

# DETAILED PROJECT REPORT FOR MKSP (SUSTAINABLE AGRICULTURE)

Enhancing the capability of women  
in Integrating Farming system to  
improve the quality of their lives in  
the Poverty regions of Odisha.

(Keonjhar, Mayurbhanj and Rayagada districts of Odisha)

SUBMITTED  
TO  
**Panchyat Raj**  
**Department**  
**of**  
**Government**  
**of Odisha**

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**Project Implementing Agency**

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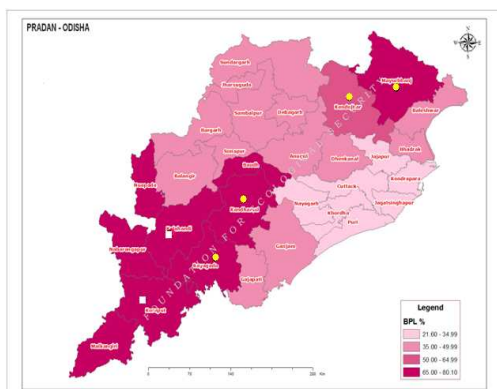
## A. Summary of the proposal

<b>A.1</b>	<b>Title of the Project</b>	Enhancing the capability of women in Integrating Farming system to improve the quality of their lives in the Poverty regions of Odisha (Keonjhar, Mayurbhanj & Rayagada Districts)
<b>A.2</b>	<b>Project Duration</b>	Duration: 3 years (2013-16)
<b>A.3</b>	<b>Total Budget (approved)</b>	Rs. 6.168 crores – Total
		Rs. 4.626 – Govt. of India
		Rs.1.542 – Govt. of Odisha
<b>A.4</b>	<b>Name of PIA</b>	Professional Assistance for Development Action (PRADAN)
<b>A.5</b>	<b>Coverage of the Project</b>	Women SHG Members from the poorest pocket in Keonjhar, Mayurbhanj & Rayagada districts
		No. of Districts: 3
		No. of Blocks: 4
		No. of Revenue Villages: 127
		No. of Families: 6000
<b>A.6</b>	<b>Key Outputs of the Project</b>	1) Enhance the farm-production-system with 6000 women by appropriate land and water development and cropping practices.
		2) Introduce sustainable farming practices like soil nutrition enrichment measures, integrated pest management etc with 3500 participant women
		3) 60 % of participant women intensify and diversify their farm portfolio increasing income and reducing volatility suited to their resource endowments
		4) Pilot specific interventions with 25 % participant women on drudgery reduction
		5) 12 Production clusters will be developed around selective specific commodity with 6000 households and GPLF will be prompted to provide various techno-managerial supports to the producers
		6) 240 Community resource persons will be developed at village level and they will provide handholding support to the producers.
		7) 12 Community based entrepreneurs will be promoted to provide various agro and market related services to the community.
		8) 12 paravets (preferably women) will be developed as entrepreneurs to provide vaccination and other health services to the small ruminants and poultry birds.

## A. Chapters

### 1: Project background, context and rationale

Keonjhar, Mayurbhanj and Rayagada are among the tribal dominated districts of the state where also particularly vulnerable tribal groups like *Junaga, Kharia, Mankedia and dongaria kandhas* live. Keonjhar & Mayurbhanj districts are situated in the northern highland regions of the state where as Rayagada is in the Southern highland. These are among the poorest regions of the country where higher concentration of BPL and female illiteracy are seen. However the sex ratio in these three districts is comparatively positive i.e. above 975 and the involvement of women in agriculture is of substantial level. The agriculture is of traditional technology and labour intensive with very less mechanization and irrigation coverage. It demands a substantial investment and focus on creation of successful replicable prototypes, particularly for small and marginal farmers. The women farmers who were in knowledge of traditional cultivation practices find themselves less equipped to handle advance technology in cropping practices.. This leads to disempowerment of women participating in decision making process.



District	SC	ST	Literacy Rate	Female literacy Rate	Population Density	Sex Ratio	Rural BPL %
Keonjhar	11.6	44.5	59.2	46.2	188	977	76.9
Mayurbhanj	7.7	56.6	51.9	37.8	213	980	77.7
Rayagada	13.9	55.8	36.1	24.6	116	1028	72
Odisha	16.5	22.1	63.1	50.5	236	972	66.4

The project under Mahila Kisan Shashaktikaran Priyojana (MKSP) has been formulated with this idea in mind. It seeks to cover 6000 families in four blocks of these three districts. It seeks to empower women with focus on enhancing their efficacy and identity by increasing their knowledge and skill thereby increasing say and space in economic sphere within the household also in immediate community.

### **Rationale for Support under MKSP:**

The primary objective of the MKSP is to empower women in agriculture by making systematic investments to enhance their participation and crop productivity, as also create and sustain agriculture based livelihoods of rural women. More than 80% household in Keonjhar & Mayurbhanj districts and 60% in Rayagada district has patta land. However more than 90% household have access to lands and depends on agriculture as the major source of livelihoods. However the returns from per unit land are much below the national average. So this deserves an attention under this MKSP.

Secondly, the women of these families, in spite of their hard work since morning till evening, are excluded in most of the decision making processes. They hardly have any control over the income of the family and have a low status in family and the society. Even though they carry out most of the critical operations in agriculture, like sowing, weeding, transplanting, threshing and so on, they remain excluded from most of the capacity building events done by Agri department. To help such women get the due recognition for their contribution to the family income and hence the ownership over it, the project needs support under MKSP. A demonstration in such a poor tribal region can trigger a large scale transformation in rural Odisha.

In the proposed operational area PRADAN has promoted SHGs which are managing effectively their savings and credit activity. In some cases there are also cluster level federations (CLF) at a village level or 3-4 village level who are taking up the issues relevant to the SHG members, which in isolation they found difficult to address. We visualize SHG and its associated tiers are also taking up activities for enhancing the livelihoods of its members through this programme. Institutions like SHG, cluster and producer groups would be strengthened to enhance the livelihoods of its members in a sustainable manner.

Thirdly, PRADAN as an organization that has exclusive focus on improving the living quality of such poor communities, has extensive experience of promoting agriculture based livelihoods for women members of SHGs. They are quite experienced in promoting SHGs and their associations with sound systems and processes. Substantial support under this initiative by government will facilitate mobilization of more investment from other sources through convergence for enhancing the quality of life of poor people.

#### **1.1: Demographic Profile of the area:**

The Project is being implemented in four blocks such as Patna of Keonjhar district, Karanjia, Jashipur of Mayurbhanj district and Kolnara of Rayagada district. The major tribes of these areas are Gond, Bathudi, Munda, Santal, Kandha etc..



(Santal)



(Kandha)



(Bathudi)

PRADAN, Bhubaneswar

The demographic profile of the area is shown in the following table:

Demographic Indicators	Keonjhar1		Mayurbhanj2			Rayagada3	
	Patna Block	District	Karanjia block	Jashipur block	District	Kolnara block	District
Rural Population	104824	1548674	91518	115929	2326842	66670	831109
Female population	53109	774007	46208	58884	1169266	34187	421317
Female Literacy - %	24.3	28.9	21.7	20.2	21.8	19.4	24.56
Female ST - % (Out of total FP)	56.7	53.3	68.4	70	62.3	70.8	56.6
Female SC - % (Out of total FP)	7.4	13.5	6.9	6.8	6.9	8.6	13.9

The table shows there is higher % of ST and lower level of female literacy in those blocks in comparison to the district average. The female population is around 50 or more than 50% of total rural population.

## 1.2: Rural Poverty Context in the area

### a. Poverty and Human Development:

The Living condition Index (LCI)<sup>4</sup> of the state development report says that Rayagada district from Eastern Ghat, and Keonjhar and Mayurbhanj districts from Northern plateau are among 14 most poorest districts of Odisha. Further referring to the Ghadei Report<sup>5</sup> of the Government of the Odisha, the Kolnara block of Rayagada district comes under very backward block whereas Patna of Keonjhar and Karanjia & Jashipur of Mayurbhanj district come under Backward blocks.

A comparative analysis of the present status of these four blocks is given below.

<sup>1</sup> Source 2011 census (Block data are referred from from respective police station data)

<sup>2</sup> Source 2011 census (Block data are referred from from respective police station data)

<sup>3</sup> Source: District statistical handbook 2005

<sup>4</sup> LCI is a composite index, determined through Taxonomic method by taking 18 socio-economic indicators

<sup>5</sup> Referred from Mr Prafulla Ch. Ghadei committee report of planning and coordination department. Based on 11 developmental parameter (Population density per sqKm, Percentage of agri workers to main workers, NSA per agricultural workers, Percentage of net area irrigated to NSA, Percentage of cropping intensity, Percentage of literacy, No. of primary schools per lakh of population, Percentage of villages connected with all weather roads, Percentage of villages electrified, Percentage of problem villages provided with safe drinking water facility, No. of medical institutions per lakh of population) blocks have been categorized. 82 blocks out of 314 belong to very backward category.

Category-	Backward block	Very backward block
<b>Block name</b>	Karanjia, Jashipur of Mayurbhanj district and Patna <sup>6</sup> block of Keonjhar district	Kolnara block of Rayagada district
<b>Geography</b>	Less remote and accessible	Remote and inaccessible mostly during rainy season
<b>People</b>	Dominated by tribals (Bhatudi, Santhals, Gonda) followed by OBC and Schedule caste. More sanskritisation	Dominated by tribals followed by Schedule caste (Kandha, Bonda, Gonda, etc.); Less sanskritization.
<b>Living condition</b>	Live in unhygienic conditions; woman and children are prone to malnutrition, Malaria and other diseases occur but death rates are low	Live in unhygienic conditions; woman and children are prone to health hazard and malnutrition, Malaria and other disease related deaths are relatively higher
<b>Livelihoods</b>	Agriculture is the primary source of livelihood (60%). Cultivate in developed lands. It is followed by forest based activity and livestock (20%) and wage (20%). Annual cash income ranges around Rs25,000 to 35,000/-	Agriculture (40%), Forest (25%), livestock (10%) and wage (25%) are the sources of livelihood. Shifting cultivation along with cultivation in the settled land, though gradually shifting cultivation reducing. Seasonal migration varies place to place, Annual cash income varies between Rs15,000/- to Rs 25,000/-

**b. Vulnerabilities:**

Our Project areas are situated in the south and north part of the Odisha. The extent of poverty in southern and northern regions is still very high and remains a matter of concern.

**Household Vulnerability:** The majority of the village communities depend on subsistence farming. Due to subsistence nature of farming, farmers do not have surplus money to make investments in agriculture and irrigation. The landless households (varies from 10 to 40%) sustain their livelihoods through wage labour in agricultural fields and also through the NREGA programme. The Panchayati Raj Institution is not fully aware of the NREGA programme, which is one of the major reasons for the community not able to get 100 days of job, as envisaged in the programme. The problem of timely payment to NREGA workers, no access to financial institutions, also other major issues related to this programme.

Therefore, the livelihoods of the village communities, is badly affected not only with the obstacles like subsistence agricultural practices, inadequate source of irrigation infrastructures, not having protective irrigation, undulating lands, lack of access to market

<sup>6</sup>Patna come under the category of developing block as per the report, we work in the poorer GPs that would be similar to backward categories

(for better price realization), financial institution, but also by dysfunctional village level institutions.

Since the project pertains to rain-fed farming, prolonged drought and highly erratic rainfall may lead to crop failures, causing loss of interest among project beneficiaries. This will lead to forced migration and affecting the project.

The nutritional status of women in Odisha as indicated in the NFHS-3, shows that about 41.4 % of women have a BMI below 18.5. Prevalence of severe malnutrition among children, mothers, old and indigent people is a matter of serious concern in the state. Sixty-two percent women suffer from anemia against the national average of 55.3 %. The severity of health problem in the family may affect the growth of the project.

***District and state level vulnerability:***

Political instability and law and order problems also discourage private players to take initiatives. This may affect our plans to link farming families with the private sector especially in the remote areas. Though PRADAN has had fairly modest staff turnover in the past, increases in personnel compensation in government and private sector may lead to both higher turnover and lower recruitment.

**1.3 : Context of Social Inclusion and Social Mobilization**

One of the key constraints for development of the State is its traditional feudal social relations which have long defined role for a person or family assigned to in the economic system. However, the tribal communities have largely remained aloof of this vice though they do have their own traditional divisions of people based on what they do. Even here, one would find hierarchy but not as stark as in mainstream *hindu* societies.

The Self Help Groups (SHGs), which are formed around savings and credit, have been one of the effective ways to overcome these hindering factors. It is estimated that more than 3.8 lakh SHGs have been promoted in the State by Govt. and NGOs irrespective of the differences in the quality of these SHGs. The focus has been on promoting SHGs but little organized effort has been on promoting secondary/tertiary level people's institutions that could have lent strength to SHGs and provide sustenance to the needs of primary groups.

Government and NGOs are the main promoters of SHGs in Odisha. It is seen that, in these groups, "beneficiary" mentality and approach is yet to be addressed while tackling the larger issue of the poverty reduction and socio-political empowerment.

The table below shows the number of SHGs promoted by PRADAN and its potential across district and blocks under this project.

District	Block	Total No. of GP where PRADAN focus to engage with SM	Total No. of Village	Estimated No. of Potential Rural HHs for SM	Actual SHGs promoted till date	New SHGs to be formed under NRLM	No. of GP where PRADAN is present
<b>Keonjhar</b>	Patna	9	65	8191	326	178	9
<b>Mayurbhanj</b>	Karanjia	12	134	14819	463	525	12
	Jashipur	14	160	14286	311	780	13
<b>Rayagada</b>	Kolnara	15	198	7378	269	223	15

The key challenges facing this mass mobilization program is to create systems and mechanism to sustain them, ensure greater involvement in governance and providing legitimate space at Panchayat level. As it has happened in other states, the financial empowerment may take some time to happen but social empowerment would precede it. Many women SHG members say that earlier they used to sit at homes but now they are involved in various livelihood activities and have begun to participate in *pallisabha*..

#### 1.4 : Context of Financial Inclusion

In most tribal areas, inadequate cooperation of banks and other financial institutions have made the poor dependent on the informal sources of credit delivery. These traders and money lenders, no doubt, do provide an important service to the poor but their conditions are so strangling that poor end up becoming poorer and rarely do come out these traps as a significant economic production systems is influenced and controlled by these agents. The widespread practiced subsistence agriculture has limited scope to create surplus and generate savings. Thus, as soon as the first misfortune a family meets; there is no other way than go to the money lender, thus beginning the vicious debt cycle.

The banks have poor reach out due to low bank branch density (also because of low population density) and even provide poorer access to rural poor as they find it easy to entertain few customers with big pockets than mass of poor customers with a little surplus and savings and credit worthiness.

Indicators	Odisha	Keonjhar	Mayurbhanj	Rayagada
No. of Bank branches <sup>7</sup>	3216	149	189	69

Access to institutional credit and marketing are equally critical for addressing the needs of the poor producers. The present set of interventions in terms of (SHGs) along with micro finance is one of the effective ways of handling this. The table below shows how SHG is acting as an effective tool for micro financing her members,

<sup>7</sup> Source: 2011 census

<b>Data of PRADAN promoted SHGs:<sup>8</sup></b>	<b>Keonjhar</b>	<b>Mayurbhanj</b>		<b>Rayagada</b>
<b>Indicators</b>	<b>Patna block</b>	<b>Karanjia block</b>	<b>Jashpur block</b>	<b>Kolnara block</b>
<i>Net Owned Funds of SHGs (savings + interest - expenses), Rs lakh</i>	210	27.44	27.06	80
<i>Total Internal Credit Generated (loans from own funds), Rs lakh</i>	127	263.09	71.7	35
<i>Total Outstanding loans, Rs lakh</i>	135	60	30	23
<i>Total Credit Leveraged from Banks, Rs lakh</i>	50	63.13	25.7	11.1
<i>Number of SHGs linked to Banks</i>	220	79	134	25

The experience from a large number of SHGs suggests that these institutions need to be made viable by creating federations and linking SHGs through them with institutional mechanism. It is essential to ensure institutional support and hand holding over a longer period of time as the concerted and collaborative approach among the line departments and other stakeholders is missing.

### 1.5: Livelihood Context

The topography of the proposed blocks of these three districts is hilly and undulated. Agriculture is the mainstay of the majority of the population here. In this sense agriculture is the stronghold of community's economy. Land utilization pattern in this area shows that land under agriculture is coming down and fallow land area has gone up. There is very low penetration of modern technologies in agriculture sector. The average agriculture yield is only 1511 kg/ha of the state. (all India Average is 1968 kg/ha).

Farming is caught in a vicious cycle characterized by the resource degradation, shrinking landholding, and low investment leading to reducing crop yield. The food security atlas of Odisha, prepared by WFP, identifies these districts as food insecure and low nutritional status districts. There is little diversity in the farm sector, little value addition and the region is a net importer of most farm products.

Wage employment, livestock and Forest produce supplemented people's income. Keeping of Goat and poultry birds are very common in family. However the income from livestock is very uncertain due to outbreak of various diseases and improper management. Hence great many are forced to migrate seasonally to distant places as unskilled workers bringing more suffering to women left behind the village alone. These are also areas with low literacy, especially women's literacy, which shows the women's status. Infrastructural facilities including rural connectivity are poor that further constraints market penetration.

Moreover, increasing intervention of outsiders for various minor minerals and forest produce have created an exploitative situation for the locals and vitiated the tribal habitats. Enabling Acts like PESA (Panchayat Extension to Scheduled Areas) could not be effective because the Communities were neither aware nor mobilized to protect their resources and could not

<sup>8</sup> Source: PRADAN M.I.S.

stand the onslaught of business interests. Women had traditionally enjoyed more freedom in such Societies and gender relationships were more equitable. However, with increasing intervention from outside and worsening economic condition of the families, gender equations have changed, women being at the receiving end. Even though they significantly contribute to all economic activities pursued by the family, in addition to their household chores, their participation in decision making and control over income is minimal.

#### **a. Agriculture and allied activities**

Agriculture contributes less than 20 percent towards the states GDP. But it provides employment to 60% of workforce of the state. Significant rural households are engaged to agriculture and their holding pattern is skewed.

The table below depicts the status of land holding in the districts:

Fragmentation of Landholdings in these three districts, 2000-01:

District	Marginal (<1.0 ha)	Small (1-2 ha)	Semi-medium (2-4 ha)	Medium (4-10 ha)	Large (>10 ha)
Keonjhar	60	27	10	3	0
Rayagada	46	31	16	6	1
Mayurbhanj	60	26	11	3	0

The data shows that in the proposed project area more than 75 % of farmers are small and marginal farmers. These two segments of farming community constitute significant portion of the rural household and can play a major role in boosting rural economy through intervening of land based farming activities.

Paddy constitutes about 90% of the total production of food grains, though in terms of area there is a shift from paddy to cash crops like vegetables, fruits, flowers, spices ,etc. There is an increasing trend of productivity and area of these cash crops. However pulse area is going down though productivity is going up. Though paddy productivity is slowly increasing and is of the order of 15.85qtl/ha but this is less than the national average.

The table below shows the productivity of different major crops of the proposed area:

Yield Rate ( Yield (Qt/Ha)								
Indicators	Orissa State	Keonjhar		Mayurbhanj			Rayagada	
		District	Patna block	District	Karanjia block	Jashpur block	District <sup>9</sup>	Kolnara block
<b>Rice</b>	15.85	20.02	17.5	23.46	23	18	23	31.5
<b>Ragi</b>	6.38						8	17.14
<b>Gram</b>	7.48	2.13	3	4.15	8	9.12	2.49	4
<b>Mung</b>	2.71	2.4	NA	4.74	2	2.1	2.24	4.13
<b>Groundnut</b>	11.69	6.77	14	13.03	13	11	8.6	11.48
<b>Arhar</b>					23	18		14.39 <sup>10</sup>

Source: Directorate of Agriculture and food production, Orissa; Directorate of Economics & Statistics, Orissa.

<sup>9</sup> Odisha Agriculture Statistics 2008-09

<sup>10</sup> The productivity of our operational is lower than this statistics 2-3 Q/ acre

### **Irrigation:**

Irrigation is one of the critical requirements to make agriculture stable and remunerative. Irrigation intensity in the state is only 31% in 2006-07 in comparison to all India average of 44%. Though there is a focus by the Govt. on this programme<sup>11</sup>. Like MGNREGA and other govt. programmes provides opportunity for the small and marginal farmers to be benefitted by this. In Hilly region of the state, irrigation area is low in comparison with plain belts. In the project area, the average rainfall being 1300-1500 mm per year and the area is known for “paddy” but exclusively during kharif season.

The agro climatic condition of these districts is conducive to intensify horticultural activities. Increasing area under crop, raising cropping intensity and increasing irrigation access are probable strategies to increase production of farm products and farmer’s income.

### **Land resource:**

As mentioned earlier even though 60% of the people depend upon agriculture, the land under agriculture is declining. Per capita landholding especially with small and marginal farmers is reducing. So total landlessness is gradually increasing significantly. Few highlights of this area are as follows.

- 40% rural households are land less in Rayagada. If available lands are distributed it would be 1.8 acre per family in tribal belt.
- Numbers of land reforms legislation have been promulgated by Odisha state to improve access to land. But inadequate implementation has not yielded desire result.
- Mineral richness Odisha – attracting mining & industries – deforestation & ecological misbalance – affecting livelihood & food security.
- Practicing unsustainable non-edible cash crop by leasing out land is affecting less production of food crops & nutrition imbalances.

### **b. Livestock:**

Animal husbandry, next to agriculture, is the major source of supplementary income of rural households. Livestock has always been an integral part of the rural livelihood systems in Odisha. Around 80% of rural household depend on livestock which contributes around 30% of the household income. 85% of total livestock is owned by landless and small and marginal farmers.

Odisha contributes about 4.82 % population of livestock in the country. Out of total livestock 60% are cattle, 32% are small ruminant and 2.5% are pigs. Out of total poultry 70% are local backyard breed. Livestock sector contributes about 6 % of Odisha’s Net State Domestic Product (NSDP). About 80% of farmers depend fully or partially on animal husbandry enterprise for their livelihood.

### **Total no. of livestock and poultry-2003 (000' numbers)**

	Orissa State	Keonjhar district	Mayurbhanj district	Rayagada district
<b>Indicators</b>				
<b>Goat</b>	5974	148.558	686.8	163
<b>Sheep</b>	1759	471.765	166.6	40
<b>Poultry birds</b>	17611	787.227	2764.6	213
<b>Cattel</b>	14281	1844.682	936.1	372

<sup>11</sup> Refer to the various programmes of the state

Each and every tribal of these area keep goat and poultry birds in their backyard. But the livestock activity is suffering due to inadequate veterinary services available at the door step of the community. Systematic intervention in rural live stocks particularly small ruminants can bring substantial income to the hand of community beside adding animal protein to their diet.

### c. Non-farm / NTFP sector

Many villages are located in the forest fringe areas. Income from forests constitutes a major source to supplement the livelihood earning (30% to 50% in some cases) of a significant proportion of the rural population. Certain forest-based activities such as Tasar sericulture and Lac cultivation are practiced as traditional vocation. Collection of non-timber forest produce like *tendu*, *tamarind*, *sal* seeds, *mahua* flower and seeds, *chironji*, *karanj* seeds, some medicinal plants like *Chiraita*; offer cash income to villagers in forest fringe villages. Degradation of forests and problem of access (as majority of the forests are Reserve Forests) are serious issues in many places in the region to affect livelihood earning of people. Further, due to the lack of storage infrastructure or developed markets, the prices of forest produces are fully controlled by the traders.

#### 1.6: Performance of MGNREGA in the state

MGNREGS has been a big game changer since its advent owing to its scale, achievements and possibilities that it provides. The local wage rates have been changed more than two times and so have been the impact on migratory pattern. Many development investments have been made possible like large-scale land development (leveling, bunding), dug wells, water harvesting structures and other such works like watershed.

Source: MGNREGS website .

However MGNREGS has its own set of issues, which need serious attention like timely payment of wages, transparency in wage payment, smooth bank payment etc.. though it has the potential to alleviate many problems faced by these communities; It is besieged with several problems. The first is that there is a lack of awareness among the people that they have to place a demand for work to be granted work. Secondly, there is lack of adequate technical and administrative infrastructure required for carrying out the works as per provisions of the Act. Evaluation, documents like muster, MB and pay orders to banks and then to wage earners account is a tedious task and at each level there are inordinate delays. All in all this leads to disaffection and people do not want to work in the NREGS.

In most of our project area, PRADAN team started intervention in MGNREGA since the financial year 2006-07.. As a result of our engagement, SHG members are able to resolve Gram Panchayat level issues like delayed payment for works done under MGNREGS through petitioning. The SHG members have begun to demand jobs under MGNREGS .Active participation has led to deepening of local governance. The following table shows the status of MGNREGA in the proposed block and district.

	Keonjhar		Mayurbhanj			Rayagada	
Indicators	District	Patna block	District	Karanjia block	Jashpur block	District	Kolnara block
<b>Job cards-HH</b>	323,726	24,275	446340	20452	22878	192632	15041
<b>Investment (Cr.)</b>	73.8	7.06	153.38	8.46	8.52	46.83	2.05
<b>Wage days created</b>	4,022,311	313,980	8021799	399733	532809	1666870	78200
<b>Jobs created</b>	102908	8269	174347	8984	11253	52863	2924
<b>HHs with 100 days wage</b>	6658	453	19071	975	1065	1488	55

### 1.7: Existing Livelihood Initiatives and social sector initiatives in the selected area (by the State Government, NGOs and externally aided projects)

The Odisha Govt. has promoted many special efforts, apart from regular schemes, livelihoods for the rural poor .– two of prominent ones are OTELP (Odisha tribal empowerment programme) and OLM (Odisha Livelihood mission ). Under OTELP and OLM programme there is provision to ensure livelihood, improve resource base and provide basic facilities in the villages to make it a better place to live in.

### 1.8: PIA's prior experience in developing the prototype for proposed interventions:

PRADAN started its work in Orissa by setting up a team in Keonjhar district in 1992 and gradually it expanded its work to the other districts. At present it is concentrated in the highlands of the state covering 6 districts such as Keonjhar, Mayurbhanj, Kandhamal, Rayagada, Kalahandi and Koraput.

Abject rural poverty and lack of livelihood opportunities in the rural areas are the key developmental challenges of the area. Lack of infrastructure, poor husbandry of natural resources, low agricultural productivity, lack of access to credit and technology, poor health and literacy status of the rural community remain the major constraints towards the economic development of the district.

PRADAN in these districts has been working for enhancing the livelihood of the rural people in these blocks through promotion of women self help groups and establishing different livelihood activities. Land based activities including soil-water conservation; micro-irrigation, horticulture, and improved agriculture are a major component in enhancing the income of the people in these project areas. The other major activities include modern goat rearing, poultry, value addition and trading in siali leaf-plates and commercial tasar rearing.

Presently PRADAN is working with around 45795 families in about 3505 women SHGs in Orissa. The various livelihood activities mentioned have been promoted in collaboration with different agencies like OTELP, DRDAs, ICEF, AIF, ITC, NRTT, NABARD, UNDP, BMGF, PHF etc. Apart from the primary level bodies like the Self Help Groups (SHGs), Water Users' Associations (WUAs) etc, secondary level bodies like Federations and Cooperatives are also formed for input, output linkages, conflict resolution and for the overall sustainability of an

activity. Members from the primary as well as the secondary bodies are given regular training and exposure visits to build their capacity.

PRADAN's outreach in different districts of Odisha.<sup>12</sup>

Location	No. of blocks	No. of villages	No. of SHGs	No. of families	Livelihood families
Koraput	3	71	241	2866	1390
Rayagada	3	142	368	4416	1629
Mayurbhanj	4	281	1138	14794	6817
Kalahandi	3	74	169	1953	657
Keonjhar	3	202	895	13090	4250
Kandhamal	6	299	694	8676	4053
<b>Total</b>	<b>22</b>	<b>1069</b>	<b>3505</b>	<b>45795</b>	<b>17406</b>

In PRADAN context, the SHG is a “support group”, enhancing the sense of “being” of its women members by helping the members to create a vision, explore and analyze their existential realities and extend mutual help in issues concerning their lives. Savings and Credit functions provide a context around which group develops trust and mutual support to reduce financial vulnerability and launch livelihood initiatives. The SHG grooms its members to participate in community institutions. The groups get engaged with a number of issues like claiming rights and entitlements, standing against atrocities, ensuring delivery of basic services, etc. Many of these issues are handled by the SHGs within village. However for dealing with larger socio-political vested interests, the SHGs seek support of cluster associations at Panchayat and federation at block that engage with nodes of the administration at block or district level. PRADAN has already promoted about 2000 SHGs in the project area. These groups meet weekly; do regular savings and internal lending. As per the stage of the group, most of the groups are also linked to banks. Besides in the project area, at present there are 141 cluster associations and 5 federations.

### **Agriculture programme:**

Agriculture has been the primary livelihood for a majority of the people we work with in the project areas. Over the years, PRADAN has been working towards stabilizing the food crop production and enhancing yields. Currently about 13361 families are intervened through food crop, out of which 8.650 families are supported towards enhancing the productivity of paddy, mostly through adoption of SRI, resulting in doubling of the productivity of paddy. This has also increased the food sufficiency by another 4-5 months. Besides this about 9883 families are also involved in cash crop like improved vegetable cultivation, pulses etc.. The focus has also shifted to improve the quality of soil by way of adopting organic practices. Use of

<sup>12</sup> Source PRADAN M.I.S as on Sept 2013

*Handikhata* and *Jeebamrut*<sup>13</sup> has been initiated in all the teams. The results have also been encouraging in case of paddy with these applications helping to provide the nutrient requirement to the soil as well as controlling pest without much change in the yield as compared to the inorganic method of farming.

### **Land and Water Resource Development:**

To help families have access to life saving irrigation (mostly in Paddy to enhance the food sufficiency) and irrigation to take up a second crop (mostly Rabi to ensure additional cash income), PRADAN has been working on land and water resource development in the project area. Around 2100 families in the project have access to different sources of water for irrigation. The major sources include water harvesting structures like community based small lift irrigation and flow irrigation structures. PRADAN has been supporting the villagers to plan and undertake comprehensive treatment measures to enhance land and water resources as an integral component of farming system development. The focus here is to improve conservation in the upper ridges and tap and recycle water from the seepage zone for utilization of the same for intensification and diversification of farming. In three teams namely Kandhamal, Mayurbhanj and Keonjhar, extensive work on land development and creation of irrigation infra-structures was done focusing village as a unit. Village level INRM plans were made with 3914 families in 204 revenue villages focusing on developing lands and providing irrigation for around 0.3 to 0.4 acre of land.

### **Plantation:**

Most of the target families in PRADAN's operational area in Orissa have about 0.5 to 1 acre of less productive upland. In Orissa we have initiated to bring it under productive utilization by way of plantation of horticultural plants. Presently this activity has been initiated in Keonjhar district with 300 families under the NABARD WADI development programme.

**Poultry:** PRADAN has developed a model of decentralized smallholder poultry rearing which has emerged as a powerful tool for the livelihood promotion of rural poor women. The poultry model demonstrated in other operational states (Madhya Pradesh and Jharkhand) has been successfully adopted with 220 families in Patna block of Keonjhar district. In Patna Block of Keonjhar district, PRADAN team has initiated the broiler farming activity with SHG members under support from SGSY and ITDA. NABARD under its CAT programme and ATMA, Keonjhar had supported the first batch for training and exposure. The women have been organized into self-help cooperative "Baitarani Women SHG Members Poultry Cooperative Ltd." for inputs, technical support and output marketing. Gradually other families also got included with the support received under SGSY scheme to do this activity.

<sup>13</sup> A kind of organic manure with high effectiveness

### Goat rearing:

Considering the resource base of the area, Goat rearing came out as an important livelihood activity, especially for the tribals in Kandhamal and Keonjhar district. PRADAN has demonstrated a model around integrated livestock promotion with large family coverage and substantial income enhancement by intensive goat rearing. Mass vaccination through groomed paravets and maintaining cold chain was conducted in a saturation approach. An evaluation was conducted in November 2012 after the last vaccination campaign by Galvmed. Along with area based approach and service system establishment improved goat rearing programmes are introduced with the families who have more herd or who have got support from some programme. A total of around 4400 families are planned to gradually intervene with all the components of livestock rearing and got an average return of Rs5000 this year and expecting a return of around Rs10000 in the coming year. Around 650 families started earning more than Rs 10000 from the activity.

Presently PRADAN is working with 1027 families in these two districts under improved goat rearing. The major intervention points had been stabilizing the herd size, improving the shed, timely vaccination and medication. About 29 Paravets (Mostly women) have been groomed to provide regular and ongoing support to the rearers. 70% of the stock in the goat unit has been vaccinated with PPR, FMD and Pox. Presently the average number of goat per family is 6 and the average income is Rs.6,000. The kid mortality has been checked from 45% to 18% while the adult mortality has been checked from 25% to 7%.

### Forest based activity: Tassar:

PRADAN initiated improved tasar rearing activity since three years in Keonjhar district. Four grainage entrepreneur, 18 seed cocoon rearers and 425 commercial rearers have been trained to experience improved rearing practices at all levels. Two grainages were closed because of disease incidence. Despite of opposition from the state promoted co-operatives, farmers are excited to revive this activity.

Parameters	Achievement
No. of families covered	425
No. of Active Grainages	4
DFLs used	26000
Commercial Co-coons Produced in Lakhs	8
Gross output in Rs.lakh	12
Net incomes to participating families by the livelihood programmes in Rs. Lakh	10
No. of Seed co-coons in Lakh	1.4

**Basic PIA Information**

<b>1</b>	Name of PIA	Professional Assistance for Development Action (PRADAN)
<b>2</b>	Legal Status (NGO) Network NGO / CBO / Producer Co. / Section 25 Co. / Pvt.Co / Other Please specify)	NGO : Registered under SRA 1860
<b>3</b>	If Network NGO, number of partners being supported?	NA
<b>4</b>	Registration No. & Date of Registration	13434, 18th April 1983
<b>5</b>	Name of Donors in the past 3 years, if any (give max3)	Bill and Melinda Gates Foundation ICCO, Netherlands Sir Navajbai Ratan Tata Trust
<b>6</b>	Name with Size (Budget in INR) of relevant projects handled in the past 3 years (give max 3)	1. Socio economic Empowerment of Women through SHGs and their federations from Govt. of Orissa. Rs. 2.8 crore 2. Sustainable social and economic development of the poor community in Baliguda through strengthening women's SHGs and developing appropriate livelihood generation programmes from AIF : Rs. 55.79 lakhs 3. Strengthening rural livelihoods in the endemically poor regions of India from SDTT : Rs. 11.25 crore.
<b>7</b>	Annual Revenue of PIA for the most recent audited financial year`2011	Rs. 580,562,369
<b>8</b>	List of ongoing projects (max 3) and their size (INR)	1. Empowerment of village level associations and user groups to undertake sustainable NRM and enhance the resilience of live hood systems of tribal population especially that of women from OTELP of Govt. of Orissa : Rs. 13.8 crore. 2. Enhancing the live hoods of tribal people in Jharkhand & Orissa through women's self-help groups from SRTT : Rs. 15 crore. 3. Developing farm based livelihoods in endemically poor regions of India from BMGF Rs. 40.7 crore.
<b>9</b>	Completion of last project (MM/YY)	March : 2006 (ICEF)

<b>10</b>	Total value of assets available with the PIA?As on 2011	Rs.188,620,375 (Assets, Corpus & Free Reserve at 31.03.2010)
<b>11</b>	Experience of working with (i) Women SHGs/Groups (Y/N) (ii) Agriculture based livelihoods with existing women groups (Y/N)	Yes  Yes
<b>12</b>	In the proposed project, what % of the implementation will be undertaken by existing capacities and what % will be leveraged from external community based organizations in the project area ?	Existing 100%  External 0%
<b>13. Human Resource – Attached for the proposed project</b>		

## **Chapter: 2 Detailed Intervention strategy and Phasing**

### **2.1: Objective of the Project:**

#### **a. Vision of Success**

The project would result in enhanced skills of women in sustainable agriculture, improved access to input and output market and increased income from agriculture in the hands of women. The project would build the confidence of women to use their resources meaningfully by mobilizing support from the relevant institutions around them.

#### **b. Goals**

The project aims to achieve the following goals:

- (i) Enhanced technical knowledge of women as farmer in modern agriculture
- (ii) Productivity enhancement
- (iii) Get secure, sustainable farm based livelihoods
- (iv) Reduced migration from families
- (v) Adopt agriculture as a suitable sustainable effective livelihood.

**c. Key outputs:**

1. Enhance the farm-production-system with 6000 women by appropriate land and water development and cropping practices.
2. Introduce sustainable farming practices like soil nutrition enrichment measures, Integrated pest management etc with 3500 participant women
3. 60 % of participant women intensify and diversify their farm portfolio increasing income and reducing volatility suited to their resource endowments
4. Pilot specific interventions with 25 % participant women on drudgery reduction
5. 12 Production clusters will be developed around selective specific commodity with 6000 households and System and process at GPLF will be promoted to provide various techno-managerial supports to the Producers.
6. 240 Community resource persons will be developed at village level and they will provide hand holding support to the producers. 12 Community based entrepreneurs will be promoted to provide various agro and market related services to the community.
7. 12 paravets (preferably women) will be developed as entrepreneurs to provide vaccination and other health services to the small ruminants and poultry birds.

**d. Guiding Principles**

The key guiding principles at the time of project implementation would be:

- Focus on women farmers along with the male farmers in their family
- Utilize the opportunity created by community institutions – SHGs, VLC and SHG federation
- Make the project a community led initiative and participatory
- Adhere to enabling approach

**e. Values and Non-Negotiable**

- Enabling approach
- All decisions will be taken by the community
- Equity
- Dignity of families to be upheld
- Integrity among staff and project participants
- Transparency in decision making and all transactions

**2.2: Project Strategy:**

The broad strategy would be as follows:

1. Build on the social capital existing in the form of women SHGs and their associative tiers,
2. Build, systematize and learn from the best practices on building institutions and sustainable practices in agriculture and livestock carried out in earlier years
3. Work with Panchayati Raj Institutions (PRIs)
4. Women's ownership of assets planned under the project – like ponds, equipments, Implements, finance, etc would be created with formal ownership of women

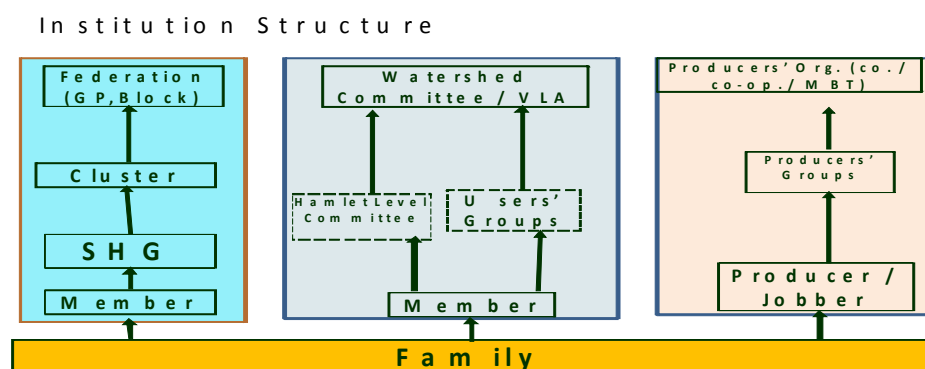
## 2.3 Community Institutions Architecture

### a. Past Experience:

PRADAN has strong presence in the undulating and hilly regions across central and eastern India. It has established its potential in promoting rural livelihoods in both farm and non-farm sectors in India. With a long track record of innovations to develop rain-fed farming in undulating and hilly regions, it has been at the forefront in advocating a livelihoods focus in government policies and programs to develop land and water resources. It pioneered the self-help group (SHG) model to organise poor women to access mainstream financial services, has developed robust prototypes of rural enterprises suitable for poor households in farm and non-farm sectors and successfully linked poor people to urban markets. It has successfully nurtured community based mechanisms, such as service entrepreneurs, self-help groups, cooperatives and companies to ensure sustainability of development interventions. It has high credibility with state and federal governments, banks and foundations, from whom it leverages development finances for poor families on a large scale. With strong internal systems and processes to induct high quality human resources, institution development and management, PRADAN is equipped to take large livelihood programs to showcase the development of backward regions as a strategy to remove mass poverty.

Broadly, two themes – expanding livelihood opportunities for poor people and getting caring and capable people on board to do so – have guided PRADAN's institution development processes all along.

As an approach PRADAN organizes poor particularly women into self help groups. These Women SHGs are initiated with saving and credit activities and slowly function as mutual support groups and provide conducive atmosphere where women take part in various decision making processes and raise voices. SHG also facilitates her member in building the aspiration of their life and making livelihood plans to reach the desired state. PRADAN builds skill of the women so that they implement their livelihood plan. SHG gets linked to Bank to provide financial assistance to her members. The associative tiers of SHG are formed at different level to provide various services to the SHG and builds solidarity among its members. Village level institutions are formed to plan and implement village level plans like land and resource development plan, watershed plan etc. However these bodies cease operation as soon as the project gets completed. Depending on the nature of the sectoral activities, producer cooperatives are formed.



PRADAN has done pioneering work in promoting rural livelihoods over the past decade by enhancing land and water based livelihoods, strengthening existing village enterprises, promoting new village enterprises and promoting women's mutual help based savings and credit activities. Creating awareness about and developing, adapting and introducing new technologies and ideas, fostering local organization, including market type structures; and creating an enabling environment through linkages with input output markets, banks, government agencies and people's secondary and tertiary level organizations are the three broad components of PRADAN's approach, and hence expertise. The tribal and scheduled communities form the bulk of the target group that PRADAN works.

### **Best Practices:**

Formation of Self Help Groups is an integral part of PRADAN's livelihood promotion strategy. If the SHGs have to be on their own for routine maintenance functions, it requires that they are equipped with strong, yet simple and user friendly systems, especially for accounts and MIS because they are the most important ongoing function in the SHG. It is with this belief that PRADAN introduced the Computer Munshi (CM) system to improve the book keeping quality of SHGs by connecting these groups with trained accountants (munshis) who use a PC with accounting software to maintain an electronic database of SHG financial records and transactions.

In Mayurbhanj district of Odisha, PRADAN has established this system. There are 4 computer munshis providing accurate and timely account report to 1138 SHGs without support from PRADAN.

Most of the Projects undertaken by PRADAN, focus on organising poor people and developing and introducing sectoral livelihood activities. Following an area saturation approach, PRADAN worked with over 2,68,600 families in 4,792 villages of 130 blocks and 42 districts across seven States. Seventy-two per cent of these families belonged to vulnerable groups such as Scheduled Tribes (STs) and Scheduled Castes (SCs). Out of these, 2,25,413 families were organised into 16,555 SHGs. We supported 9,130 SHGs from among these in preparing their livelihood plans. PRADAN has a strong presence in the poverty-stricken undulating and hilly regions across central and eastern India and a long track record of innovations to develop rain-fed farming. PRADAN has developed and promoted farm and forest based enterprises to enable a large number of poor families to enhance livelihoods by linking with markets. To ensure higher incomes as well as reduce vulnerabilities, PRADAN promotes combinations of sectoral interventions at the family level. PRADAN is implementing a MoRD (GoI) assisted SGSY Special Project with an investment of Rs 12 crore aimed at poverty alleviation through Integrated Natural Resource Management of individual households in West Bengal. Similar INRM based livelihood project worth Rs. 55 crores are approved by MoRD (GoI) for implementation in Jharkhand by PRADAN teams. PRADAN has pioneered in community managed micro lift irrigation (LI) schemes" in South Bihar plateau region. Till now around 1200 small group managed irrigation projects have been promoted by PRADAN projects in Jharkhand, Odisha, Chhattishgarh and Madhya Pradesh that benefit over 31000 tribal and other poor households with a total gross command area of over 65000 areas. PRADAN has

implemented INRM program in eight districts of Jharkhand, and in two districts of Rajasthan; and is collaborating with Panchayats in two districts of West Bengal. Kandhamal districts administration of Orissa has engaged PRADAN to promote INRM under MGNREGA and the Odisha state has engaged them as consultant to support strengthening of SHGs and their federations promoted under Mission Shakti. PRADAN's INRM based livelihood promotion drew the attention of MoRD (GoI), who brought out a manual on this for replication under MGNREGS. Other livelihood interventions with significant community outreach and impact include; Leaf plate making, Tasar Sericulture, Mulberry Sericulture, poultry, Mushroom, Dairy.etc

Given PRADAN's institutional expertise and presence in the identified poverty pockets of Odisha, it is well suited to build appropriate sustainable agriculture and allied activity based livelihood model in INRM approach on a significant scale. Currently, PRADAN works with about 33313(as on 31<sup>st</sup> dec'2013) poor families in proposed 3 districts of Odisha and every year the outreach is increasing by around 5,000 families in the Odisha.

District	Blocks	No. of project villages	No. of SHGs	Participant	Activities taken up
				Families	
<b>Keonjhar</b>	Banspal, Patna,	178	895	13558	SHG promotion, Improved & irrigated agriculture (paddy & vegetables), SRI, horticulture plantation, goat rearing, poultry
<b>Mayurbhanj</b>	Karanjia, Jashipur, Thakurmunda	281	1189	15339	SHG promotion, Improved & irrigated agriculture (paddy & vegetables), SRI, Integrated fish with duck rearing
<b>Rayagada</b>	Kolnara, K.singhpur	142	368	4416	SHG promotion, Improved & irrigated agriculture (paddy & vegetables), SRI,
<b>TOTAL</b>		<b>601</b>	<b>2452</b>	<b>33313</b>	

## b) Proposed Plans. Strategies as part of the Project

The blocks identified by PRADAN under this project belong to backward and very back ward category as per Ghadei<sup>14</sup> report . There is also high concentration of SC & ST and BPL in those blocks.

At the beginning of the project, PRADAN would identify the clusters of villages in the selected blocks based on the following Criteria.

- ❖ A minimum total of 60% SC & ST population in the village
- ❖ More than 70% saturation with SHG in Village

<sup>14</sup> Praffula Ch. Ghadei , then finance minster of Orissa has formed a committee to segregate the blocks of the state based on 11 indicators .

- ❖ At least 70 % of the women and their families depend on agriculture as their major livelihood.
  - ❖ The villages are in contiguous to each other
- Once we identify the villages in a contiguous patch, we would share the concept either at respective cluster or GPLF body depending on the context and stage of the institution. With help of those institutions we would conduct wealth ranking in village with SHG members to identify the poorest of poor like widow, single women, land less and physically challenged to include in the SHG and thereby include under the project. All the members under this project will be recorded in the *Mahila Kissan profile format*. It would be kept both at SHG level and PRADAN level.

### **Proposed community architecture:**

PRADAN will continue its strategy of formation and nurturing of Women SHGs as a part of grass root mobilization. However taking learning from the past experiences PRADAN may add new dimensions to the existing institution mechanism to strengthen the input and output linkage.

At the beginning of the project, PRADAN will do a base line survey (10% of sample survey) to understand the present status of women with respect to the expected output of the project. The *base line format* has been prepared by PRADAN and the data will be captured in the base line format.

The village level association (VLA) will be formed taking all adult women of that village. An execution committee called as Village level committee (VLC) will be formed taking selective members from each SHG exclusively dealing with livelihood (here it is primarily agriculture and its allied activities). This VLC will function as producer group (PG) under this project. These VLC/producer group will act as a learning group and facilitate producer members to prepare a Village Agriculture Development Plan (VADP). This plan includes crop plan and potential land use along with land and water development plan in a Integrated Natural Resource management (INRM) perspective. Subsequently the VLC members with help of Community resource persons/elective members will facilitate the detail planning in the SHG and latter on SHG will implement the plan.

The Community resource person (CRP) preferably the woman from the same village will be selected by the PG. Preferably one CRP will be groomed around one village It is expected that an experienced women farmers from SHG act as Community Resource Persons (CRPs) and play the role for need arousal, motivation, experience sharing and help other SHG members plan and adopt. Those CRPs will be trained and guided by PRADAN and Para-professionals. However these CRPs will be monitored and supervised by the PG. They would be given honorarium on task basis to compensate their engagement time. At the beginning, the payment can be made through PRADAN but latter on it will be done through the respective institutions as decided by the PG.

When the agriculture production rises, there may be requirement of input and output linkage at higher level. It is expected that around 500 producers, system and process will be required

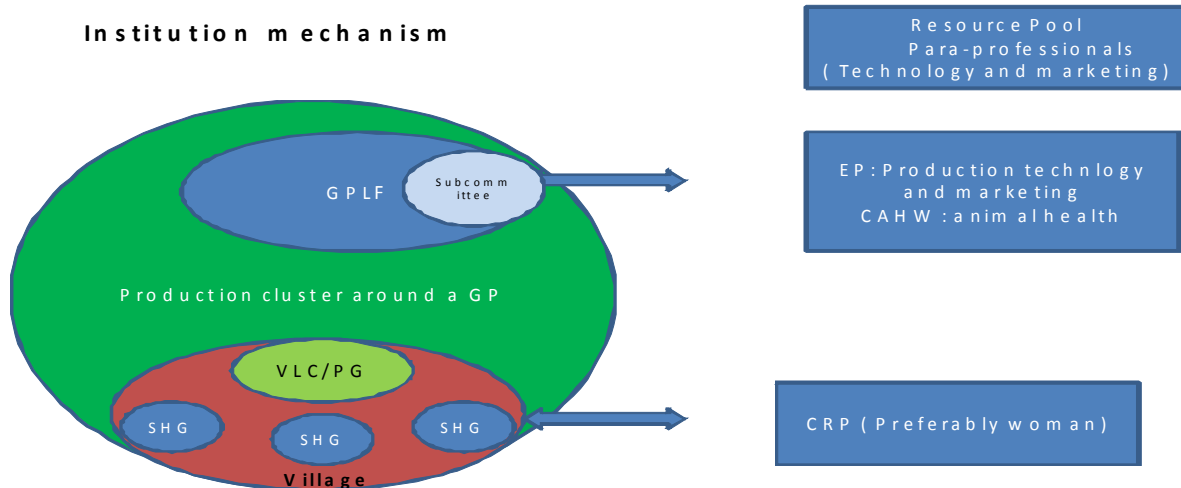
to streamline input and output linkage. So a production cluster approach will be followed to develop that area into a production cluster. We are visualizing this area around one GP.

We are proposing the following system and processes at this stage:

- A producer federation (PF) will be formed taking members from PGs. This PF will act as a subcommittee of Gram Panchayat Level Federation. This would be an informal body and would be hosted at GPLF. It would guide and ensure technical and market related information and services to its members.
- A Collection centre will be taken on rented basis at this level for collecting, grading and marketing of produce. However this collection centre can also be used for various centralized training for producers at beginning.
- An account will be there for keeping book and record keeping.
- There would be 2-3 para-professionals around 500 producers depending on need of the context and viability. The primary role of the para-professionals would be training, demonstration and management and marketing support to the CRPs, women producers and their institutions. However they can be assigned with additional tasks as per the need of PF.
- The accountant and para-professionals will be selected and monitored by PF. The Collection centre will be under their custody.  
However the real community structure beyond village level will slowly evolve as the project moves on. Till that period, one of the producer groups among the production cluster can take the role of Producer federation.  
System and process will be decided in consultation with the producers at GP level. The proposed ideas are as follows.
- This PF/PG depending on the need of the context will identify few local youth or existing entrepreneurs (EPs) for providing market and mechanization services to community against specific services. PF/PG would provide financial support to those EPs to stand their enterprises. However the exact input and out mechanism will be evolved as the production goes on.
- Initially it was proposed that in few production cluster, mass livestock development programme will be initiated for the small ruminates like poultry, goat and sheep. Village youth and women will be selected as Community Animal Health workers (CAHW)<sup>15</sup> and trained to provide basic health services to those animals. However during the DPR preparation, the demand came from each location and hence decided to do in all production clusters within the allotted budget.

Institutional mechanisms under the project is explained as below

<sup>15</sup> The CAHW are referred as para -vet in the proposal



(PG: Producers group, VLC: Village level committee; EP: Entrepreneur, CAHW: Community Animal Health worker, CRP: Community resource person, SHG: Self Help Group)

### Strategy for the Poorest of poor:

Special measures will be taken to include the land less, single woman and widow into various livelihood programme under this project. These landless in many pockets are already into traditional agriculture in the encroached land. Efforts will be taken to link them to different govt. programmes like FRA to get land wherever possible. In some cases these land less will be organized to go for collective farming taking land on lease and will be motivated to save. Community infrastructure will be provided to them through the project to go for this activity. As land less and ultra poor has a dependency on livestock programme, they will be included in livestock programme to reduce the mortality of small ruminants and hence improving their learning from livestock. Also gradually once their herd stabilizes other components of livestock rearing will be introduced by converging with other Govt. Programmes. However during planning process poor farmers plan would be prioritized during allocation of funding. However the prototype for the poorest of poor is yet to be finalized.

### The proposed prototype under this project area for the poorest of poor women farmers under this project:

Most of the farmers will have or to have access to one acre of land. We are proposing a prototype based on the entire farming system of the women and family. She would be having around 0.3 acre medium low/low land for paddy, 0.2 acre of Medium up/homestead land having access to irrigation and 0.5 acre of upland. Under this project we are supporting 1500 such families with a small lifting device to lift water either from a well or canal. This prototype will give him 6 months food sufficiency and Rs40,000/- cash income.

**Before intervention**

		Crop	Area (Acre)	Inv est. (Rs)	Prod. (Q)	Own consum. (Q)	Balan ce (Q)	Market value (Rs)	Net income (Rs)
Upland and medium upland including homestead	Kharif	Rainfed Pigeon pea	0.5	250	1	0.5	0.5	1750	1500
		Vegetable	0.1	250	0.5	0.1	0.4	400	150
Low or medium land	Kharif	Paddy	0.3	100	1	1		2150	1650

**After intervention**

		Crop	Area	Invest (Rs)	Prod. (Q)	Own consum. (Q)	Balance (Q)	Market value (Rs)	Net income (Rs)
Upland and medium upland including homestead	Kharif	Rainfed Pigeon pea	0.5	1500	3	1	2	7000	5500
		Vegetable	0.2	2000	24	0.25	23.75	23750	21750
	Rabi	Irrigated vegetable	0.15	1500	18	0.25	17.75	14200	12700
Low or medium land	Kharif	SRI	0.3	500	6	6		44950	39950
						Rest she would get from PDS			

**Benefit calculation per Mahila kisan:**

In the first year of intervention, she has been able to obtain 6 months food grain and Rs 38,000 cash income by covering only a part of her lands under improved agriculture due to lack of capital. So the potential is much more. The project has a target of ensuring round the year food security to all households and Rs 15,000 cash income on an average from cash crops to 60 % of total household under this project from the intervention.

**Plans for post-project sustainability and scaling-up strategies:**

For sustainability, the project would be implemented through women members of existing SHGs and their associations who are running efficiently for years. They have sound computerized systems for mobilizing

finance from banks and lending them to their members. Under this project they would be linked to various government institutions for mobilizing resources to augment their resources, and improve farm productivity. Priority would be given to help them access their entitlements, under MGNREGA. Along with increase in productivity focus would be given to develop market linkages for inputs and outputs as explained below. These together would sustain the efforts in the long run. We already have the experience in Mayurbhanj district of Odisha that once the skills and knowledge are transferred to people for increasing productivity and realize a good price for it they take interest in maintaining the assets that are owned by individuals or small groups. Following demonstration of sound strategy to augment farm based livelihoods of poor in these poverty stricken regions, lessons would be documented and disseminated among all relevant actors for scaling up the interventions in similar regions of the state.

#### **Plans aiming at drudgery reduction for women farmers:**

Since the planning of all the activities would be done with women's groups, women friendly interventions would be focused. Introduction of small farm implements like weeders, power sprayers will be given attention through this project to reduce drudgery of women. Use of power tiller, pump sets, etc. will be incorporated in this project so that women dependency on men for agriculture will be reduced thus they can take decide and prove their credibility and also they can easily access those services through their Producer Groups. Few such things like Potato ridger, marker, Power thresher, seed driller have already been demonstrated with the support from CISSA. A plan around such services is proposed around production cluster either at GP or village level depending on the context and demand of the situation.

#### **Plans for awareness generation with regards to women farmers' rights and entitlements:**

The major focus of the project would be to increase the awareness of SHG members on their entitlements under MGNREGA and FRA so that they would act to mobilize these. They would be made aware about the panchayat and its role in planning their development and encouraged to attend those for influencing the decisions in their favor.

#### **Plans to increase market accessibility of women farmers:**

As farming becomes intensive and coverage of cash crops increases, strong and stable linkages with input and output markets have to be developed. Several alternatives are emerging across our project locations depending on local conditions and the nature of the produce. Under this project we are proposing EPs at Gram Panchayat level who would assist PG for input and output linkage. These EPs will be properly guided by the para-professionals for effective linkages with market. Collection center will be established at GP level for collecting, grading and selling of produce. Plans for skill up gradation among women: The Producer group will choose one of its members to help women acquire skills in improved agriculture. PRADAN will train her as 'community resource person (CRP). The CRPs will be trained as village extension workers to help farmers adopt modern farming techniques and new crops and will be hosted in community organizations. They will provide services to farmers, remain accountable to and paid by their collectives for services, at mutually agreed rates. Initially the project will subsidize the cost.

CAHWs mostly women will also be trained to provide mass vaccination and need base medication to improve the livestock of the poor.

### **Plans for increasing access of credit to women farmers and women groups :**

As already mentioned, members of SHGs who already are in link with banks but are not able to mobilize much investments due to lack of opportunities, are the target under the project . So we would help SHGs have proper records and repayment discipline and prepare credit plans to approach banks. We would also engage with banks to convince them and cater to people's demand . Efforts have been initiated for the women farmers getting KCC for their farming.

### **Use of ICT:**

Selective village youth will be trained to shoot and document best practices of local area in local language. They will show it to Producer Group as a capacity building tools to stimulate the efficiency of agriculture extension services. However new ways will be evolved as the project moves on.

### **Review and monitoring:**

Regular review of progress made against stated objectives of the project and making mid course adjustments go a long way in achieving the envisaged goals. It is proposed to have a multi-level review and correction system to keep the project on track to eliminate poverty from the lives of 6000 poor families in these 3 districts.

Within PRADAN: The monitoring and learning systems in PRADAN have been designed to facilitate learning and feedback to help personnel improve and to ensure quality and quantum of work against plans. Each project team would meet monthly to report performance against plans and make plans for the next month. A State Management Committee (SMC) comprising of all team leaders in the State and the State Programme Director supported by functional heads from head office and Project/thematic anchors shall review performance once in three months. There is, thus, a great deal of emphasis on interactive review.

Within the Community: Much of the operational review of the project shall be done at the SHG and PG level in their weekly and monthly meeting respectively. The pallasabha will be tried to become active stakeholder in review the progress of the activities by inviting/sharing of the progress review. These community institutions will organize themselves, with the facilitative support of the PIA staff, to run the processes for monitoring and review in terms of inputs, processes and outputs and impact.

The project aims at empowering the community to take charge by way of certifying the utilization of funds as per the plans. The community will certify by passing resolutions to that effect. This is similar to the concept of community social audit system, which has been found to be an effective method to ensure the authenticity and transparency of such a large project.

Mahilakissan card will be designed and data will be captured regularly to track the progress. PRADAN has developed its own data base system called PRADAN M.I.S which can also provide accurate and transparent data for this project in every quarter.

### **Control of CBOs over the fund flow mechanism:**

The funds of the relevant institutions will be transferred either as advance/cash subsidy grant to the respective institutions. However PG/PF may nominate any one SHG for channelizing fund appropriate to the situation. However all expenditures will be made with due approval of any of the institution like PG, PF as decided. The concerned institutions send the receipt of payment statement and work progress report to PIA every month. The above system would be adopted in few identified villages in year one and based on the experience gradually the system and process will be standardized with due modifications over the project duration of three years.

## **Chapter 3: Detailed programme components**

### **3.1 Detailed proposed action**

- 1. Plans for promoting and enhancing food and nutritional security for women farmers**
- 2. Plans to bring more cash to the family for their wellbeing:**

- **Plans for promoting and enhancing food and nutritional security for women farmers**

In these proposed districts community are perpetually suffering with chronic poverty and malnutrition, the human development index of these districts are quite low. Naturally women and children in the family are worst affected from this deficit. The support from PDS system is very much helpful to bridge some of the gap. However the support is limited to carbohydrates. Protein and oil are not supplied. In addition to that lack of cash in hand affects the wellbeing of the family to a great extent.

Under such circumstances working with the women with a multipronged methodology seems appropriate to intervene. The women can be enabled to have better productivity from a more diverse cropping system; better understanding on malnutrition and access to income seems a feasible strategy to address the issue of food, malnutrition, income sustainably.

### **Strategy**

The core strategy would be working with the women of the community, so that they can have more objective understanding of food sufficiency and malnutrition prevailing in the family and in the society, its implications and enabling them to find out the most appropriate ones for their own context.

The women are targeted as a conscious choice because they the most suffered one with food insufficiency and malnutrition and there are strong evidences that they are the cornerstones which can reduce the malnutrition among children.

- Training to SHG members to integrate nutritional dimension in annual crop planning. This will lead to diversifying the cropping at farm level to ensure a proper crop mix that can take care of access to complete food and nutrition for the whole family. This may

result in inclusion of crops like pulses and oil seeds, millets, maize, vegetables for home consumption, in addition to crop targeting the market.

- Improved income through cultivating and marketing cash crops by women of the family so they can bring more cash to the families for their wellbeing.
- **Strategies addressing sustainability/evergreen/regenerative agriculture**

Following principles of sustainable agriculture, package of practices of crops and other interventions would be planned. These are based on some of our experience and learning from other organizations.

- **Crop selection and preservation of local seeds**

Crop will be selected based on the community suitability and market attractiveness. Efforts will be taken to identify and preserve good local varieties for large scale replication. These seeds are more resistant to the climatic variation and best fit to the local condition. This will also reduce dependency on market and is more sustainable. We have already identified one such good local Variety in pigeon pea and the women farmers would be practicing it for other crops. A seed bank may be thought to be developed in each village/ production cluster level

- **Soil health**

This is an important aspect for sustainable agriculture, So each project participant would be trained to incorporate more and more organic matter into the soil by green manuring and decomposing the crop residues, cow dung, other wastes and organic manures. Use of only inorganic manure otherwise would deplete the soil. The families will be trained in preparing organic manures (composting/Jabamruta) and pesticides (handikhat). Appropriate crop rotation would also be introduced to maintain the soil health. They will be encouraged to treat their uplands with lime to reduce the acidity of the soil.

- Recycling bio mass into soil ( Green manuring, Glaricidea leaf application, application of other plant residues etc.)
- Production and use of quality compost (Improved method of composting, vermin-composting,etc)
- Introduction of leguminous crop in crop rotation and in mixed cropping wherever suitable
- Measures to increase microbe population in the soil like applying liquid manure, PSB, Azotobacter,etc

- **Land and water management**

Proper land and water management practices will be followed by farmers to reduce soil erosion, better aeration and increase water holding capacity of the soil. These are

- Different in-situ measures to increase moisture holding of the soil

- Proper drainage in low lands for better aeration and root growth
- Assured water for year round cropping to mitigate the risks due to uncertainties of monsoon

- **Agronomic practices:**

The principles of System of rice intensification like early planting, planting without disturbing the root system, adding more compost, alternate weighting and drying and hoeing and weeding will be practices in every appropriate to the situation.

- **Non Pesticide Pest management**

Various agronomic practices like use of resistant variety, adjusting time of sowing etc will be practiced to reduce pest population below ETL level. Use of Handidkhata and other bio pesticides may be encouraged as preventing measures. Pheromone trap and other biological agents will also be used as per the need of the situation. However if required then safer molecules may be applied with proper precautions.

The package of practices (POPs) of few crops like paddy, finger millet, arhar has been well demonstrated. So we would scale up those practices and also develop and demonstrate POPs for other crops for scaling up during the project period. Before the beginning of the project period, POPs for the selective crops will be finalized in consultation with women and progressive farmers of the respective area.

### **Soil and water conservation and ground water recharging:**

This is the most important activity to achieve the production to potential of the lands in the identified region. Different low cost techniques have been tried by in different reaches of the undulating terrain to suit local contexts.

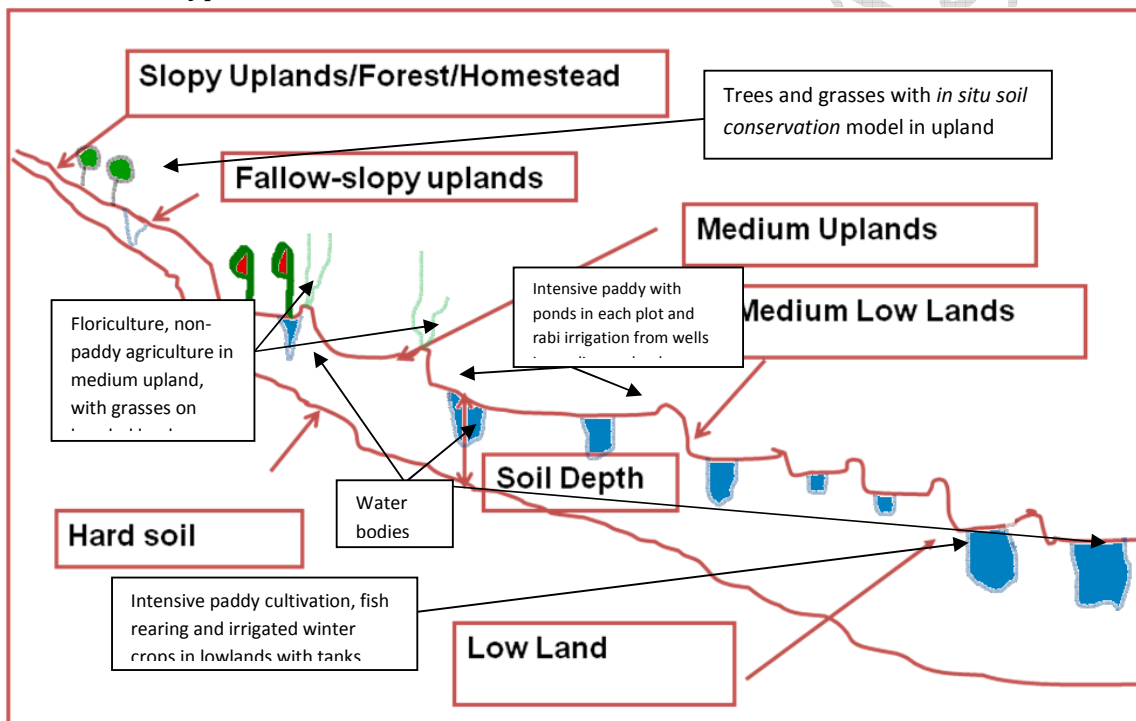
The underlying principle is that in an undulating terrain, used largely for farming and underlain with an impervious substrate, rainwater must be harvested and managed in a decentralized way to increase soil moisture regime and promote commensurate vegetation to maximize the land productivity. The core idea is that every plot should have a water body to hold back rain water that would otherwise flow out as run-off during heavy showers. It captures excess water when it rains and releases it to the field during dry spells. The pits enhance sub-surface water flow and improve the moisture regime of the whole area. Additionally, the water in the pits is used to irrigate in times of scarcity during the crop's vegetative growth phase. Various structures like leveling and bunding , 5% model, gully plugging, etc would be suitable for these kinds of areas. However community would make an effort to mobilize this fund from MGNREGA and other sources.

### Providing irrigation:

As already explained these areas are mostly rain fed and in the recent past production has been affected because of uncertainties in monsoon. Families migrate to nearby places because of the failure of the crop, not having irrigation and confidence on irrigated agriculture. Therefore a backup plan is proposed so that around 3500 families can go for irrigated agriculture in a small patch of area around 15 to 20 decimal of land. Different low cost structures like Dug well, Ring well, Farm pond, Lifting devices with the existing water source would be constructed.

Few Villagers would also submit plan for a complete land and water treatment so that significant area can be productive later on. By that time women would have gained confidence of sustainable agricultural (both rain fed and irrigated) practices.

Schematic of Typical Land and Water Based livelihood Intervention Possibilities



A mix of the following activities would be planned through convergence of resources from MGNREGA, RKVY etc. after joint planning exercise with the SHG members in each village.

- **Plantations** (fruit trees / relevant Timber) in privately owned fallow / wastelands, supported by in situ soil moisture conservation model on degraded uplands.
- **Farm pond in each agriculture plot** in medium lands to support rain fed cultivation.
- **Land Husbandry** in upland, medium upland and homestead. This will include gully plugging, terracing, leveling-bunding, contour bunding, land treatment e.g. liming, increasing organic matters, dealing with micro-nutrient deficiencies etc. to improve productivity of rain-fed agriculture.
- **Tanks** in lowlands and valleys and small earthen dams on local drainage lines.

- **Micro-irrigation** scheme and wells to provide life saving irrigation to Kharif crop and take up cash crops on a small scale in Rabi season.

Effort would be given to submit a plan and mobilise resources from other sources, however it would depend upon support mechanisms in the particular district.

***Integrated farming system:***

Most families participating in the programme would have about 2 acres of land but are unable to grow enough food for the year. As discussed above, the project would emphasize on the improvement of the land and water resources, Subsequent to this, one of the key interventions under this project would be to enhance productivity of the farming systems adopting integrated farming practices. Integrated farming includes agriculture and its allied activities like improved livestock management relevant to sustainable agriculture to enhance the income of the family. At the basic level, there is a need to improve the productivity of the main cereal crops so as to ensure food security at the households. The project would build on it further by intensification and crop diversification. Availability of irrigation facilities would help in taking up crops round the year. Suitable crops combination would be introduced that would aim at optimizing income and stabilizing soil nutrient status. Small scale duck and fish rearing will be integrated with families accessing irrigation through farm pond. Mass vaccination and medication will be taken up to improve the livestock of poor.

*System Of Rice Intensification (SRI)* :A typical family would presently meet its food grain need for six to eight months from farming, mostly from paddy, with average yields of less than 2 t/ha. However, the yield potential would be enhanced to 6 to 8 t/ha through better management of land and water, by adopting innovative techniques like system for rice intensification (SRI). With only 1 acre of paddy land, this would ensure food security, generate surpluses for investment and considerably enhance returns to labour, leading to better husbandry of land. We have demosterated SRI principles in Paddy and Finger mille and has creates greater acceptance in the community. So during this project we will scale it up.

Other interventions proposed include introducing better varieties of seeds, help families adopt improved practices of manuring and crop protection and taking up crops more suited to terrain, soil conditions and the moisture regime. Past experiences in the area have shown that introduction of good quality seeds and adoption of the above practices helped families to enhance crop productivity by more than 100% with only little increase in the cost of cultivation. However integrated pest and nutrient management will be the prime focus for sustainable agriculture.

- **Target population:**

Focus on Poverty and women is to be done strongly under this project .Starting from deciding the project area in the poorest regions in the state, within the districts, poorer and backward blocks are chosen. In most cases poverty is so widespread in these regions;

the selected habitations consist of 100% target population. In rare cases where mixed population resides in villages, community wealth ranking is used to identify the target families. Almost 90% of the participants will be from Scheduled tribe and Scheduled Caste families and rest from most backward communities (MBCs). Most of these families will be small-marginal farmers, however, in the rain fed context, project will be conscious to include food-insufficient families with land holdings. The target families are part of women SHG mobilization process and thus in some ways self select themselves. In all cases the women in the target family is the local person for this intervention. The project also proposes to follow a saturation strategy to enable creation of viable business organizations at the community level; hence clustering of villages will also follow clear poverty cum economic potential criteria.

- **Phasing:**

The project shall focus on existing crops and introducing new practices in them – food crops, pulses, millets and vegetables to begin with, best practices would be intensified with resource development activities, introduction of drudgery reduction tools and other equipment. As production increases there shall be demand for product management and market support. Capacity building shall be running activities which would be organized simultaneously for all activities as the need of the activity and demand from the farmers.

- **Scalability:**

For sustainability, the project would be implemented through women members of existing SHGs and their associations who are running efficiently for years. They have sound computerized systems for mobilizing finance from banks and lending them to their members. Under this project they would be linked to various government institutions for mobilizing resources to augment their resources and improve farm productivity. Priority would be given to help them access their entitlements under MGNREGA. Along with increase in productivity focus would be given to develop market linkages for inputs and outputs as explained below. These together would sustain the efforts in the long run. We already have the experience in Mayurbhanj district of Odisha that once the skills and knowledge are transferred to people for increasing productivity and realize a good price for it they take interest in maintaining the assets that are owned by individuals or small groups. Following demonstration of sound strategy to augment farm based livelihoods of poor in these poverty stricken regions, lessons would be documented and disseminated among all relevant actors for scaling up the interventions in similar regions of the state.

- **Drudgery Reduction:**

Since the planning of all the activities attention would be done with women's groups, women friendly interventions would be focused. Introduction of small farm implements like weeders, power sprayers will be given attention through this project to reduce

drudgery of women. Use of power tiller, pump sets etc will be incorporated in this project so that women dependency on men for agriculture will be reduced thus they can decide and prove their credibility and also they can easily access those services through their Producer Groups. However, there may be new innovation or introduction as the project moves.

- **Plans for awareness generation of women's rights and entitlements under different schemes related to her identity as "women farmer":**

Agriculture is an occupation of the household which clearly entails involvement of both men and women. However, the mention of 'the farmer' i.e the *kisan* evokes the image of a male, toiling away in his field with his bullocks and a woman rarely forms a part of the image. Consequently all the planning, program, schemes and technical support for agriculture is provided to this *kisan* i.e the male. However, in doing so, the development of a major portion of the human resource is completely neglected.

Having recognized this acute misbalance against the women, the project plan and processes would address the inequities in the following manner-

- To ensure almost 100% participation of women in all programs and schemes though males would also be one of the participants in decision making and training events
- Organising Mahila krushak mela at village level
- Sensitization of stakeholders on the issue of Gender discrimination in SHG, VLC and pallisabha meetings
- Increase role of women in decision making and income through various initiatives
- To bring the agriculture services at the farmers doorstep and technical support at village level to ensure women participation.
- Utilization of homestead for commercial vegetable cultivation
- Introduction of drudgery reduction tools and equipments and with techniques like line sowing that enable the use of weeders
- Technical support and extension services to be provided at the level of Self Help Groups - market information, credit facilities.

- **Interventions in value chain development:**

One of the objectives under this project is to develop an area into an agriculture production cluster so that there is a well established system and processes for input and output linkage. Women farmers are able to sale their produce and get fare price.

Hence following steps are to be followed systematically to develop an area into a production cluster.

- Mapping desired state
- Market study
- Baseline study
- Crop selection
- Prototype design

- Strategy finalization
- Prototype demonstration
- Implementation of strategy
- Market linkage
- Scale up

Value chain study of selective crops will be done to find out the missing links and designing intervention plan for an end to end solution. The farmer's collective shall comprise of all women and it shall design its systems such that door step village level service is made available which would be suitable to women farmers. Also the women would be in the governance and involved in decision making role.

### **3.2: Convergence with MGNREGA and other line departments:**

MGNREGS provides one of the biggest opportunities for resource development for tribal and poor families by developing private lands and also creating irrigation facility, apart from developing common infrastructure. A significant progress has been made by this in the last five years in our project area like Mayurbhanj

The convergence from MGNREGS and other such opportunities has been planned for expanding the successful prototypes from the project. This engagement has to be made at two levels – (a) VLA/Gram Panchayat and (b) Block/district. At the VLA level, once people realize the opportunities provided by the scheme they would demand for it in the pallisabha and include the activities in the shelf of projects. Corresponding effort has to be made at the block and district for getting the technical sanction and administrative and financial approvals for the same once the plan gets approved the pallisabha.

### **3.3 Training and Capacity building of communities**

**Capacity Building:** Capacity building is core to the successful adoption of crop practices and inputs and sustaining the outputs over long period of time beyond project duration. Various types of training and exposures are planned. They are:

- Training and exposure of farmers, and CRPs-within district- Training and exposures have been planned for effective adoption of technology.
- Training and exposure of farmers and CRPs-outside district- Training and exposures have been planned to get exposed to effective suitable technologies which are in use in areas other districts in the state. .
- Training and exposure of farmers-other state- Some technologies are in use in other states which can be used with some modifications or readily adopted..
- Annual Women get together: Annual gathering of women farmers have been planned to build on learning and experience Annual gatherings of women farmers have been planned where they will get positively exposed to experiences and also set agenda for the coming year where the focus of the all involved need focus. 6 such events have been planned with three in each district.

Apart from the above, various planning and review meetings at the SHG and VLC level also have elements of capacity building for the participant members. The events within district would be mainly around crop technology, skill development and processes. These events would have interactive discussions, lecture by experts using posters, flex, audio-video aids and the on-field skill demonstrations would be organized at farmer's fields. The events outside district and state are mainly for exposure to new ideas and building perspectives. The methodology would be a mix of classroom sessions and video sessions and live demonstration of the activity along with interaction with farmers and experts.

**A tentative training calendar for the community is mentioned below:**

Name of the trainee	Community		Schedule of the training for 2014											
Training	Trainee	Place	J a n	F e b	M a r	A p r	M a y	J u n	J u l	A u g	S e p	O c t	N o v	D e c
WIF (Women identity as farmers)	PP/CRP	Village/GP level												
Concept seeding of production cluster	PP/CRP	Village/GP level												
Producer group formation	PRP/CRP	Village/GP level												
Norm setting	PRP/CRP	Village/GP level												
Crop selection	PRP/CRP	Village/GP level												
Crop demonstration	PRP/CRP	Village/GP level												
Drudgery reduction	PRP/CRP	Village/GP level												
Harvesting and storage	PRP/CRP	Village/GP level												
Seed preservation	PRP/CRP	Village/GP level												
Marketting	PRP/CRP	Village/GP level												

### 3.4 Training and Capacity building of Para-Professionals and Community resource persons.

The par-professionals (PP) and Community resource persons (CRP) play a critical role in extension services, taking the knowledge and firmly setting it up with the farmers on their context. The PPs, and CRPs thus need constant training and exposures in process, communication and crop technology, handling of tools and equipment to enhance their knowledge and skills. A series of trainings and exposures have been planned for PPs and

CRPs right from the stage of planning, on-going implementation phase and also post seasons review.

A tentative training calendar for community, CRP and PP are written below.

Name of the trainee	CRP	Place	Schedule of the training for 2014											
			J a n	F e b	M a r	A p r	M a y	J u n	J u l	A u g	S e p	O c t	N o v	D e c
Training	Trainer	Place												
WIF (Women identity as farmers)	Professional/PP	Village/GP level												
Concept seeding of production cluster	Professional/PP	Village/GP level												
Producer group formation	Professional/PP	Village/GP level												
Norm setting	Professional/PP	Village/GP level												
PG strengthening	Professional/PP	Village/GP level												
Crop selection	Professional/PP	Village/GP level												
Crop planning	Professional/PP	Village/GP level												
Crop demonstration	Professional/PP	Village/GP level												
Drudgery reduction	Professional/PP	Village/GP level												
Harvesting and storage	Professional/PP	Village/GP level												
Seed preservation	Professional/PP	Village/GP level												
Marketing	Professional/PP	Village/GP level												

Name of the trainee	Para-		Schedule of the training for 2014
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	<b>professional</b>													
Training	Trainer	Place	J a n	F e b	M a r	A p r	M a y	J u n	J u l	A u g	S e p	O c t	N o v	D e c
WIF (Women identity as farmers)	Professional/ External expert	Block/ GP level												
Concept seeding of production cluster	Professional/ External expert	Block/ GP level												
Producer group formation	Professional/ External expert	Block/ GP level												
Norm setting	Professional/ External expert	Block/ GP level												
PG management	Professional/ External expert	Block/ GP level												
PG strengthening	Professional/ External expert	Block/ GP level												
Crop production based on sustainable practices	Professional/ External expert	Block/ GP level												
Hamlet based INRM planning	Professional/ External expert	Block/ GP level												
Plant protection	Professional/ External expert	Block/ GP level												
Drudgery reduction	Professional/ External expert	Block/ GP level												
Harvesting and storage	Professional/ External expert	Block/ GP level												
Seed preservation	Professional/ External expert	Block/ GP level												
Marketting	Professional/ External expert	Block/ GP level												

Training schedules are attached as annexure

## Chapter 4 : Implementation Arrangements:

### 4.1 Implementation Plan

- i. The project implementation team will work with SHGs/PGs to strengthen or introduce various financial and non financial norms in the selected villages and intensify formation of additional SHGs/PGs for increased outreach planned in the project.
- ii. The baseline survey for each village will be done through different PRA tools like social mapping, wealth ranking, resource mapping.
- iii. Visioning cum livelihood planning exercises will be conducted with all members of SHGs in the project villages, and Village Agriculture Development Plan (VADP) will be prepared for each village. The VADP will contain details relating to the interventions around land and water activities, allied activities and other traditional activities along with time line and budget details. VADP will also have a training plan with a timeline and a budget.
- iv. The team will facilitate the community to select from among themselves a group of women who would be trained to provide support for implementation of planned INRM/Livelihood interventions. They will also provide handholding support to the families engaging in the various productive activities to adopt improved package of practices. Training of those selected “Community based Resource Persons” and deploying them to support the implementation of the VADP in all project villages.
- v. Simultaneously participating families will be helped to pick up new skills to manage the improved or newly created asset. e.g. families will be trained to improve productivity of Kharif crop, or take up seasonal vegetables, or trained to profitably rear duck , fish and poultry birds
- vi. Women as Para vets will be trained to provide mass vaccination and medication to improve the live stocks of the family.
- vii. The project team will undertake a brief sub-sectoral study to identify the gaps in critical linkages of crops and allied activities being promoted. Also, aggregation needs to access markets, or for taking benefits of economies of scale would be documented.
- viii. The project implementation team will work on all three critical areas of institution development of producer group i.e. “Governance and leadership development”. “Membership development” and “ensuring effective and efficient Operations” of the created entity. These institutions on one hand will provide the required services on a sustainable basis and on the other will continue to scan the environment to look for newer opportunities for increasing benefits. A strong producer’s organization provides a robust mechanism to sustain the initiatives made under this special project. Further, in the context of large corporate entering various rural businesses including, agri-business, these collectives provide the marginal and small holders a level playing field to collectively bargain better services and prices.

A detailed physical outlay and financial plan over three years for different districts is attached as annexure

## Chapter 5 : Implementation schedule

The gantt chart is attached as annexure for a year. The subsequent plan will be detailed out taking leanings of the first year work.

## Chapter 6 : Results Frame work

Objective1	Established a prototype for large-scale women SHG based farm livelihoods in tribal populated blocks of Rayagada, Keonjhar and mayurbhanj districts of Odisha
Output 1.1	Enhanced the capacities of 6000 women through farming system based livelihoods
Task 1.1.1	Forming village level committee (VLC) taking representatives from SHGs of that village. This can be referred as Producer group (PG) under this project.
Task 1.1.2	Facilitate women to prepare farm based livelihood plan for improvement of their farming system
Output 1.2	60% of women have round the year food sufficiency
Task 1.2.1	Selection of food crops based on food habit of the community
Task 1.2.2	Adoption of Improved Food production practices using SRI principles
Task1.1.3	Identification and use of women friendly agriculture implements
Output 1.3	60 % of women farmers have surplus income of 15000/- per annum
Task 1.3.1	Selection of cash crop looking at small holders suitability ,nutritional requirement and market demand
Task 1.3.2	Adoption of improved practices
Output-1.4	25 % women farmers use women friendly implements
Task 1.4.1	Identification of women friendly farm implements
Task 1.4.2	Demonstration of use of farm implements
Output 1.5	Sustainable practices with 3500 women farmers demonstrated
Task 1.5.1	Preparation package of practices and training modules of sustainable practices
Task 1.5.2	Exposure to sustainable practices
Tasky 1.5.3	Training of women on sustainable practices
Task 1.5.4	Implementation of sustainable practices
Objective 2	A large pool of CRPs ( preferable women )were groomed to provide handholding support to women in their farming system
Output 2.1	<u>240 Community resource persons ( preferably women) trained on agriculture , land &amp; water and 12 CAHWs[1] ( Preferable women) on livestock , 24 para professionals to provide hand holding support to 6000 farmers in three years</u>
Task 2.1.1	Selection of CRP and CAHWs by VLC/PG
Task 2.1.2	Exposure
Task 2.1.3	Preparation of training calendar and training design
Task 2.1.4	Systematic training of CRPs and CAHWs
Task 2.1.5	Hand holding support to CRPs and CAHWs
Objective 3	Institution mechanisms are strengthened around input and output linkage
Out put 3.1	12 productions clusters(PC) around GP level were promoted
Task 3.1.1	Concept sharing of VLC/PG and PC in SHG and cluster
Task 3.1.2	Exposure
Task3.1.3	Formation of subcommittee in GPLF at PC level
Task 3.1.4	Capacity building of members of subcommittee on governance and management
Task 3.1.5	Selection of Eps (Agri market and CAHWs)
Task 3.1.6	Training of EPs
Task 3.1.7	Support to purchase women friendly equipment and deep freezer to provide support to community against a service charge

[\[1\] Community animal health worker](#)

## Chapter 7 : Monitoring, Evaluation and learning

### 7.1 Web based MIS and real time input-output monitoring at various levels:

PRADAN uses a basic computer based MIS to capture on-line plans and achievements for each staff and team across the organisation. The MIS would generate report about the total farmers supported under each of the activity in a given time period.

Farmer level crop data is collected almost every week in the cropping season. This data is collected from field office at block level about each family and entered at field/district level office wherever the internet facility is available. The analysis is done at all the levels – block, district, state as well as central level. The analyzed data is fed back through a review system, described below, to the appropriate node so that it supports in decision making.

The project specific data would be drawn from manual reports as well as web- based MIS so that progress of project activities can be reviewed and also review reports can be prepared for analysis and decision making.

### 7.2 Review Mechanism

The Review for the project would be conducted at two levels – within PRADAN and in the community and both have different systems as described below:

Within PRADAN: The monitoring and learning systems in PRADAN have been designed to facilitate learning and feedback to help personnel improve and to ensure quality and quantum of work against plans. Each project team would meet monthly to report performance against plans and make plans for the next month. A State Management Committee (SMC) comprising of all team leaders in the State and the State Programme Director supported by functional heads from head office and Project/thematic anchors shall review performance once in three months. There is, thus, a great deal of emphasis on interactive review.

Within the Community: Much of the operational review of the project shall be done at the SHG and VLC level in their weekly and monthly meeting respectively. The pallasabha will be tried to become active stakeholder in review the progress of the activities by inviting/sharing of the progress review. These community institutions will organize themselves, with the facilitative support of the PIA staff, to run the processes for monitoring and review in terms of inputs, processes and outputs and impact.

The project aims at empowering the community to take charge by way of certifying the utilization of funds as per the plans. The community will certify by passing resolutions to that effect. This is similar to the concept of community social audit system, which has been found to be an effective method to ensure the authenticity and transparency of such a large project.

## Chapter-8 Budget Narrative

The project aims to work with 6,000 poor families in Keonjhar, Mayurbhanj and Rayagada districts of Odisha to diversify and intensify farm sector livelihoods. The project plans to invest in crop production, strengthen community infrastructure support, include sustainable agricultural practices, include livestock development of the area, develop a cadre of community based resource persons and help women farmer access market.

- **Project Inception:**

This includes family profiling, DPR preparation, value chain study, etc.. The Detail cost of which is provided in the budget sheet.

- **Institution building :**

This is one of the important component in the budget for establishing the system and processes for input and output linkages. This includes the formation , strengthening and management support cost of following institutions

- **Capacity building:**

This is the core of the proposal. This cost includes the capacity building of CRPs, leaders, PRI representatives, Service providers, etc. As already mentioned there would be 240 CRPs and 36 Entrepreneurs (24 agriculture and 12 animal health related) for developing production cluster. CRPs would be generally trained to provide training to the farmers. Though initially some of the trainings would be undertaken by para-professionals and professionals.

- **Community investment support:**

As the farmers of the area mostly depend on monsoon and Rabi irrigation percentage is below 10 %, so community infrastructures would be created and used by the producers group or SHGs so that their skill on irrigated agriculture can be enhanced. This will enhance the confidence of the women members to mobilise resources under various schemes to create individual irrigation asset and use them optimally. This component includes the irrigation common asset, input support for going for sustainable agriculture and revolving fund to procure small equipments which will reduce the drudgery of women members and would encourage taking up agriculture. Input supports would be in the nature of compost making, green manuring, developing cattle shed for collecting urine for preparing liquid manure, planting trees in the bond for biomass recycling, etc. Small equipments like power tiller, power sprayer, weeder, marker, etc would be owned by the producer groups. They will provide these equipments as a loan to the EPs /PGs and will get the revenue for the same.

- **Knowledge management:**

Best practices of the project will be identified, documented and disseminated for upcoming NRLM. We will capture few process details mostly by audio-visuals which will be used as training materials for the farmers.

- **Monitoring and evaluation:**

Baseline and end line data would be collected with 10% of the families. Along with this two independent evaluation studies would be done .Information display boards will be placed for providing required information of the project which would create awareness amongst the women members.

- **Administrative expenditure:**

This covers institutional cost of PRADAN for providing techno managerial support to the implementing team which will be 5% of the total cost.

Project Component	Expenditure (Rs.)	Per Beneficiary Cost	% age of Total Cost
<b>Project Inception</b>	150000	25	0.2%
<b>Institution Building</b>	14082880	2347.15	22.8%
<b>Capacity Building</b>	18658376	3109.73	30.2%
<b>Community Investment Support</b>	24799000	4133.17	40.2%
<b>Knowledge Management</b>	515000	85.83	0.8%
<b>Monitoring &amp; Evaluation</b>	382000	63.67	0.6%
<b>Administration</b>	3100000	516.67	5.0%
<b>Total</b>	<b>61687256</b>	<b>10281.21</b>	

**Component wise benefit to cost ratio per Mahila kissan:**

**Expected benefit per MK under this project is Rs 38000/-**

Component	Component wise cost per Mkissan(,000)	Benefit per Mkissan under this project period (,000)	Benefit to cost ratio
<b>Project inception</b>	0.025	38	1520
<b>Institution building</b>	2.35	38	16.17
<b>Capacity building</b>	4.13	38	9.20
<b>Community investment support</b>	4.13	38	9.20
<b>Knowledge and Evaluation</b>	0.085	38	447.06
<b>Monitoring and Evaluation</b>	0.064	38	593.75
<b>Administration</b>	0.52	38	73.08

There was little calculation error in the physical units while distributing year wise. Those have been rectified during the DPR preparation without changing the total budget and physical units of that head.

Please find the budget attached below.

S.No	Component	Unit Description	Physical Outlay (No.of units planned)				Unit Cost	Yr1
			Yr1	Yr2	Yr3	Total		
<b>1</b>	<b>Project Inception</b>							
1.1	Mahila Kisan profiling	No.of mahila kisan	3000	3000		6000	5	
1.2	DPR Preparation	lumpsum				0		
1.3	Technical protocols documentation	lumpsum				0		
1.4	Value-chain Studies	lumpsum				0		
A	Subtotal		3000	3000	0	6000	5	1
<b>2</b>	<b>Institution Building</b>							
2.1	Mobilisation & Promotion of producer groups	No. of producer groups	120	120		240		6
2.2	Promotion of producer group federation	No.of producer federations	7	12	12	12		18
2.3	Management support to producer federation	No.of producer federations	12	12	12	12		17
B	Sub total		139	144	24	264	0	41
<b>3</b>	<b>Capacity Building</b>							
3.1	Training module development : Print	No.of training modules	5	5		10	5000	
3.2	Training module development : audio-visual	No.of training modules	5	5		10	5000	
3.3	Training equipment & material	Nos	8			8	25000	2
3.4	Training to CRP+EP <Needs to be backed with detailed training schedule>	No.of CRP +Eps	132	264	264	264		5
3.5	Trainings to para-professionals <Needs to be backed with detailed training schedule>	No.of para-professionals	12	24	24	24		1

	Training to Community <Needs to be backed with detailed training schedule>	No.of community members	3000	6000	3000	6000		1296000	2707200	1416960	5420160
	Training to leaders & PRI	No.of leaders	192	192	192	192		30400	30400	30400	91200
	Exposure visits of CRPs to immersion sites	No.of CRPs	132	132	0	264		198000	408000	0	606000
	Exposure visit of para-professional to immersion sites	No.of para-professionals	15	15		30		82500	82500	0	165000
	Exposure visit of Community to immersion sites	No.of mahila kisan	300	300		600	500	150000	150000		300000
1	Service charge to CRP (Excluding the resource fee received by them as trainers)	No.of CRPs	130	240	240	240		720000	1440000	1440000	3600000
2	Service charge to para-professionals (Excluding the resource fee received by them as trainers)	No.of para-professionals	12	24	24	24		1094400	2407680	1115136	4617216
3	Training to Eps (paravet & commission agent)	No of Eps	12	12		12		175000	175000		350000
	Sub total		3955	7213	3744	7678	35500	4638060	8734300	5286016	18658376
	Community Investment Support										
	No.of Mahila kisan	No.of Mahila kisan	500	1000			10000	5,000,000	10000000		15000000
	Inputs to the mahila kisan (grant/subsidy/full loan)	No.of mahila kisan	1500	2000		3500	1250	1875000	2500000		4375000
	Operational Fund of Producer federation	No.of producer federations	6			6		1,224,000			1224000
	Revolving fund to Producer Federations	No.of producer federations	12			12	350000	4200000			4200000
	Sub total		2018	3000	0	3518	361250	12299000	12500000	0	24799000

	Knowledge Management										
	Identification of best practices	Lumpsum				0		5000			5000
	Documentation of best practices	Lumpsum	2	2	2	6		50000	50000	50000	150000
	Dissemination of best practices	Lumpsum	8	8	8	24	15000	120000	120000	120000	360000
	Subtotal		10	10	10	30	15000	175000	170000	170000	515000
	Monitoring & Evaluation										
	Baseline survey	No. of HH to be covered	300	300		600	50	15000	15000		30000
	Endline survey	No. of HH to be covered			600		100	0	0	60000	60000
	Independent evaluation studies	No. of Studies		1	1	2	50000		50000	50000	100000
	Public information disclosure	No. of information disclosure sites/places	120	120		240	500	60000	60000		120000
	Social Audit	No. of social audits	12	12	12	36	2000	24000	24000	24000	72000
	Sub total		432	433	613	878	52650	99000	149000	134000	382000
	Administration Expenditure (Maximum 5% of total project cost)										3100000
	Grand Total (A+B+C+D+E+F+G)										61687256

Annexure attached:

Details of professional staff under MKSP project

Implementation schedule in gantt chart for 1<sup>st</sup> year

Physical target quarter wise for 1<sup>st</sup> year: district wise

Training Schedule

Component	Unit Description	Physical Outlay (No.of units planned)				Unit Cost	Financial outlay (Rs) as planned			
Project Cost		Yr1	Yr2	Yr3	Total		Yr1	Yr2	Yr3	Total (Rs)
Project Inception										
Mahila Kisan profiling	No.of mahila kisan	3000	3000		6000	5	15000	15000		30000
DPR Preparation	lumpsum				0		10000			10000
Technical protocols documentation	lumpsum				0		10000			10000
Value-chain Studies	lumpsum				0		100000			100000
Other (Specify)					0					0
....					0					0
Subtotal		3000	3000	0	6000	5	135000	15000	0	150000
Institution Building										
Mobilisation & Promotion of producer groups	No.of producer groups	120	120		240		600000	1176000	0	1776000
Promotion of producer group federation	No.of producer federations	7	12	12	12		1824000	2601600	2873760	7299360
Management support to producer federation	No.of producer federations	12	12	12	12		1773360	1540656	1693504	5007520
					0					0
....					0					0
Sub total		139	144	24	264	0	4197360	5318256	4567264	14082880
Capacity Building										
Training module development : Print	No.of training modules	5	5		10	5000	25000	25000		50000
Training module development : audio-visual	No.of training modules	5	5		10	5000	25000	25000		50000
Training equipment & material	Nos	8			8	25000	200000			200000
Training to CRP+EP <Needs to be backed with detailed training schedule>	No.of CRP +Eps	132	264	264	264		510840	1021680	1021680	2554200

Trainings to para-professionals <Needs to be backed with detailed training schedule>	No.of para-professionals	12	24	24	24		130920	261840	261840	654600
Training to Community <Needs to be backed with detailed training schedule>	No.of community members	3000	6000	3000	6000		1296000	2707200	1416960	5420160
Training to leaders & PRI	No.of leaders	192	192	192	192		30400	30400	30400	91200
Exposure visits of CRPs to immersion sites	No.of CRPs	132	132	0	264		198000	408000	0	606000
Exposure visit of para-professional to immersion sites	No.of para-professionals	15	15		30		82500	82500	0	165000
Exposure visit of Community to immersion sites	No.of mahila kisan	300	300		600	500	150000	150000		300000
Service charge to CRP (Excluding the resource fee received by them as trainers)	No.of CRPs	130	240	240	240		720000	1440000	1440000	3600000
Service charge to para-professionals (Excluding the resource fee received by them as trainers)	No.of para-professionals	12	24	24	24		1094400	2407680	1115136	4617216
Training to Eps (paravet & commission agent)	No of Eps	12	12		12		175000	175000		350000
										0
Sub total		3955	7213	3744	7678	35500	4638060	8734300	5286016	18658376
Community Investment Support										
Community Infrastructure	No.of Infrastructure units	500	1000			10000	5,000,000	10000000		15000000

Inputs to the mahila kisan (grant/subsidy/full loan)	No.of mahila kisan	1500	2000		3500	1250	1875000	2500000		4375000
Inputs to producer groups/ federation (grant/subsidy/full loan)	No.of producer groups				0					0
Operational Fund of Producer federation	No.of producer federations	6			6		1,224,000			1224000
Revolving fund to Producer Federations	No.of producer federations	12			12	350000	4200000			4200000
....					0					0
Sub total		2018	3000	0	3518	361250	12299000	12500000	0	24799000
Knowledge Management										
Identification of best practices	Lumpsum				0		5000			5000
Documentation of best practices	Lumpsum	2	2	2	6		50000	50000	50000	150000
Dissemination of best practices	Lumpsum	8	8	8	24	15000	120000	120000	120000	360000
Other (Specify)					0					0
....					0					0
Subtotal		10	10	10	30	15000	175000	170000	170000	515000
Monitoring & Evaluation										
Baseline survey	No. of HH to be covered	300	300		600	50	15000	15000		30000
Endline survey	No. of HH to be covered			600		100	0	0	60000	60000
Independent evaluation studies	No. of Studies		1	1	2	50000		50000	50000	100000
Public information disclosure	No.of information disclosure sites/places	120	120		240	500	60000	60000		120000

Social Audit	No.of social audits	12	12	12	36	2000	24000	24000	24000	72000
Other (Specify)					0					0
....					0					0
Sub total		432	433	613	878	52650	99000	149000	134000	382000
Administration Expenditure (Maximum 5% of total project cost)										
Staff salaries					0			0	0	0
Travel & conveyance					0		0	0	0	0
Stationary					0					0
Communication					0					0
Cost to Integrating office for project handling.					0		0	0	0	3100000
Institutional cost for techno managerial support to the implementing team.										
....					0					0
Sub total		0	0	0	0	0	0	0	0	3100000
Grand Total (A+B+C+D+E+F+G)										61687256

**of annexure attached:**

Details of professional staff under MKSP project

Implementation schedule in gantt chart for 1<sup>st</sup> year

Physical target quarter wise for 1<sup>st</sup> year: district wise

Training Schedule