013-14 to Rs. 7990 in 2018-19.
- Thus, total income of MK from all sources enhanced to Rs. 63708.00 (2018-19) from Rs. 18682.00 (2013-14).

Chapter 6: Food security, Income Generation, Production & Productivity

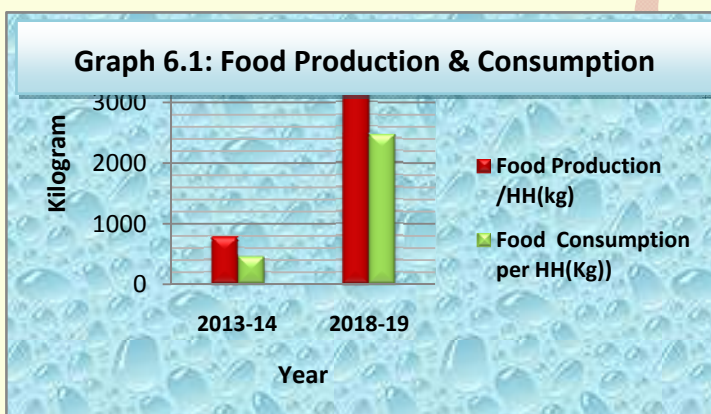
6.1. Food Security: It entails ensuring adequate food supply to people, especially those who are deprived of basic food and nutrition. India ranks 94 out of 107 major countries in terms of Global Hunger Index 2020 (www.globalhungerindex.org). In spite of the State of West Bengal being one

of the major food producers in the country, hunger and starvation have not ended in many parts of the state. In order to achieve the

Table no: 6.1 Food Production and Consumption per Household

Year	Production /HH(kg)	Consumption per HH(Kg)	Consumption per HH per day(kg)
2013-14	772	450	3.33
2018-19	3500	2471	6.50

Sustainable Development Goals (SDG) of Zero Hunger (Sub Goal 2), declared in 2015 by United Nations, Government of India undertook various efforts to mitigate the food security by making it available, accessible to the PoPs for utilization of food. The primary



objective of MKSP was to secure food at household level by enhancement of production and productivity in agriculture and generation of income. Over the last few years of project period, the total agricultural production as well as productivity of the MK households have been enhanced. The table shows that there is a marked difference in household production as well as consumption of food

between 2013-14 and 2018-19. In comparison to 2013, the net availability of food has increased from 3.33 kg/day to 6.50kg per day per household in 2019. Information in detail on food intake derived from the special study has been elaborated in Chapter 9.



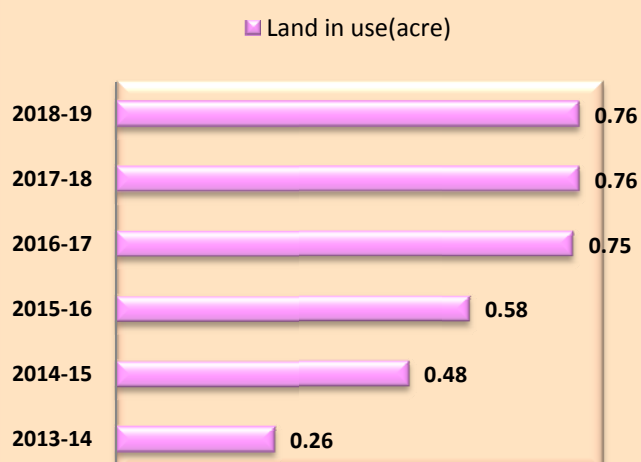


6.2: Production and Productivity:

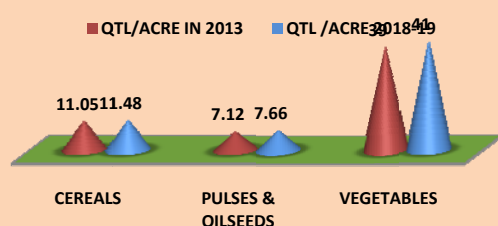
Table 6.2: Volume of Production (Qtl) per MK per year

Year		2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Av. Land per MK(Acre)		0.26	0.48	0.58	0.75	0.76	0.76
MK Covered		30145	53229	55366	60743	61109	61109
Crops	Land under SA (Acre)	7837.7	25549.9	32112.3	45557.3	46442.8	46442.8
Cereals	Land used(Acre)	12600.61	39664.67	43357.11	59169.76	61011.23	61011.23
	Total Production (Qtl)	139236.7	439881.2	484732.5	666251.5	690037	700408.9
	Productivity(Qtl/acre)	11.05	11.09	11.18	11.26	11.31	11.48
	Cropping Intensity	1.9	1.9	1.91	1.91	1.92	1.92
Pulses and Oil seeds	Land used(Acre)	5124.65	11178.09	12180.52	17008.04	21999.24	24443.6
	Total Production (Qtl)	36498.13	80482.25	88430.58	125689.4	164554.3	187317.3
	Productivity(Qtl/acre)	7.12	7.2	7.26	7.39	7.48	7.66
	Cropping Intensity	1	1	1	1	1	1
Vegetables	Land used(Acre)	3255.66	12982.55	26165.97	34259.05	39916.4	40619.15
	Total Production (Qtl)	44836.02	249914.1	555503.6	859902.2	1100096	1163542
	Cropping Intensity	2.7	2.71	2.78	2.82	2.84	2.89
	Productivity(Qtl/acre)	13.77	19.25	21.23	25.10	27.56	28.65
Total Agricultural Production(Qtl)		220570.9	770277.6	1128667	1651843	1954687	2051268
Agricultural production(Qtl) /MK		7.63	14.47	20.39	27.19	31.99	33.57

Graph 6.2: Land in use(acre)



Graph 6.3: Productivity of major crops



Enhancement of land in use, production and productivity to empower women in agriculture was of prime importance in the MKSP project, though **per capita cultivable land holding due to fragmentation has resulted in an uneconomic holding size to sustain a poor farmer's family.** Our constant endeavor was made to maximize the yields from the available land of the MK households. Integrated farm management techniques were applied through agro ecology that has enhanced both production and productivity as well. In MKSP, farmers adopted the

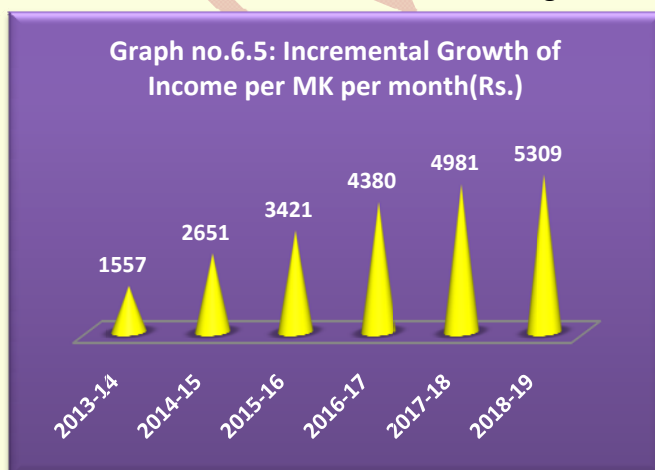
techniques, reduced the cost of cultivation, procured land on lease basis and enhanced the production. Land was utilized judiciously to produce crops in three seasons where diversification of multiple crops took place in every season on a single plot. Cropping intensity, thus, increased along with volume of production throughout the year.

The table no. 6.2 presented above shows the figures of production, productivity and area of land used for cultivation of three major food crops in 2013-14 and 2018-19. It is interesting to note that the enhancement of land per MK took place for production of cereals (0.53 acre), pulses & oilseeds (0.40 acre) and vegetables (0.23 acre) at the end of the project period compared to the figures of those crops were 0.22, 0.17 and 0.06 acres respectively. Similarly, production has also been increased per MK households. Graph no. 6.4 shows that Cropping Intensity was 173.08 in 2013-14 which is 188.42 in 2018-19.

6.3. Incremental Growth through Various Sources of Income

Table 6.3: Year wise Income per MK from various Sources(Rs.)						
Source	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Agriculture	7478.15	15411.00	22526.04	31108.37	38101.83	41532.06
Livestock & fishery	6254.25	8893.00	10889.00	13697.00	13818.00	14186.00
Off & non farm)	4950.08	7516.00	7647.2	7759.84	7856.77	7990.00
Total income per annum	18682.48	31820.	41062.24	52565.21	59776.60	63708.06
Income/month	1556.87	2651.00	3421.85	4380.43	4981.38	5309.01

The strategy for income generation under the project was that every MK would undertake at least two livelihood activities from agriculture, livestock, fisheries etc. Table 6.3 depicts

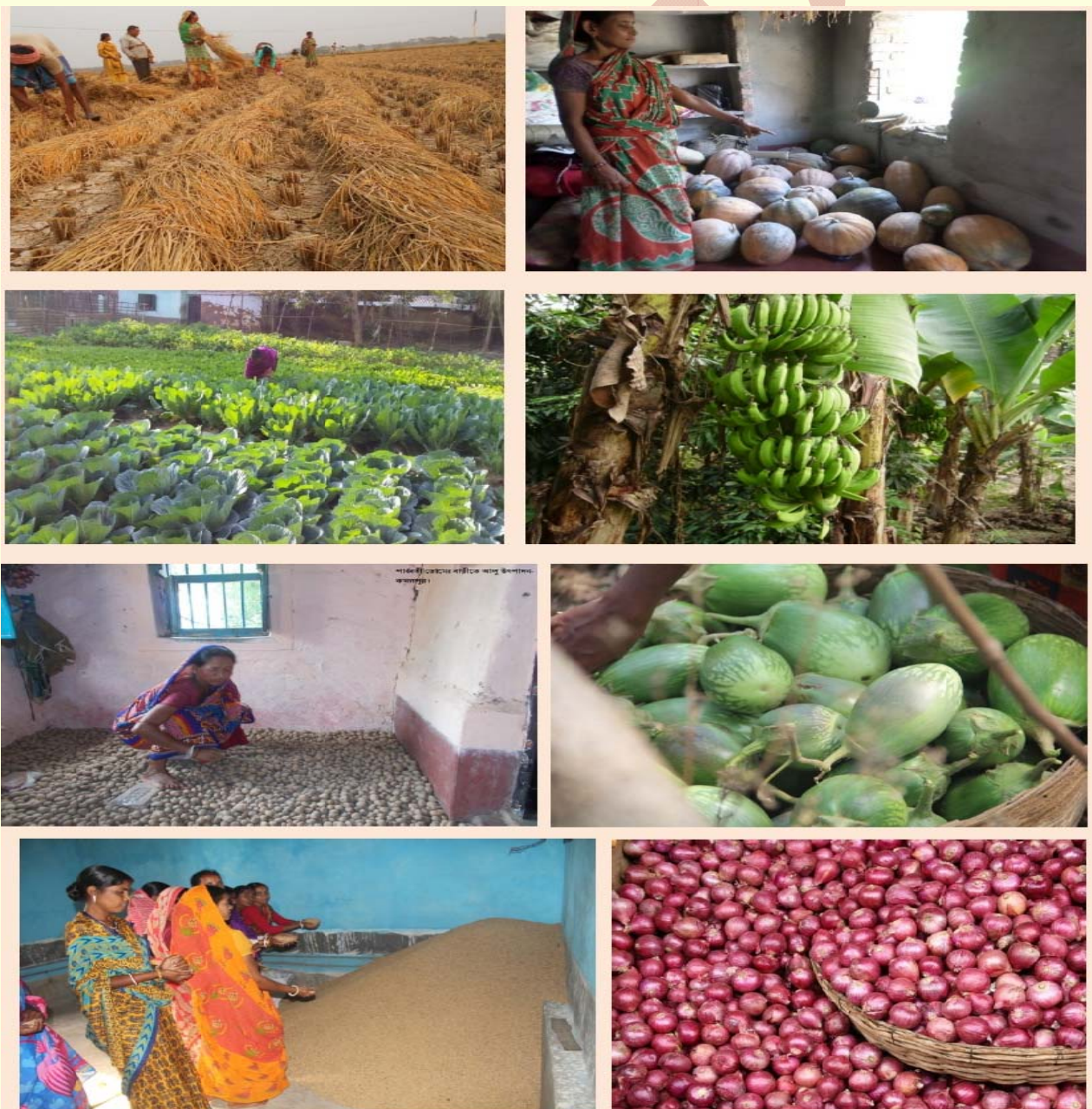


that income of the MKs have been enhanced 3.4 times (Rs.5309.00) more than that was found in 2013-14(Rs.1557.00). Income from agriculture have had significant enhancement (5.4 times) due to multiple cropping and application of sustainable technology. Income from livestock rearing and fishery sources (more than double) due

to supply of improved variety of ruminants given from the project fund, vaccination and

disease management support by the State Animal Husbandry Department. The other sources include on and off farm activities, agro forestry etc. Graph no. 6.3 shows a gradual enhancement of income in each year making average income per Mahila Kisan that reached Rs. 5309.00 per month at the end of the project in 2018-19 . It may be pertinent to mentioned here that the average income of the Mahila Kisan per year turned out to be only Rs. 15000 emerged from the Baseline Study of the project under taken in 2012.

*Here the income from agriculture sources has already been included and income from many other sources that are significant like MGNREGA, income from migration, selling of land, agro forestry from household income as a whole have not been included.



Various I produces of Mahila Kisans in different seasons under MKSP

Highlights

- The monitoring and review activities had two parts, internal and external. Internal monitoring has been done by Project Implementation Body (PIB), Community Institutions (VLF, GPLF, BLF) in the field area and external review by funding agencies like MoRD, WBSRLM and NIRD&PR.
- A committee consisting of internal experts specifically for internal monitoring and evaluation of the project work was formed by LKP as a principle of its project implementation.
- Monthly meetings used to be held at the Head Quarter in every month to assess progress, obstacles and needs for the project besides regular meetings in the field level.
- Monthly reports (Physical and Financial) from the field units submitted to the LKP head quarter and the DMMU of respective districts with a copy to the local BDOs under the project area.
- The Quarterly Progress Reports in the prescribed format were regularly submitted to WBSRLM for onward transmission to NMMU by the specified date in every quarter in a year.
- Regular field visits were undertaken by our subject matter specialists from LKP to assess the situation in the field as well as providing training required for the project staffs.
- A specialized MIS has been developed by LKP to capture the progress on a regular basis and uploaded in the website.

Continued....



....Highlights

- External reviews took place by the representative from state, district, block as well as national level throughout the project period.
- Third party assessment was done by the external agency namely, JVES, Regional Council for PGS Organic Certification and a training provider in Organic Farming and allied sector In January, 2018.
- NIRD&PR also conducted a field study based interim evaluation on behalf of MoRD to assess the performances and its impacts on the livelihoods of the poorest of the poor farmer households under MKSP.
- M/s A.C. Nielson undertook a detail study as a part of the end evaluation of the MKSP project in our intervention area in all the 5 districts on behalf of the MoRD held in 2019.
- MoRD has come out with a Compendium of selected 'Agro Ecological Best Practices' in which an explicit report on 'Integrated Livelihood approach for landless and marginal farmers through Convergence by LKP in West Bengal' was included.

Chapter 7: Monitoring and Evaluation

- The monitoring and review activities have been undertaken as a continuous process throughout the project period in multiple ways.
- Internal monitoring by Project Implementation Body (PIB), Community Managed monitoring by the GPLF in the field area and external review by funding agency are three major parts of monitoring and evaluation

7.1: Monitoring: Proper monitoring and review in a regular manner is an essential ingredient for having an in-depth insight about the progress and performances of all the stakeholders with respect to project action plans. LKP has implemented its activities with its core principle of enabling women institutions themselves to transparent self monitoring and review mechanism during programme implementation for their own development.

The monitoring and review activities have been undertaken as a continuous process throughout the project period in multiple ways.

- Internal monitoring by Project Implementation Body (PIB), of the LKP
- Community Managed monitoring by the GPLF in the field area
- External review by funding agency like MoRD, WBSRLM and NIRD&PR



**Field monitoring by
Block in charge and CRPs**

7.2. Internal monitoring by Project Implementation Body:

A committee for specifically monitoring and evaluation of the project work was formed for the MKSP Project by LKP as a principle of its project implementation. Monthly meeting was held at the Head Quarter level every month to assess the performance, obstacles and needs for the project and act accordingly. Besides, regular such meetings used to take place every two months in the field level in the districts.

- Monthly reports from field units in structured format duly filled in received at the head quarter on both physical and financial progress that are checked, verified and consolidated at the head quarter. The district level reports were also shared with the DMMU of respective districts with a copy to Block Development Offices under the project area.
- The Quarterly Progress Reports in the prescribed format were regularly submitted to WBSRLM for onward transmission to NMMU by 7th day of every quarter.
- Regular field visits were under taken by our subject specialists from HQ level to assess the situation in field as well as providing training required for the CRPs , project staff members and other stake holders including meeting with the GP and the block level officials .



7.3. Monitoring and Review by the Community Institutions:

The federations at GP level as well as village level played an important role in the implementation of the project for the poorest of the poor. The activities followed by the women institutions for the purpose included as follows:

1. LKP has introduced a system under the project to monitor the services and field performances of the CRPs/PPs by the federations as end users to communitize the entire project activities
2. The community institutions at village and GP level federations acted as watch dogs for successful implementation of the project activities. The CRPs/PPs were given a target based on monthly action plan and the GPLF and VLF monitored and reviewed the performance on a monthly basis and reported to the PIA.
3. The service charges have been transferred to the respective GPLF's bank account in order to disburse the same to the CRPs/PPs every month to ensure their involvement being nested in the villages.
4. The input under the project have been provided to the SHGs as participatory cost basis as follows:
 - A core committee was formed with representatives drawn from the federations, LKP block In Charges, in some cases, members from the GPs to take a decision regarding need, procurement process and its distribution by the SHGs at the grass roots
 - Fund required was disbursed to the bank account of GPLF by LKP after receiving quotations and distribution plans for distribution to the MK.
 - Funds and functions of the project work, thus, managed by the community developed a sound system for effective field management under MKSP.

7.4. Monitoring through MIS:

A specialized Web based MIS has been developed by LKP to capture both process & output indicators at different field units that helped monitoring the progress, in a regular interval and /or otherwise as & when required.

- **The LKP- MIS** used to generate various reports which helped in decision making and analysis about the performances of the project parameters.
- **The project specific** reports have been prepared for further analysis.
- LKP MIS possesses a strong database on MK profile (basic information), seasonal plans, physical progress, production, incremental income, capacity building success stories, best practices etc in its store.

7.5. External review: It took place by the representative from state, district, block, national level which includes:

- Review & consultation workshops with both state and national level were attended by LKP regularly.
- Expenditure statements, Utilization Certificates & related audit reports to WBSRLM, MoRD were submitted in every quarter in the form of quarterly progress reports.
- Progress reports both physical and financial uploaded on the LKP website on regular basis
- Third party assessment was done by the external agency namely, Jalpaiguri Vivekananda Education Society (JVES), Regional Council for PGS Organic Certification in the Eastern Region of the country and a training provider in Organic Farming and allied sector In January, 2018.
- NIRD&PR also conducted a field study based interim evaluation on behalf of MoRD to assess the performance and its impacts on the livelihoods poorest of the poor farmer households in intervention area of LKP that took place in.



**SPM (livelihood) visiting MKSP sites
on behalf of WBSRLM**

• Teams from MoRD as well as WBSRLM visited our project area number of times throughout the project period. MoRD has come out with a Compendium of 'Agro Ecological Best Practices' in 'Integrated Livelihood Approach for Landless and marginal farmers

through Convergence by LKP in West Bengal'.

- Last but not the least; A.C. Nielson undertook a detail study as a part of the end evaluation of the MKSP project throughout the country held in.

7.6. Impact assessment by the external agencies: Observation, assessment and recommendation on MKSP at a glance

7.6.1. Jalpaiguri Vivekananda Education Society: Observations

- The small and marginal farmers were found to be early adopters of technology.
- The Mahila Kisans prepare their own concoctions. If they are



not having the cattle with them, it seems they collect it from their neighbours for doing so.

- Development exercises are found to be more oriented towards Community approach for several initiatives.
- Individually, vermi composting seems to be turning towards enterprises.
- Climate resilient technology & new agriculture practices are promoted as a part of sustainable agriculture in the project area. Seed selection, seed treatment, System approach of cultivation, Agro Forestry, bio mulch, pitcher irrigation, drip irrigation are some of the techniques practiced by the women farmers have been experienced by the visiting team.
- Women are empowered and strengthened are found to be proud for their recognition as farmers
- They sort out their problem collectively.
- Contribution to the family earning makes them self esteemed and recognition in the family

7.6.2. NIRD&PR : Some observations during evaluation:

- The successful implementation of the MKSP by LKP shows a real impact it had on their livelihoods by the Mahila Kisans created rippling effect among other communities outside the project that further fuelled them practice sustainable agriculture in their own field.
 - LKP's knowledge dissemination on sustainable agriculture and animal husbandry is laudable since none of the MKs interviewed expressed interest in chemical farming.
 - Targeted MKs were provided training with customized training process as per the ground realities to make it easier to adopt.
 - The most important is the community nutrition gardens and their own home nutrition gardens have been self-sufficient in feeding them with quality food throughout the year which has considerably increased their health.
 - CRPs were provided necessary support structure with reading materials, printed leaflets, books, A-V documents, model, module etc. for providing at the grassroots
- The big farmers did not adopt the changes but it seems, they want to accept the process, but are unsure of the risk associated with it.



Mid term evaluation by NIRD



- There has been tremendous effect in term of livelihood impact which were evident by visiting their home and talking to the MK families.
- The accrued saving per family per month is not less than Rs. 5000/- as per the data gathered. The income has almost tripled in most of the families in the last four years.
- The soil in the area has enriched and the pest population since negligible in the observed areas.
- School dropouts of the children due to paucity of money are almost nil in MK families and some could also afford private tuition.
- The bottom up approach forming SHGs or sub clusters and their chosen members at federation level could very well represent the actual ground scenario where in the interventions are necessary. LKP has done a tremendous work through community institution as a strategy to raise the voice and creating a space for the Mahila Kisans in the public domain through MKSP project.
- The social evils has considerably reduced with a united face of MKs through concerted effort of the SHGs and awareness of their rights build up by the CRPs
- A Mahila Kisan being a successful earning member within the family has been able to diminish the male ego.
- Majority of the SHGs who formed Producer Groups seems successful in one trade or the other.
- Quality certification in terms of PGS organic is what most MKs are interested to do.
- The biggest take away through the MKSP programme is their health benefit.
- Domestic violence is considerably reduced due to objections raised from the SHGs .
- TRUST is the most important asset that LKP has generated among the MKs while implementing the project.
- Women empowerment is the important goal that the MKSP project has achieved by LKP and their team members.

7.6.3. Ministry of Rural Development: Compendium on Agro Ecological Practices: MKSP

Some observations are presented here from the compendium as following:

- **Bottom up planning:** A smooth and healthy partnership between SHG and PRI has been established. The members of MKSHGs prepared their livelihoods plan, which are consolidated at village/Sub Cluster level. After being approved in Gram Sansad Sabha, the consolidated plan are considered for incorporation in the annual GP plan
- **Capacity building:** Experts from reputed institutions like BCKV, KVK, CADC, NIRD &PR, BRAPRD and from Governmental line departments have trained CRPs. They are also supported field level handholding by LKP experts.
- **Approach to landlessness:** The private land and the public land that remain fallow after harvesting Aman rice are taken on seasonal lease on Pvt –Pvt and Pub-Pvt mode in season to season. Similarly on common land, the Pub-Pvt partnership mode



is adopted by the landless SHGs to take up agro forestry plantation. Ponds and other water bodies are also taken on lease for integrated farming. The leasing of land to individual landless and landless groups is finalized with the involvement of SHGs and PRI.

- **Nutrition Garden:** Most of the families in the visited villages have adopted the nutrition garden model in small plots of about 2-10 decimals as per the availability of land near their houses. Four different models were observed during the visit
 1. Community nutrition garden in lease land taken up by a group of landless
 2. Individual members doing it on their own land or on land leased from other farmers
 3. Some are doing it in small farm pond close to their house along with fish farming
 4. In schools also SHGs are promoting nutrition garden in school while helped children in getting chemical free nutritious meal.
- **Livestock:** Integrated livestock has been one of the major intervention promoted by LKP and the entire programme is run in close collaboration with the Animal Husbandry Dept. of the local Government.

Overall outcomes: The overall interventions around nutrition garden and livestock, especially poultry, are making the families self sufficient around nutrition along with ensuring additional income for women.

- ✓ The linkage between SHGs and PRIs is very vibrant.
- ✓ During interaction it is evident that the women are having increased say in their villages and Gram Sabha. They have developed much confidence to deal with other stakeholders and now also taking decisions in their villages and Panchayat.

7.6.4: A.C. Nielson: Observations during End Evaluation on behalf of MoRD

- Awareness about various Government Schemes/Programmes is higher in SHGs under MKSP as compared to the households who are not under MKSP.
- 77 percent households in MKSP own land in West Bengal and average landholding size was less than 1 acre.
- Awareness about agricultural improvement practices was higher among households of MKSP areas than in the non MKSP areas.
- Adoption of agricultural improvement practices was higher among households of MKSP areas as compared with control areas
- The proportion of households who were involved in animal husbandry was much higher in MKSP areas.
- Three major veterinary services received for the livestock were medicines, vaccination and de- worming. Receiving these services from Pashu Sakhi staff was only 15 percent and MKSP areas received these services more than control villages.
- Around 68 percent of participants who received one training in Plant Nutrient Management adopted the practices while around 82 percent of women farmers

who received more than one training on the same subject reported adopting the practices

7.6.5. Key learning and best practices:

- ✓ The round the year Kitchen Garden model with a mix of vegetable and fruit trees in small plots following locally prepared organic input, including local seeds is a promising activity
- ✓ It is observed that in MSSRF, ORRISA, LKP and PRADAN project areas the farmers largely adopt improved seed both from indigenous and improved category
- ✓ Observations from the best practice show that there are hardly any specific activity that really contribute significant additional income, i.e to the tune of Rs.40000-50000 p.a on the other hand in the cases of LKP in West Bengal. PRADAN in Keonjhar , Odisha and the Harsha Trust in Koraput, Odisha, it is found that most of the assisted families are engaged around whole farming system, where a basket of compatible activities are taken up in an integrated manner, thus overall returns are significant in terms of enhanced income above the desired level besides ensuring food and nutrition security to a larger extent

Source: Compendium on Agro Ecological Practices, MKSP, Ministry of Rural Development, GOI.



From L to R(clock wise): (i) World Bank Team, (ii)Divisional Commissioner, Government of West Bengal, (iii) PRADAN team on behalf of MoRD & (iv) NMMU, MoRD



chapter Eight

Documentation, Public disclosure, Seminar/ Conference & Special Achievements

Highlights

- Mahila Kisan card was designed as per MoRD guidelines to collect all relevant information throughout the seasons during the entire project period.
- A sound MIS was developed to generate various types of information, as required by the project team with feedback received from the field units.
- Theme- based Models/Modules(21), books (38), pamphlets/leaflets (9), charts (21), etc. were developed under the project and disseminated to grass root level and also shared with the agricultural experts available in the line departments of the district and block level.
- Subject specific Audio-Visuals (18) along with instant photo documentation have been prepared by the experts and widely used as learning material for different stakeholders under MKSP.
- Various Whats -App groups have been formed at the level of LKP HQ to disseminate relevant updated information regarding season wise agricultural plans, advisories, weather reports, pest attack, market price of produced commodities and the market network etc.in order to exchange information instantly.
- Updated information was disseminated through Public Disclosure (wall writing, display board, flex/ banner, leaflets, hoarding etc.) displayed in the public places in the project area.
- Series of seminars/ conferences/workshops were attended and also conducted by LKP in association with various eminent institutions like IIT- Kharagpur, Indian Institute of Engineering, Science & Technology (IIEST), etc.

Continued.....



.....Highlights

- Papers were presented in NIRD &PR, Hyderabad and All India Peoples Technology Congress (AIPTC) on different aspects of livelihood development of the Mahila Kisans in West Bengal under MKSP.
- LKP was recognised by MoRD while publishing an explicit report in the compendium of 'Agro Ecological Best Practices' under MKSP on 'Integrated Livelihood Approach for Landless and Marginal Farmers through Convergence by LKP in West Bengal'.
- 104 CRPs/Master Trainers developed under MKSP were deployed by WBSRLM as village level extension worker in their CMSA project in 8 districts of West Bengal.
- Five Mahila Kisan companies were incorporated under Companies Act 2013 and three Cooperative Societies under State Cooperative Act, 2011 and are functional at present.
- Twenty four Mahila Kisans/ CRPs/ PPs/ Progressive Farmers have been conferred various awards like Krisak Ratna, Kriti Krisak, Kriti Krishi Samman and other awards for agriculture and livestock activities by the department/ agencies of the Government of West Bengal.
- LKP Training Centres in Birbhum and Purulia have been recognised as certified training centre under Utkarsha Bangla, Deen Dayal Upadhyay Kaushalya Yojana.
- LKP set up soil test laboratories to examine the soil parameters to have valuable insight of the soil condition in order to maintain proper soil health in the village level.



Chapter 8: Documentation, Public Disclosure, Seminar , Conference and Special Achievements

8.1. Project documentation: It is a vital part of project management to establish traceability concerning the project. Documentation lays the foundation for quality, accountability and traceability for the entire project throughout the implementation period. LKP has maintained the following records for documentation:

- Mahila Kisan card was designed as per MoRD guidelines to collect all relevant information of their status and production particulars throughout the seasons. This was meticulously done by the Mahila Kisans under the guidance of the CRPs. Data so collected formed the MIS developed under MKSP and generated various types of information as desired by the project team.
- Filing the Monthly Progress Report after consolidating the field data at the HQ level and submission to office of the Block development Officer
- Regular updating of LKP MIS simultaneously with the individual MK card
- Submission of Quarterly Progress Report to MoRD as well as uploading in website
- Regular updation of website with updated documents(QPR, Audited Accounts and project related other documents)
- Models/Modules, books, pamphlets , leaflets, charts, theme based training materials developed under MKSP are well documented published and disseminated upto grassroot level and shared with the agricultural experts available in the line departments of the district and block level
- Subject specific Audio –Visual documents have been prepared by the experts and widely used as learning material for different stakeholders. It helped immensely in development of skills for the MKs in particular and other stakeholders in general.
- Various *whats app* groups have been formed at the level of LKP HQ to disseminate current information and advisories by the Governmental departments and other agencies on weather, rainfall, flood, storm etc. and problems faced in seasonal cultivation of crops, declaration of benefits for the kisans by the Government(central & state). Such groups were also formed within the CRPs in each block for interact within themselves and sharing the relevant information to the MKs. Information about season wise agricultural plan, advisories during pest attack and also the market price and the market network was usually shared by them.
- Instant photo documentation and occasional video graphy directly from field also helped to understand what is happening in other area.

8.2. Public Disclosure:



- Leaflets/ IEC materials
- Audio –visual documentary
- Hoarding etc.
- Publication of progress in News Paper

LKP has disclosed updated information on MKSP project for the purpose of disseminating progress of the project. Those were displayed at various public places in the project area. It includes some important para/hamlet in the village level also.

The different forms of public disclosure may be stated as follow:

- Wall writing
- Display board
- Flex/ banner

8.3. Seminars/ Conference attended/Publication:

1. A national seminar cum workshop was held organized by LKP in association with at IIT, Kharagpur in May, 2015
2. LKP participated in **All India Peoples Technology Congress (AIPTC)** in 2017 and



2018 and presented papers each year on the impact of MKSP project in the livelihood development of the Mahila Kisans in West Bengal.

3. The national seminar organized by Indian Association of Social Development & Health held at NIRD &PR, Hyderabad in November, 2017 was also attended by LKP to present a paper on '**MKSP: Challenges to feed the landless**'

4. LKP also organized state level seminar on Certified Seeds for the Poor held in Bolpur in 2016. Eminent scientist, experts and other organizations participated in the programme.
5. LKP in association with Department of Electronics, Indian Institute of Engineering, Science & Technology Shibpur, organized two training cum workshops in 2017 and 2018 on **Soil Protection, Conservation, & utility of Field Deployable Soil Moisture** followed by field testings done in various districts under MKSP.



6. A paper was published entitled 'A Cost Effective Field deployable system for soil micro nutrient analysis based near infra red reflectance spectroscopy', Rural Technology Development and Delivery, Springer, 2018, page309-322.

8.4. Special Achievements:

- **Recognition of LKP in the national level:** The best practices of Loka Kalyan Parishad under MKSP were found its place in the **Compendium of 'Agro Ecological Best Practices' published by MoRD, Government of India**. An explicit report made by a MoRD visiting team in MKSP project area has been published in the same entitled **Integrated Livelihood Approach for Landless & Marginal Farmers through Convergence by LKP in West Bengal**. For [detail click here](#).
https://aajeevika.gov.in/sites/default/files/nrlp_repository/Compendium%20of%20Agro%20Ecological%20Best%20Practices%20under%20MKSP%20%28English%29.pdf
- **Employment Generation of our CRPs in the State Anandadhara Mission:** 104 CRPs/ Master Trainers developed by LKP under MKSP were deployed by WBSRLM as village level extension worker in their CMSA Project. They have been deployed and working successfully in the districts of Birbhum, Bankura, Purulia, Uttar Dinajpur, Dakshin Dinajpur, Alipurduar, Howrah and Nadia.
- **Formation of companies under Companies Act as well as Cooperatives Act have already been mentioned in the previous chapter.**
- [24 Mahila Kisans /CRPs/Progressive Farmers](#) have been awarded with Krishak Ratna, Kriti Krishi Samman, and other awards on agriculture and livestock activities conferred by State Departments and agencies.
<https://www.youtube.com/watch?v=5cEwPtaMDKA>
- **Utkarsh Bangla under Deen Dayal Upadhyaya Grameen Kaushalya Yojana , NRLM.** During this project period, LKP received recognition as a Training Provider from



PBSSD, Department of Technical Education, Training and skill Development. The training centers set up in the district of Birbhum and Purulia with infrastructure, equipment, materials and modules along with residential accommodation. LKP has been awarded with training courses in agriculture & allied sector namely, Organic

Grower, Vermi Compost Producer, Goat farmer, Small Poultry farmer, Quality Seed Producer and Veterinary Assistant. A total 96 students from village level received training from the training centres.

- **Establishment of Soil Test Laboratory and training provided:** Soil testing provides a farm management tool to optimize crop production, improve nutritional balance and reduce operating costs and conserve energy by applying only the amount of fertilizer needed. LKP is headed towards organic farming for organic certification. **Soil testing and quality control as well as crop residual analysis** are mandatory for this certification. In general, measurement of 10 soil parameters (pH, EC, Org-C, texture, structure, soil aeration, NPK etc. is considered as soil health indicators. Time to



time analysis of these soil parameters would provide valuable insight on soil ecosystem. LKP have established two Soil Testing units in the districts Birbhum and Purulia which could provide the Soil Health report to each farmer in time so the farmers could maintain proper soil health.



Practical Training under Utkarsh Bangla training program, Ilambazar, Birbhum

3.1.11

Integrated Livelihood Approach for Landless & Marginal Farmers through Convergence by LKP in West Bengal

Background
 Lok Kalyan Foundation (LKF) has been working in the backward districts of West Bengal and is working with about 60,000 Mahila Kshetris spread over 11 blocks of 5 districts. It has been partnering with WBESBM (West Bengal State Rural Livelihood Mission) to implement its MKSP project since 2013 in the Labpur block of Birbhum district. Around 65% of the population belongs to the SC, ST and OBC communities. Agriculture and wage labor are the major sources of livelihood in the area.

Contextual Issues, Problems & Challenges
 With very high population density, the average landholding of the farmers is less than 1 acre and this is decreasing gradually. About 51.05% families are considered to be landless. Agriculture is mostly rainfed and the average food security (own owned land) is about 3-5 months only. The landless families mostly take land on lease from individuals as well as from the Government. However, the leased land is also very small. The issue of land availability results in decreasing livestock rearing due to less availability of grazing lands for animals, which is affecting the availability of compost. Gradually, most of the male members of the families are migrating to other districts and states in search of employment, while women mostly rely on the agricultural activities along with household work. The nutrition status of women is very poor, where more than 70% of the women and children of the target population are anemic.

Core Idea
 With very high coverage of landlessness, nutritional security has become a huge issue in the area. The idea was to ensure access to land individually or collectively through leasing land from individual land owners with surplus land or from common landowner (LKP) with the involvement of NGOs and PRA. The SMC members are trained to utilize these small land areas to produce nutritious food and the year by adopting sustainable crops and organic practices. This is supplemented with strengthening of small livestock like DPM, goats, etc., to further aid to family nutrition and income in the hands of women. Collaboration with Panchayat bodies and various line departments strengthens the overall livelihoods of women farmers, enhances self-confidence, and contributes towards empowerment in general.



MKSP project team meet the BoDs of Mahila Kisan Producer Companies, Labpur, Birbhum

Some of Our MKSP Ratna awarded by State Govt.



Kriti Krishak

Smt. Namita Mahato
Mahila Kisan
Purulia

Krishak Ratna



Smt. Panchami Mahato
CRP, LKP
Purulia



Krishak Ratna

Smt. Manija Begam
CRP, LKP
Birbhum

Krishak Ratna



Smt. Rupa Garai
CRP, LKP
Birbhum



Krishak Ratna

Smt. Amita Bagdi
CRP, LKP
Birbhum

Krisi Award Winner



Smt. Shibani Mondal
Mahila Kisan
Uttar Dinajpur



Kriti Krishak

Smt. Anita Barui
CRP, LKP
Birbhum

Krishak Ratna (Twice)



Sri Atulananda Garai
Progressive Farmer
Birbhum



Krisi Award winner

Sri Gostha Mondal
PP, LKP
Uttar Dinajpur

Kriti Krishak



Smt. Prabharani Biswas
Mahila Kisan
Birbhum

Highlights

- Objectives of the study were to understand the extent of empowerment achieved by the Mahila Kisans in terms of attainment of food security and to study the different dimensions of women empowerment in the context of their space in domestic as well as social environment.
- Study was undertaken in 5 blocks, 4 districts under MKSP project, namely, Birbhum, Purulia, Uttar Dinajpur and Dakshin Dinajpur in the state of West Bengal.
- Selection of sample HHs (2.5 percent) done adopting Circular Systematic Sampling technique to draw 1125 HHs for the purpose of study of women empowerment and 997 HHs for the purpose of food intake study.
- Almost 100 percent of households have ration cards to avail cereals amounting 21.55 kg.in average per month from PDS system mainly from NFSA card (52 percent) and KhadyaSathi (47 percent).
- Access to food on an average was reported as 195.13kg per household per month that comes from their own production sources (73 percent) and commercial market (27 percent).
- Average monthly expenditure on food items per household is derived as Rs.5461.00 and non-food items Rs. 1260.00. Hence, total expenditure on both food and non-food turned out to be Rs.1680.00 per capita per month.

Continued...

....Highlights

- MK households(490)are found to have crossed the ICMR consumption cut off mark i.e., 7542.5 kcal per day for a household with mixed membership of different age groups.
- Considering the average family size as 4 in our study, average individual consumption is derived as 1885.63 kcal per day; on the basis of this, the number of households with average individual consumption above the cut off mark is calculated as 525 i.e.,52. percent of the surveyed households.
- An analysis of the data shows that more than 90 percent households had access to safe drinking water and toilet facility at home as well.
- More than 44 percent households have reported to be treated in a hospital whereas more than 81 percent of the household have been treated at home which also include the members hospitalized in the pre and post hospitalization period.
- Individual food security index was constructed using two broad domains i.e, food domain and hygiene domain.
- Based on various dimensions of food security, the analysis reveals that 68.9 percent MKs under study touched the minimum threshold line of FOOD SECURED (FS) status as per our definition.
- From over all analysis with all parameters of food security i.e., food availability, physical and economic access to food, food utilisation in terms of kcal and access to safe drinking water as well as toilet facility at home, it is derived that 85.1percent women farmers have attained the FOOD SECURED status under MKSP.
- Perceptions of 1125 Mahila Kisan households were recorded and analysed on participation in the decision making process in the space of domestic and social environment.
- Based on various dimensions of women empowerment, overall analysis reveals that 68.9 percent MKs under study touched the minimum threshold line of EMPOWERMENT. status as per our definition.



Chapter 9: Highlights of the Special Study on Food Intake and Women Empowerment under MKSP

A special study was conducted in five blocks in four districts out of five districts under the project, namely, Birbhum, Purulia, Uttar Dinajpur and Dakshin Dinajpur in the state of West Bengal to explore the disparities on some particular issues that was prevailing before the implementation of the project whether remained at the same level or changes took place at the post project period. The key issues for the study were:

9.1 : Objectives of the study :

- To understand the extent of empowerment achieved by the Mahila Kisans in terms of attainment of food security, skill development, enhancement of household Expenditure, creation of asset etc.
- To study the different dimensions of women empowerment in the context of their space in domestic as well as social environment
- To determine the factors of empowerment, that played major role in the process of development.

The study was designed to cover both quantitative and qualitative components to understand the current scenario on the impact of the implementation of MKSP Project on the beneficiaries under the project on demographic profile, food intake scenario, household expenditure, dimension of women empowerment etc. using primary sources of information collected directly from the households of the Mahila Kisans under MKSP .



Study was undertaken in 5 blocks , 4 districts under MKSP intervention area namely Birbhum, Purulia, Uttar Dinajpur and Dakhshin Dinajpur.

9.1.2: Schedule of Enquiry: There are two parts for collection of data from the Mahila Kisan households on the subject mentioned as under:

Part 1: Food and Nutrition Intake

Part 2: Women Empowerment

9.1.3: Part I: Definition of Food Security: In order to achieve the Sustainable Development Goals of zero hunger (Sub Goal 2), declared in 2015 by United Nations, Government of India under took various efforts to mitigate the food security by making it available and accessible to the poorest of the poor for utilization of food.



Achieving food security requires that the three separate dimensions such as availability, accessibility and utilization of food.

- Food availability includes physical supplies of food from domestic production, commercial imports, food assistance and national stocks and distribution of the same through the safety nets that is Targeted Public Distribution System (TPDS).
- Household accessibility of food through home production, market purchases, and/or transfers from other sources (barter, gifts etc.)
- Utilization of food means that food that consumed is appropriate to meet the specific dietary and health needs of individuals within a household. In order to satisfy the health needs, access to safe drinking water and access to sanitary requirements were also added to it.
- To measure food security as per definition discussed above, individual food security index was constructed using two broad domains-food domain and hygiene domain. Food domain consists of availability, accessibility and utilization of food while health domain consists of availability of safe drinking water and sanitation requirement. Women who have scored more than 0.6 were considered to be **FOOD SECURED**.

9.1.4: Survey Reference Period

In this study, Mixed Method of reference period was used to capture data in the 'food intake 'schedule of enquiry. Food consumption and expenditure data were captured for the period of 'last 30 days' while that on non food items were reported for the 'last 365 days'.

Sample size for collection of data was 1125 only for all purposes but after scrutinizing cleaning procedure there have been some rejections of outlier data. Ultimately 997 schedules were processed for data entry and further analysis in case of Food Intake study, while 1125 households were covered and analysed to study on women empowerment.

After data were captured from directly the MK households through a structured questionnaire, was analyzed and presented here in the form of tables, graphs along with relevant notes to describe. Let us put forth the scenario related to achieving food security according to the dimensions set by the world experts in the following paragraphs:

9.1.5: Availability of Food:

Table No.9.1: Availability of Ration cards in Mahila Kisan HHs		
MKs(No.)	Yes	No
997	996	1
%	99.90	0.10

Under the study, we considered food from public distribution system to mean **availability of food through various types of**

ration cards availed by 99.9 percent Mahila Kisans. The table depicts that the MK

Table no.9.2 Availability: PDS Sources (Cereals) per Month per HH	
Block	Quantity (Kg)
Labpur	15.5
Illambazar	20.9
Itahar	30.2
Harirampur	25.6
Jhalda- II	16.9
HH/ per Month	21.55



households under study have received cereals 21.55 Kg per month through NFSA (52 percent) , Khadyasathi (47 percent) and other ration card(1 percent).

9.1.6: Accessibility of Food:

Table no. 9.3: Monthly Consumption , Home Production and Purchase			
Food (KG/HH)	Consumption	Home production	Purchase
Total	195.13	142.52	52.61
%		73	27

Accessibility of food includes agricultural production made by the women farmer households applying agro ecological practices and rearing of small animal and

purchase of additional food items from local markets. The above table depicts that the MK Households access food from their own agricultural production which is 73 percent of total monthly consumption and 27 percent procured through purchase from local market.

Common food items that were consumed by the households included cereals, pulses, fruits, vegetables, edible oil, milk and milk products, fish, meat, sugar, salt and spices.

9.1.7: Utilization of Food

Table no.9.4: Average Monthly Consumption of Common Food Items											
Consumption	No of MKs	Cereals	Pulses	Fruits	Vegetable	Edible Oil	Milk & M. Prodn	Salt & Sugar	Fish Meat	Spices	Total
Monthly/HH	997	63.12	5.89	10.46	46.49	3.41	21.43	5.98	37.35	1.00	195.13
Daily /hh		2.1	0.2	0.35	1.55	0.11	0.71	0.2	1.25	0.03	6.50
Daily per capita		0.53	0.05	0.09	0.39	0.03	0.18	0.05	0.31	0.01	1.64

The table no.9.4 depicts that Monthly Per Capita Consumption (MPCC) per household was 195.13 kg while per day consumption of the household was calculated as 6.50 kg. Average daily consumption per capita takes place is depicted in the dietary diversity of food as Cereals(0.53 Kg), pulses(0.05 kg)followed by vegetable(0.39Kg), fish-meat(0.31kg), milk and milk products (0.18kg), fruits (0.09kg) and other items consumed like Edible Oil (0.03 kg),Salt & Sugar (0.05kg) and Spices (0.01kg) . Utilisation (absorption) has been calculated for energy in Kcal units and intake of protein , fat, carbohydrate in gms . Utilization has been calculated as per ICMR norms as follows:

Table no. 9.5: Utilization of Food			
Particulars	Cut off mark for daily intake per capita	Above(%)	Below(%)
Energy (Kcal)	1885.63	52.7	47.3
Protein(gm)	50	69.9	30.1
Fat(gm)	26	23.3	76.7
Carbohydrate(gm)	377	75.72	24.28



The above table depicts the average Kcal per member of a family stands at 1885.63 Kcal which includes protein (50gm), fat (26 gm) and carbohydrate (377 gm) considering the daily per capita intake. The table also shows that 52.7 percent MKs eat 1885.63 calories and above and 47.3 percent MKs are lying below the average intake of 1885.63Kcal.

- Quantity that consumed in each item was converted to analogous amount of kcal based on the basis of the methods and 'proximate principles: common food' Source: **Nutritive Value of Indian Foods, National Institute of Nutrition, Hyderabad, ICMR.**
- Average consumption of energy in the project area as per Recommended Dietary Allowance (RDA) should be 2155 kcal/day according to ICMR norm; Therefore, daily energy requirements of the family come as per ICMR standard to 7542.5 kcal. (2155Kcal *3.5 cu) Source: **Food & Nutrition Security Analysis, India, Page No. 83, MOSPI &WFP**

Individual biological utilization of food has been calculated on the basis of ICMR norms for consumption threshold mark for protein 48 gms per day, fat 28 gms per day and carbohydrate 377gms per day. The number of households with average individual consumption per day of protein, fat and, carbohydrate touch the cut off mark are 697(69.9%), 232(23.3%) and 755(75.72%) respectively.

9.1.8: Household Expenditure on Consumed Food and Nonfoods:

Table no. 9.6: Household Expenditure on Food and Non Foods			
Particulars	Food Expenses (Rs.)	Non Food expenses(Rs.)	Total(Rs.)
Monthly (per Hhlds)	5461	1260	6721
Monthly (per capita)	1365	315	1680

The table shows that monthly household expenditure on food (Rs.5461) and non-food items (Rs.1260)

that together turned out to be Rs. 6721.00 per month for each household. Further calculation derives that monthly per capita expenditure on food (Rs 1365) and Rs. 315 on nonfood expenses make the total per capita expenditure as Rs. 1680.00

9.1.9: Health and Sanitation

9.1.9.a: Health: Medical Treatment

The table no. 9.7 deals in with two important issues on medical treatment and sanitation. More than 44 percent of households under survey were found to have treated in a hospital for ailment and availed the benefits of health insurance in most of the cases, whereas more than 81 percent of the households have reported to be treated at home which includes the members of the households in pre and post hospitalization period.



Table no.9.7: Health and Sanitation					
	Medical Treatment (Last 365 Days)		Use of Toilet by Hhlds		
No. of MKs	Admitted in Hospital	Treatment at Home	At Home	Outside	Both
997	441	812	899	83	14
%	44.27	81.42	90.22	8.36	1.42

9.1.9.b: Regarding Sanitation Facility

At overall level, 90 percent households reported using toilet at home, about 8 percent of the households practice open defecation mostly by males. However, in case of females, in practicing open defecation was significantly reduced after own toilet is constructed at home.

9.1.9.c: Safe Drinking Water is one of the critical components in maintaining good health as well as attainment of food security. The study shows that more than 90 percent of households drink safe drinking water which was 33.33 percent in 2013-14.

Table no.9.8: Availability of Safe Drinking Water		
Year	2013-14	2018-19
No.	332	904
%	33.33	90.67

Data recorded on consumption (in Kg) and expenditure in (Rs.) on food items have been analysed to find out monthly as well as daily consumption of the households. Food absorption in terms of intake of energy, protein, fat and carbohydrate were calculated as per ICMR norm.

9.1.10: Calculation of Energy and Household

Total households considered: 997

Total number of individuals (including children) : 3954 , Average household members: $3.96 \approx 4$

The household size assumed consisting of father and mother doing moderate work and two children (one between age group 9-12 years and the other between 5-7 years) and based on the average members in the family, the

Table no.9.9: Consumer Units (CU)	
Group	Cu-units
Adult male(moderate worker)	1.2
Adult female(moderate worker)	0.9
Children (9-12 years)	0.8
Children (5-7 years)	0.6

average consumption of energy in the project area should be 2155 kcal/day according to ICMR norms. To deal with energy intakes, the average number of 'consumer units' (cu) was calculated using the following coefficients for computing the **Co-efficient for computation of Consumer Units (CU)** (Source: Nutritive Value of Indian Foods, National Institute of Nutrition, ICMR,1999)

Now, it can be found out the no. of households lying below and above this consumption cut off mark to arrive at a figure shown as below:

Table no.9.10: Household above and below cut off consumption rate	
No. of families that have consumption above 7542.5 kcal per day	490(49.1%)
No. of families that have consumption below 7542.5 kcal per day	507(50.9%)

Since the average family size in our project is 4, average individual consumption comes to as 1885.63 kcal per day that give rise to calculate the average individual consumption above the cut off mark as following.

Table no. 9.11: Average Individual Consumption	
Average per capita consumption above 1885.63 kcal per day	525(52.7%)
No. of families that have consumption below 1885.63 kcal per day	472(47.3%)

LIMITATION: Although in most cases, our assumption of the household consisting of one man, one woman and two children holds true, member composition of households are otherwise in some cases. Therefore, this is calculated only on an overall average basis and not with exact household member composition.

9.1.11: Over all Food Security Results

Women who have scored 0.6 and above are considered to be Food Secured by our definition and is indicated by overall status obtained 'FS'. Women who have not attained 0.6 are indicated by 'FI' or Food Insecured in terms of calorie consumption. The total marking was done out of 5 variables considered for building up the index. With attainment of each sub-domain (variable) women were awarded 1 mark.

Table no. 9.12 reveals that 848 women

Table no. 9.12: Over all Status of Food Security		
Status	No. of Women	%
Food Secured(FS)	848	85.1
Food In-secured (FI)	149	14.9
Total	997	100

farmers, i.e, 85.1 percent MK households have turned out as Food Secured under MKSP



Concluding note: The study was undertaken basically to generate estimates of average monthly per capita consumption and expenditure to understand the change that took place under the project in terms of attainment of women empowerment and of course, food security without which any empowerment cannot be considered to happen at all for the rural poor. Analysis that took place was based on triangulation of primary data; secondary information generated from the LKP MIS as well as data available on public domain. Food nutrition survey analysis is a complex and multi-dimensional task and the fact remains that a single internationally agreed upon approach is not available; yet this exercise has taken care of all dimensions of food and nutrition security as per revised definition of food security except capturing anthropometric measurement studies due to resource crunch. This was our limitation.

9.2: Part II: Women Empowerment:

The issue of women empowerment assumes a central position in the developmental discourse for a long time past and it is linked with the pathways to equality of opportunities. Empowerment is a process aimed at changing the nature and direction of systematic forces that marginalize the women and other disadvantaged section of the society.

Marginal farmers and landless people in the villages in general and women farmers, in particular, are the most vulnerable segment of the village community. Though women participation in Indian agriculture is on the rise, but not the ownership and the sector are dominated by small and marginal farmers with majority of women, are largely engaged in subsistence farming for self-consumption only. Land for cultivation, finance for investments, irrigation facility, quality seeds, technology and market and other inputs are lacking and not under their control.

Issue is to create an ability to empower the women in agriculture and bring in a significant change in the gender equity in land rights and ownership to productive resources, livelihood rights in domestic space and environment enhancing ability to direct their own lives as per their aspiration for future. It encompasses sufficient healthy food, better health and education for children, prevent early marriage of girl child, stop domestic violence and enjoy the liberty etc. to construct a better life and development.

9.2.1: Objectives of the Study:

- To understand the extent of empowerment in terms of attainment of food security, skill development, enhancement of household Expenditure, creation of asset etc.
- To study the different dimensions of women empowerment in the context of their space in domestic as well as social environment and
- To determine the factors of empowerment, if any, played major role in the process



Sample size formed in this part of study was 1125 (percent) Mahila Kisans under the project that was drawn following the statistical methods. Data collected through questionnaire were processed, analyzed and presented in the form of tables , graphs, charts along with notes to describe.

9.2.2: Reflection from the Mahila Kisans

Following questions were asked directly to Mahila Kisans to understand the comparative changes that took place and have their perceptions on different dimensions on women empowerment like participation in procurement of inputs in the production process, ownership of property and assets, decision making in finance related issues, control over income,, liberty to work outside ,own leisure time at home, and dealing in critical issues in the household like own health care, girl child to be born, child marriage, toilet at home, child education, domestic violence ,regular treatment, family status enhancement, relation with Panchayat, skill development etc.

9.2.3: Construction of Individual Women Empowerment Index (IWEI) under MKSP

Individual Women Empowerment Index (IWEI) was constructed on the basis of a few domains that were formed with dew weightages attached like activity domain, knowledge domain and social interaction domain. A cut off mark 0.7, was assumed to measure the empowerment index on the basis of the marks obtained by the individual MKs lying below and above the minimum score (0.7). Women who would score 70 percent mark in the process were considered as EMPOWERED, else are not.

9.2.4: Perceptions of the Mahila Kisans as reported are recorded as below:

9.2.4.1. Whether MKs do participate in the input related matters in the production process (Agri, Animal, fishery & etc.)

- There is a striking difference in decision making situations between Pre MKSP and Post MKSP periods in agriculture (90 percent), Animal Husbandry (95 percent) in comparison to 2013-14.

9.2.4.2.Ownership (joint/single) of Properties(Land, Livestock Equipment, Mobile ,Cycle, Others)

- Land includes agricultural land, non agricultural and homestead land. The study reveals that 32 percent MKs have ownership on land in 2018-19 which was 13 percent in 2013-14. Besides, in other productive assets like livestock and agricultural tool and equipment, access was given to 87 percent and 66 percent of MKs respectively compared to 44 and 15 percent only in 2013 14. Regarding non-agricultural assets, MKs enjoys exclusive ownership on mobile (91 percent) followed by cycles (60 percent) and TV, Radio by 48.36 percent.

9.2.4.3: Extent of Land owned by the Mahila Kisans Herself

- It reflects a significant development of six fold ownership of land gained by the Mahila Kisans from 4.36 percent in 2013 - 14 to 24.8 percent in2018 -19.



9.2.4.4: Whether MK purchase or rented out materials

- Mahila Kisans are found to give their decisions freely in renting, selling or purchasing of materials of the households if need be which was very negligible in pre MKSP period.

9.2.4.5: Whether MK takes part in the decision making in taking loan, it's use and repayment, different source of family income and liberty to purchase things of her own choice from her income

- MKs (more than 90 percent) are given due consideration while taking loan and mode of repayment, knowing sources of income in the family and in case of liberty to buy materials of her own choice.
- To study the detail regarding the amount of loan taken, it's uses and amount during 2013-14 to 2018-19, it is found that 64 percent households reported that they had bank linkages in Pre MKSP period which was enhanced almost 100 percent during the project period.
- Loan taken were reported to be used for productive purposes like for buying land for farming, for purchasing farm assets and inputs like seeds, fertilisers, pesticides, etc.
- To study in detail regarding the amount of loan taken, it's use and amount of refund that took place during the project period (from 2013-14 to 2018-19), it is found that 64 percent households reported that they had bank linkages in Pre MKSP period which was enhanced almost 100 percent during the project period.
- SHG Inter lending was the most preferred source of borrowing with most of households have availed from it amounting Rs19958,000 (37.95 Percent) followed by commercial banks (32.75percent),SHG Cooperative bank (21.09 percent), private loan (0.83 percent),relative and friends (1.14 percent) and other sources (Micro finance) 6.25 percent.

9.2.4.6: Whether Mahila Kisans can decide herself on the issues on health care, girl child etc.:

- Mahila Kisans(97 percent) reported that they take decision for their own health care regarding doctor, medicine, and place of treatment.
- 30 percent MKs opined that they could give her opinion in favour of a girl child to be born.
- 63 percent MK reported to travel outside home on a regular basis.
- 77 percent MKs think that they can take a decision on education of the girl child to continue studies.
- Only 16 percent of MKs reported to be found not in favour of untimely marriage of their girls and will see that it does not happen. 87 percent of MKs reported that they had their say in construction of toilets at home.



9.2.4.7: Own leisure time of Mahila Kisan: It is interesting to note that MKs enjoy her leisure time around 2 hours a day except in Illambazar block in Birbhum district with 1.2 hours a day.

9.2.4.8: Sharing domestic work with others:

- Members of the family shared the domestic work of the Mahila Kisans more in number in comparison to the pre MKSP period which include husband (78 percent), other members (40 percent). More than 8 percent of mother in laws are reported to have shared the domestic work that was usually done by the MK in the Pre MKSP period.

9.2.4.9 Status of leadership of MKs in 2013 – 14 and 2018 – 19:

- 25.35 percent of SHG members under the project holding leadership position in various spheres of women development activities like SHG, Producer Group, Nari Jagorani Samity, social groups, Producers Company etc.

9.2.4.10. Other crucial issues are taken under consideration:

- Domestic violence is reduced by 48.53 percent
- Family status is increased by 91.64 percent
- Food security enhance by 88.62 percent and
- Regular treatment is enhanced by 83.73 percent in comparison to the year 2013-14

9.2.5. Women Empowerment Results:

Table no. 9.13: Overall Status		
Status	No. of women	Percent
Not Empowered(NE)	350	31.1
Empowered	775	68.9
Total	1125	100

Overall analysis shows that women who have scored 0.7 and above are considered to be empowered by our definition and is indicated by overall status obtained 'Empowered'. Women who have not attained 0.7 are indicated by 'NE'. The total marking was done out of 22(total variables considered for building up the index). With attainment of each sub-domain (variable) women were awarded 1 mark. Variables are described in methods. From our analysis 68.9% women had attained the empowered status. [For details click here](#)



Mahila Kisan at blood donation camp



Mahila Kisans' rally on International Literacy day



Mahila Kisans working at Mahila Coop. Bank



Training of MK on soil testing at Purulia



MKs in a rally on International Women Day



Highlights

- MoU was signed on 06.03.2013 between LKP and WBSRLM for implementation of MKSP with total project cost of Rs. 13.51 crore having allocation of shares as Rs. 10.13 Crore (Central Share), 3.3184 Crore (State Share) and 0.0616 crore (PIA Share)
- As per MoU, total fund was to be disbursed in three instalments in the ratio of 25:75:25
- The share of allocation was revised (vide memo. No. K-11011/100/2011/MKSP/WB dt.26 Nov, 2013) in the ratio of 60 (Central): 40 (State) that was adjusted accordingly.
- Fund was received in five instalments amounting Rs.130748276.00 with central share as Rs.83760944.00 and state share as Rs. 46987332.00. In addition, bank interest accrued amounting Rs. 3902530.00 was also considered as fund received by LKP.
- LKP contributed Rs. 789000.00 as its share in place of Rs. 616000.00 as per the MoU.
- Cost per beneficiary was calculated as Rs. 2204.00 throughout the project period.
- Financial reports were regularly recorded following the standard accounting principles under MKSP.
- Quarterly Progress Reports (Physical and Financial) were submitted to MoRD as well as to WBSRLM by the specified time and date in a regular manner.
- The annual Audited Accounts and Utilization Certificates were also shared with the funding agencies and uploaded as well in our official website www.lkp.org.in regularly.
- Cost of livelihood development of the MKs was calculated on the basis of the performance coefficient of investment vs. achievements under the project.
- The MKs were found to achieve Rs. 81967.00 as their average annual income with generation of productive assets amounting Rs. 46131.00 at the end of the project.
- Investment as monetary value received from different sources were calculated to be Rs. 32895.00 per MK during the project period.
- Convergence played an important role from the line departments and PRIs amounting Rs. 22900.00 per MK while contribution from MKSP project was Rs. 2204.00 per MK.
- An analysis shows that the MKs have achieved 2.5 folds of the amount of investment that was made during the project period.



Chapter 10: Financial Progress

10.1: Fund Allocation and Disbursement:

The project was approved by the Project Approval Committee for implementation by LKP as PIA vide letter no. [K – 11034/81/2011/MKSP/PAC dated 14.08.2012.](#)

As per the [MoU](#) with the WBSRLM dated 06.03.2013 fund allocation was shown as below:

- Total allocation of Project Fund Rs. 13.51 Crore
- Central Share: 10.13 Crore
- State Share: 3.3184 Crore
- PIA Share : 0.0616 crore

The fund was supposed to be disbursed in 3 installments in the ratio of 25:75:25 only in three years. Subsequently, a letter (vide memo. No. [K-11011/100/2011/MKSP/WB](#)) dated 26th November, 2018 was issued by MoRD with a revised allocation of central and state shares without changing the allocation of PIA share. Percentage share of allocation was changed as central share with 60 percent and that of state share as 40 percent in place of 75:25 ratio existed previously. Hence, amounts were adjusted accordingly.

10.2: Fund Received in Detail : Funds were received for project implementation by LKP in 5 installments from MoRD as well as the WBSRLM. Total project fund received amounting Rs. 130748276.00 (**central share Rs. 83760944.00 and state share 46987332.00**). The bank interest accrued amounting Rs. 3902530.00 at LKP's end has been adjusted as fund received. Thus, total fund received from central & state shares including interest was Rs. 134650806.00. If we take into consideration the contribution of PIA share of Rs. 789000.00, total fund received as a whole, comes to Rs. 135439806.00. LKP's contribution has been recorded in the Auditor's note in the Statement of Accounts of the project.

The following statement of fund particulars received by LKP is presented here as follows:

Table 10.1: Statement of Fund Received(Rs.)									
Fund received	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Grand Total(Rs.)
Central share (Rs.)	12662500	12662500	51331944	0	0	1840000	5264000	0	83760944
State Share(Rs.)	4148000	4148000	16831732	0	0	18350000	3509600	0	46987332



Bank Interest earned (Rs.)	206633	420424	317334	2009872	485979	13910	367117	81261	3902530
Total(Rs.)	17017133	17230924	68481010	2009872	485979	20203910	9140717	81261	134650806
PIA contribution (Rs.)	345000	444000	0	0	0	0	0	0	789000
Total Fund	17362133	17674924	68481010	2009872	485979	20203910	9140717	81261	135439806

The table above shows the fund received by LKP with breakup of central and state shares.

It is observed that LKP did not receive any fund during 2016-2017 and 2017-2018 and have had to pass difficult times to carry on project activities. Contribution (Rs. 7,8,9000.00) on behalf of LKP has been found that it was Rs.1,73,000 more than the amount was shown in the MoU with WBSRLM for implementation of the project.

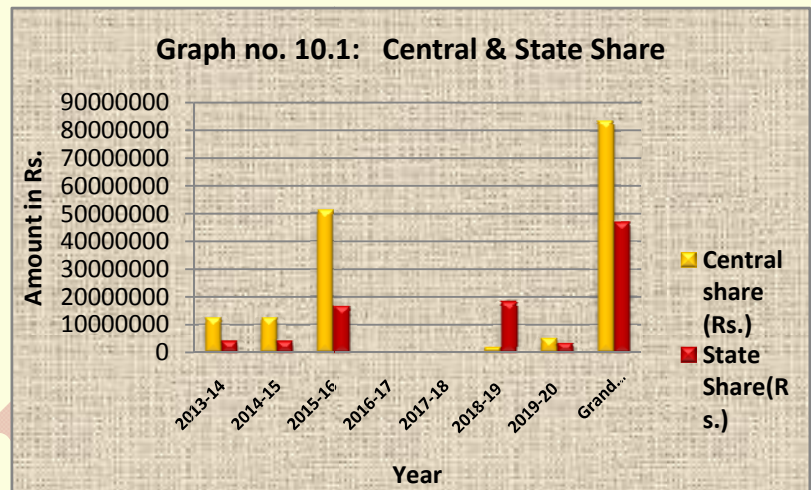
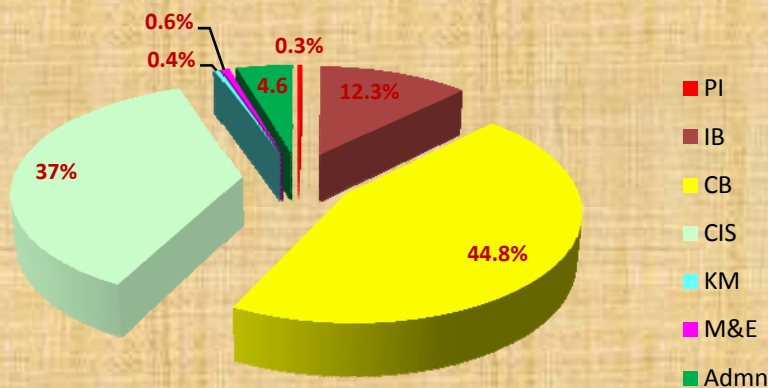


Table 10.2. Statement of Audited Expenditure as per Budget Head(Rs.)										
Budget head	20 13-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	TOTAL	%
PI	281177	164251	0	13162	0	0	0	0	458590	0.30
IB	5842390	10673841	0	0	0	0	0	0	16516231	12.3
CB	1628765	2732697	15472464	20219988	18652398	1054640	483463	46981	60291397	44.80
CIS	1809062	5796681	5174016	8715996	1143176	3436435	22587100	1122812	49785280	37.0
KM	368	25766	10144	353505		154250	11152	0	555185	0.40
M&E	348309	446643			16530	0	0	0	811482	0.60
Admn	1437674	2130371	1044972	411900	192350	567300	395877	52197	6232641	4.6
Total	11347745	21970250	21701596	29714552	20004454	5212625	23477593	1221990	134650806	100

*PI:Project Inception, IB: Institution Building, CB: Capacity Building, CIS: Community Investment Support, KM: Knowledge Management, M&E: Monitoring and Evaluation, Admn: Administration

Chart no:10.1: Percentage of Expenditure on Total Expenditure



The expenditure has been incurred as per approved budget. The year wise expenditure as per audit report upto F.Y 2018-19 is shown in table 10.2 along with its graphical representation (chart no.10.1), shows that out of total fund received

expenditure has been made Rs.134650807.00. It further shows the highest expenditure incurred under Capacity Building (44.8 percent) followed by Community Investment Support (37 percent), Institution Building (12.3 percent), Administration (4.6 percent), Monitoring and Evaluation (0.6 percent), Knowledge Management (0.4 percent) and Project Inception (0.3 percent) respectively.

10.3: Analysis of Expenditure incurred:

Table no. 10.3: Analysis of Expenditure

Budget head	Expenditure(Rs.)	Cost per MK(Rs.)
Project Inception	458590	8
Institution Building	16516231	270
Capacity Building	60291398	987
Community Investment Support	49785280	815
Knowledge Management	555185	9
Monitoring & Evaluation	811482	13
Administration Expenses	6232641	102
Total expenditure	134650807	2204
Total MK	61109	

It is interesting to note that the major expenditure under the project incurred mostly in three budget heads i.e, IB(12.30 percent), CB(44.80 percent) and CIS (37 percent) , total 94



percent amounting Rs. 2072.00 only per MKs. The table also shows that the cost of expenditure that was incurred per Mahila Kisan was only Rs. 2204.00

10.4: Quarterly Progress Reports

Financial progress reports were regularly recorded following the standard accounting principles under MKSP. Quarterly Progress Reports which includes both physical and financial progress reports were submitted to MoRD as well as to WBSRLM by the specified time and date in a regular manner. The annual Audited Accounts and Utilization Certificates were also shared with the funding agencies and uploaded as well in our official website www.lkp.org.in regularly.

10.5: Cost of Livelihood Development of the poorest of the Poor under MKSP

Table no.10.4: Performance Coefficients per MK (Investment Vs Achievements) under MKSP as on 2018-19							
INVESTMENT			ACHIEVEMENT			Remarks	
		Rs.			Acre/%/Rs.		
1	Project cost/MK as per budget heads	2204.00	1	Additional Land per MK	0.76 acre	Owned & Leased	
2	Access to Finance		2	Food Security			
	RF/CIF/Bank Loan/ MK	14400.00		Food Availability / MK	99.90%	PDS	
	SHG Interlending/ MK	7791.00		Food Accessibility / MK	100%	Own production & market purchase	
3	Convergence (Line Depts & MGNREGA) / MK	8500.00		Food Utilisation	53%	Calorie intake* for absorption in the body.	
			3	Skill Development/ MK	98.28	3 or more trainings	
			4	Asset Generation/MK	46131	Agri & non agricultural assets	
			5	Production / MK (Qtl)	33.57	Enhanced by 4.4 times	
			6	Productivity/ acre paddy (Qtl)	11.48	Enhanced	
			7	Income Generation /MK	81967	2.5 times	
			5	Women empowerment	68.90%	69% MKs are Empowered	
	Total Investment /MK	32895.00			81967.00		2.5

*The figures above on investment and achievement are based on the data available in the year 2018-19 only.

With high degree of landlessness, food and nutrition security was a great challenge to achieve under MKSP. Intensive training for skill development of the MKs made it possible to

access to additional land by leasing private as well as common Panchayat land with involvement of SHGs and PRIs other than their home garden premises. This paved the way to grow nutritious food round the year individually or collectively by adopting organic practices by the MKs with available inputs from the MKSP as well as from convergence from the line departments. Livelihood of the poor was further strengthened by rearing of BYP, goat, chicks and ducks of improved varieties that have added family nutrition and more income generation in the hands of the women farmers. Close collaboration with the PRIs and various line departments played a great role to change the overall scenario of the livelihood development scenario enhancing self-confidence of the MKs for more production, more income, gaining food security, generation of assets significantly and thereby earned more space in domestic and social environment towards women empowerment.

Calculation shown in the table no.10.4 reveals that Mahila Kisans were able to achieve Rs. 81967.00 as their average annual income at the end of the project period and also generated assets, both agricultural and non-agricultural, amounting Rs.46131.00 per MK during the project period. All these happened due to investments as described above from different sources amounting Rs.32895.00.

It is interesting to note that while most of the investment cost for each MK comes from the convergence of line department and PRIs as Rs. 22900.00, contribution from MKSP was only Rs. 2204.00. Contribution of the Mahila Kisans themselves are also found to have invested Rs.7791.00 on an average.



Our achievement under MKSP clearly exhibit that for economic upliftment and social empowerment of the poorest of the poor rural families, an investment of roughly Rs. 33,000 in a period of 3-4 years is essential. This may enhance their income 2.5 folds as also generate productive assets worth Rs. 46131.00. A pertinent point needed to be highlighted in this context is that such women need intensive capacity building and hand holding initially.



Chapter 11: Constraints, Post Project Sustainability & Way Forward

11.1: Constraints:

- The main constraints to alleviation of their poverty are landlessness, unviable land holdings, and uncertainties of rainfall, periodic occurrence of long dry spells, and also disastrous cyclones and floods during the monsoon season. Landless people had to suffer immensely almost each and every year during the project period.
- Other hindrances faced and key issues that were addressed may be enumerated as follows
 1. To make the section of the beneficiaries those were critically marginalized to be involved in the state development programme
 2. Invisible attitude and mindset of male members of the family was a great obstacle.
 3. Some groups were disorganized and more disadvantaged and hence could not visualize the benefits of the programme due to lack of proper institutions for them to carry forward
 4. Political atmosphere was found not favourable initially, and as a whole work disrupted for ten months due to three general elections (Lok Sabha, Bidhan Sabha and Gram Panchayat held within the project period.
 5. Uncertain fund flow for no fault of the PIA, restricting desired level of achievement was found to be a matter of concern throughout the project period.

11.2: Post project sustainability

Efforts have been made to enhance the capacities of the Mahila Kisans, increase their income, and encourage their participation in agriculture and allied activities. The MKSP project has ensured food and nutrition for majority of people by securing the primary livelihood basket with increasing production and productivity clubbed with secondary and tertiary modes of activities as envisaged.

It was also found that more than 90 percent of women farmers have adopted the sustainable agro ecological practices learnt from MKSP and continuing the same without coming to a halt till date. It would affect the long-term sustenance of MKSP intervention.

So far the community engagement is concerned, MKs at the grassroots have traversed a long way from Sustainable Agriculture towards Organic Farming at the end of the project through community organisations starting from village level to block level federations. MKs are mobilised and engaged in collective production as well as marketing through a network established by them that has constructed a pathway from SHGs to producers groups up to Farmers Producers Companies formed by themselves.

Besides, one important development may be pertinent to be mentioned here. FPCs that are formed are going to enter into agreements with eminent marketing organisation to set up the Farmers Development Centres (FDCs) at all locations of the MKSP companies that will strengthen the FDCs by providing finance, market linkage, advisory services and modern technology as a one stop solution for all farmers' needs. LKP also in the meantime has gone further to form a consortium of the Mahila Kisan Farmers Producers Companies at Bolpur in the district of Birbhum to extend help to them.

At the same time, they have to leverage help and co operation from all corners for ease of doing business. Post project present situation of MKSP has further set the goal to go further for long term sustenance.

11.3: Way forward:

- Strengthening of existing Companies and formation of 20 more new companies in the backward districts of West Bengal .
- Programme will be undertaken on value chain analysis to be done for the purpose.
- To establish stable marketing network for the companies in and outside the state.
- To work for achieving the rights and entitlement of Mahila Kisans equivalent to their male counterparts.



Group of MKs in a fruit orchard



Abbreviations Used		
ADMI	Accelerated Development Minor Irrigation	
Admn	Administration	
BCKV	Bidhan Chandra Krishi Viswavidyalaya	
BIRD	Bankers Institute of Rural Development	
BLF	Block Level Federation	
BPL	Below Poverty Line	
BRGF	Backward Region Grant Fund	
BRLF	Bharat Rural Livelihoods Foundation	
BRAIPRD	B.R. Ambedkar Institute of Panchayats and Rural Development	
BYP	Back Yard Poultry	
CBO	Community Based Organization	
CB	Capacity Building	
CFC	Common Facility Centre	
CHC	Custom Hiring Centre	
CIF	Community Investment Fund	
CIS	Community Investment Support	
CMSA	Community Managed Sustainable Agriculture	
CPR	Common Property Resource	
CRP	Community Resource Person	
CSO	Civil Society Organisation	
CSR	Corporate Social Responsibility	
CU	Consumer Unit	
DAY-NRLM	Deendayal Antyodaya Yojana-National Rural Livelihood Mission	
DAY- NULM	Deendayal Antyodaya Yojana-National Urban Livelihood Mission	
DDA	Deputy Director of Agriculture	
DNRM	Decentralized Natural Resource Management	
DUGKY	Deendayal Upadhyaya Grameen Kaushalya Yojana	
FDC	Farmers Development Corporation	
FFFFT	Food-Fodder-Fuel-Fertilizer-Timber	
FOSET	Forum of Scientists, Engineers & Technologists	
FPC	Farmers Producers Company	
FS	Food Security	
FIS	Food Insecured	



FSI	Food Security Index	
GP	Gram Panchayat	
GPLF	Gram Panchayat Level Federation	
Gol	Government of India	
HH	House hold	
IB	Institution Building	
ICMR	Indian Council of Medical Research	
IIST	Indian Institute of Engineering, Science and Technology	
IIT	Indian Institute of Technology	
IWEI	Individual Women Empowerment Index	
JVES	Jalpaiguri Vivekananda Education Society	
kcl	Kilocalories	
Kg	Kilogram	
KM	Knowledge Management	
KVK	Krishi Vigyan Kendra	
LKP	Loka Kalyan Parishad	
M&E	Monitoring and Evaluation	
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act	
MIS	Management Information System	
MK	Mahila Kisan	
MKSHG	Mahila Kisan Self Help Group	
MKSP	Mahila Kisan Sashaktikaran Pariyojana	
MoRD	Ministry of Rural Development	
MoU	Memorandum of Understanding	
MoPI	Ministry of Statistics and Programme Implementation	
MPCC	Monthly Per Capita Consumption	
NFSA	National Food Security Act	
NGO	Non Government Organization	
NMMU	National Mission Management Unit	
NPM	Non Pest Management	
NRLM	National Rural Livelihood Mission	
OBC	Other Backward Caste	



PBSSD	Paschim Banga Society for Skill Development	
PC	Producer Company	
PDS	Public Distribution System	
PI	Project Inception	
PG	Producer Group	
PIA	Project Implementing Agency	
PIP	Participatory Identification Process	
P&RD	Panchayat & Rural Development	
PP	Para Professional	
PoP	Poorest of the Poor	
PRI	Panchayati Raj Institution	
Pvt-Pvt	Private-Private	
Pub-Pvt	Public -Private	
RDA	Recommended Dietary Allowance	
RF	Revolving Fund	
RKSY	Rastriya Khadya Surakhsha Yojana	
RKVK	Rathindra Krishi Vigyan Kendra	
SA	Sustainable Agriculture	
SGSY	Swarnajayanti Gram Swarojgar Yojana	
SHG	Self Help Group	
SUDA	State Urban Development Agency	
SV	Standard Value	
TPDS	Targeted Public Distribution System	
VLF	Village Level Federation	
VO	Village Organization	
SC	Scheduled Caste	
ST	Scheduled Tribe	
UBKV	Uttar Banga Krishi Viswavidyalaya	
WBCADC	West Bengal Comprehensive Area Development Corporation	
WBSSC	West Bengal State seed Corporation	
WBSRLM	West Bengal State Rural Livelihood Misson	
WFP	World Food Programme	



MKs transplanting paddy plants in field



Group based fish farming in pond under lease through Pub-Pvt partnership

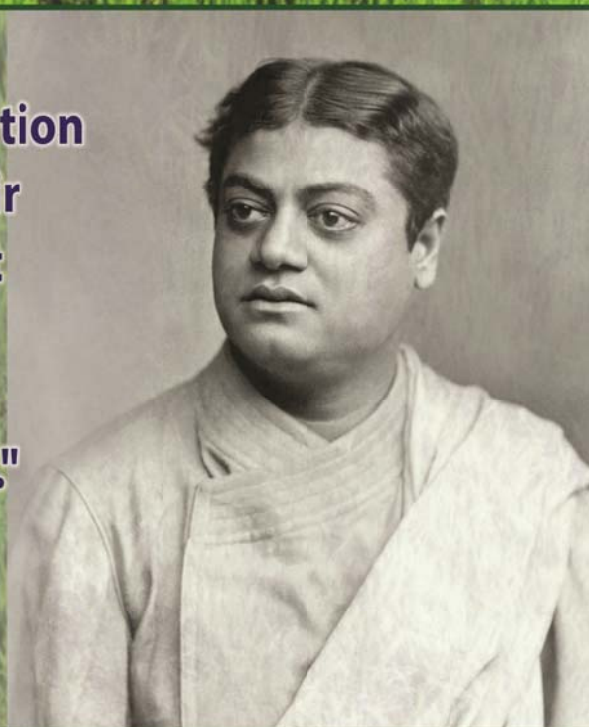


"If we could free even one village from the shackles of helplessness and ignorance, an ideal for the whole of India would be established... Let a few villages be rebuilt in this way, and I shall say they are my India. This is the way to discover the true India."

— *Rabindranath Tagore*

"Women must be put in a position to solve their problems in their own way. No one can or ought to do this for them. Our Indian women are capable of doing it as any in the world."

— *Swami Vivekananda*



Loka Kalyan Parishad, 28/8, Library Road, Kolkata-700026
website : www.lkp.org.in, gmail : lkpmksp2013@gmail.com
Phone : 033 40605036