DETAILED PROJECT REPORT

PROMOTION OF LARGE SCALE TASAR SERICULTURE BASED LIVELIHOODS IN ODISHA

Under

MAHILA KISAN SASHAKTIKARAN PARIYOJANA (MKSP)

(A sub-component of NRLM)

CO-ORDINATING AGENCY

CENTRAL SILK BOARD

PROJECT IMPLEMENTING AGENCY (PIA):

PROFESSIONAL ASSISTANCE FOR DEVELOPMENT ACTION (PRADAN)

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Project at a Glance

1	Title		**Promotion of Large Scale Tasar Sericulture Based Livelihoods in Odisha**		
2	Project area	District	Kendujhar		
		Blocks	Banspal and Jhumpura		
3	Coordinating Agency		Central Silk Board, Min.of Textiles, Govt. of India		
4	Project Implementing Agency		PRADAN		
5	Total Project Cost (Rs. In Lakhs)		**555.999**		
6	Funding Pattern (Rs. in lakhs)		CREDIT & BENEFICIARY (Rs. in lakhs)	MORD (Rs. in lakhs)	CSB (Rs. in lakhs)
			77.967	358.586	119.447
	Sharing pattern (%)		14.02	64.49	21.48
			Cost/beneficiary (Rs)	%	
	Investment per Family		18,011.77	100.00	
	Cost of capacity building per Family		2,929.15	16.26	
	Cost of program cost per Family		10,726.28	59.55	
	Cost of Program support cost per Family		4,356.34	24.19	
7	Project Period		2013-14 to 2015-16 (Three years)		
8	Beneficiaries to be covered (Direct)				
	Nursery farmers		30		
	Nucleus Seed rearer's		40		
	Basic Seed rearer's		153		
	Commercial rearer's		1,264		
	Private Graineurs		38		
	Community Resource Persons		37		
	BSPU members (15 per unit)		15		
	Improved agriculture		1,495		
	Vegetable cultivation		299		
	Women SHG members		748		
	Indirect beneficiaries		381		
	Total Project Beneficiaries		2,654		
9	Infrastructure to be created				
a	Block plantation (Forest/ private/ revenue lands) (ha.)		80		
b	Regeneration of block plantation (ha.)		940		
c	Basic Seed Production Units (No.)		1		
d	Rearer's' Collective (No.)		2		
10	Project Output (during the Project period):				
	Tasar basic seed (Lakh dfls)		0.5		
	Tasar commercial seed (Lakh dfls)		4.15		
	Tasar Reeling Cocoons (Lakh Nos.)		265		
11	Value of the Project output (Lakh Rs.)		723.07		

Abbreviations

ASR	Adopted Seed Rearer's
ATMA	Agricultural Technology Management Agency
BPL	Below Poverty Line
BSM&TC	Basic Seed Multiplication & Training Centre
BSPU	Basic Seed Production Unit
BSR	Basic Seed Rearer
BTSSO	Basic Tasar Silkworm Seed Organization
BV	Bivoltine
CBO	Community Based Organizations
CDP	Catalytic Development Programme
CEO	Chief Executive Officer
CF	Cluster Federation
CIF	Community Investment Fund
CPT	Cattle proof trench
CR	Commercial Rearer
CRP	Community Resource Person
CRRI	Central Rice Research Institute
CSB	Central Silk Board
CTR&TI	Central Tasar Research & Training Institute
CTSSS	Central Tasar Silkworm Seed Station
DFL	Disease Free Laying
DOS	Department of Sericulture
DOT&H	Department of Textiles & Handlooms
DRDA	District Rural Development Agency
EA	Executing Agency

EMT	Entrepreneurial Motivational Training
FIU	Field Implementation Units
GOI	Government of India
GP	Gram Panchayat
HDI	Human Development Index
HDR	District Human Development Report
HR	Human Resource
IMR	Infant Mortality Rate
INRM	Integrated Natural Resource Management
ISDS	Integrated Skill Development Scheme
ISRO	Indian Space Research Organization
ISTP	Inter State Tasar Project
ITC	Indian Tobacco Company
ITDA	Information Technology Development Agency
KBK	Kalahandi Balangir Koraput
KCC	Kisan Credit Card
LWE	Left Wing Extremism
MACS	Mutually Aided Cooperatives Societies
MFI	Micro Finance Institution
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MGNREGS	Mahatma Gandhi National Rural Employment Guarantee Scheme
MIS	Management Information System
MKSP	Mahila Kisan Sashaktikaran Pariyojana
MoRD	Ministry of Rural Development
MOT	Ministry of Textiles
MoU	Memorandum of Understanding
MT	Metric Tonne

NABARD	National Bank for Agriculture and Rural Development
NFSM	National Food Security Mission
NGO	Non-Governmental Organization
NHM	National Horticulture Mission
NIRD	National Institute of Rural Development
NRHM	National Rural Health Mission
NRLM	National Rural Livelihoods Mission
NSR	Nucleus Seed Rearer
NSSO	National Sample Survey Organization
NTFP	Non Timber Forest produces
OREGS	Odisha Rural Employment Guarantee Scheme
OTELP	Odisha Tribal Empowerment and Livelihoods Programme
OUAT	Odisha University of Agriculture and Technology
PCC	Project Coordination Committee
PDS	Public Distribution System
PEC	Project Execution Committee
PIA	Project Implementing Agency
PMB	Project Management Board
PRADAN	Professional Assistance for Development Action
PRFU	Project Resource and Facilitation Unit
PRI	Panchayat Raj Institutions
PS	Panchayat Samiti
QPR	Quarterly Progress Report
REC	Research Extension Center
RKVY	Rasthriya Krishi Vikas Yojana
RO	Regional Office
SC	Scheduled Caste

SGSY	Swarnajayanthi Gram Swarozgar Yojana
SHG	Self Help Group
SLMC	State Level Monitoring Committee
SLSCC	State Level Sericulture Coordination Committee
SLTPSG	State Level Technical Project Support Group
SMC	State Management Committee
SMS	Subject Matter Specialist
SRI	System of Rice Intensification
SRLM	State Rural Livelihood Mission
ST	Scheduled Tribe
TDF	Tribal Development Fund
ToR	Terms of Reference
TOT	Transfer of Technology
TSP	Tribal Sub-Plan
TTP	Trainers Training Programmes
TV	Trivoltine
TVS	Tasar Vikas Samity
UC	Utilization Certificate
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
VLC	Village Level Committee

Summary of the proposal

A	**Title of the Project**	**Promotion of Large Scale Tasar Sericulture Based Livelihoods in Odisha**
B	**Project Duration**	Duration: 3 years (2013-16)
C	**Total Budget (Approved)**	• Rs. Lakh 555.999 – Total Budget • Rs. Lakh 358.585 – Govt. of India, MoRD • Rs. Lakh 119.447 – Central Silk Board • Rs. Lakh 77.967 – Community and Other Sources
D	**Name of the Coordinating Agency**	Central Silk Board, Min.of Textiles, Govt. of India
E	**Name of the Field Implementing Agency**	Professional Assistance for Development Action (PRADAN)
F	**Coverage of the Project**	The project areas have been carefully chosen to include selected BRGF / IAP districts of the State of Odisha to reach out to a large number of marginalized families who have for generations, suffered from isolation and social exclusion. • No. of Districts: 1 • No. of Blocks: 2 • Direct Beneficiaries: 1,525 • Women SHG members: 748 • Indirect beneficiaries: 381 • Total project beneficiaries: 2,654
G	**Infrastructure to be created**	• Block plantation (Forest/ private/ revenue lands) (ha.)-80 • Regeneration of block plantation (ha.)- 940 • Basic Seed Production Units (No.)- 1 • Rearer's' Collective (No.)- 2
H	**Key Outputs of the Project**	Enhanced family incomes by Rs.10,000-18,700 for 60% of participant women through Tasar Sericulture by • Building capacities of all participating families in adopting skills to effectively and profitably engage in livelihood activities based on Tasar sericulture, • Introduction of improved technologies and practices to push the productivity frontiers for accelerated growth in Tasar Sector, • Strengthening seed sector to eliminate the key supply constraint in Tasar sericulture. • Investment to create alternative market mechanisms to ensure fair prices for cocoons. • Promote Producers' collective to provide sustainable systems of services to producers. • Design development and dissemination
I	**Value of the Project output (Lakh Rs.)**	723

Chapter 1: Project background, context and rationale

Odisha, the eighth largest, the eleventh most populous State[1] and lowest human development index in the country manifest a blend of the primordial and contemporary epochs. The state lies in a sub-tropical geo-climatic region with vastly varied topography. Even though Odisha has profuse natural resources in the form of vast mineral deposits, extensive forests, plentiful ground and surface water and long coastline, it stood fourteenth among the 15 major states with regard to the standard of living and around half of the population living below poverty line having more numbers of ultra poor families[2]. Odisha has 3 revenue divisions, 30 districts, 58 subdivisions, 314 blocks, 31 towns, 6,235 gram Panchayat and 51,124 villages as its administrative units.

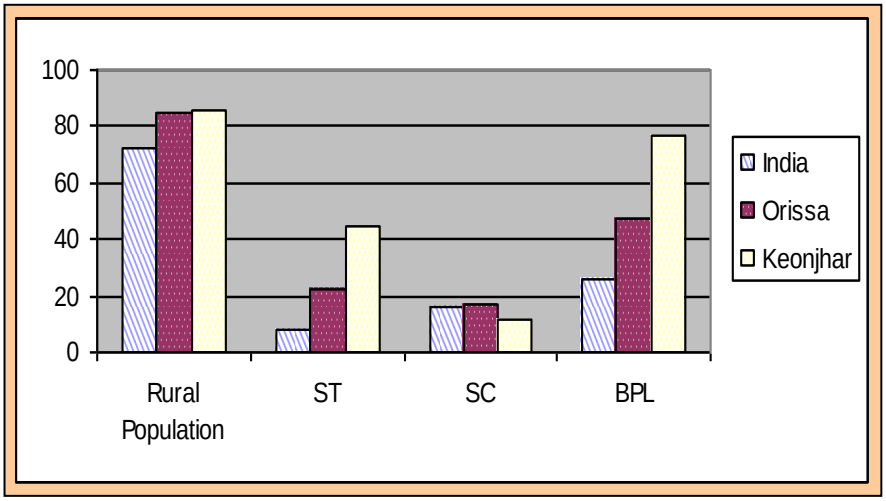
As per the Economic survey 2010-11, Odisha's economy has been following a high trajectory in recent years but in terms of real per capita income, the state has lagged behind the national average ever since independence. In relative terms, if the per capita net domestic of India is one rupee, Odisha's per capita net state domestic product in 2009-10 was 72 paisa. The rural-Urban poverty gap remains larger than all India average. The extent of poverty in southern and northern regions is still very high and remains a matter of concern. Even though state as a whole is backward against different developmental indicators, it is worsen in few regions and districts mostly in southern and northern regions of the state. Schedule caste and schedule tribe population is around 38% against Indian average of 24% however concentration of the same is very high in southern and northern regions which cover around 11 districts out of total 30 districts. Even though the state is divided into ten agro-climatic zones it can be segregated to coastal region (10 districts) and highland region (20 districts). Coastal region is characterized by fertile soil, predominant lowlands round the year irrigation, less tribal and frequent natural calamities like flood and cyclone. Whereas highland regions on the other hand has a forest-clad undulating topography, tribal population dominated, forest and livestock is a major source of livelihood along with agriculture, immense mineral deposits, largely rain fed cropping which faces regular droughts and poorly developed infrastructures. Odisha needs region wise perspective, plan of action and special focus in poorer pockets for overall development of the state.

Context of the area: Kendujhar is the fourth largest district in Odisha with a total geographical area of 8,303 square kilometers, spreading from $85^0 11'$ to $86^0 22'$ east longitude and $20^0 01'$ to $22^0 10'$ north latitude. It is divided into 13 blocks and 3 sub-divisions. The 2,122 villages (53 uninhabited) of the district are organized into 286 gram panchayats. There are 4 municipalities in the district. The district headquarter, Kendujhar is on NH-6 and NH-215 and is connected by road to state capital Bhubaneswar. The nearest railway station is Jajpur-Kendujhar Road which is 115 kilometers away from Kendujhar. Kendujhar has just recently been connected by broad gauge rail line but passenger trains are yet to start plying. The surrounding districts of Kendujhar are Mayurbhanj, Balasore, Bhadrak, Jajpur, Dhenkanal, Angul, and Sundargarh of Odisha and West Singhbhum district of Jharkhand. All- weather roads connect most of the villages in the district except those in hilly areas but they need regular maintenance.

[1] As per census 2011 total population of odisha is 419.47 lakhs

[2] In 1992, percentage of destitute and very very poor families was 71% of the total BPL families

Demographic Pattern



As per Population Census 2001, the population of the district was 15.62 lakh in 2001 that had a decadal growth rate of 16.83%. Eighty six percent of the population is rural, amongst them 45 percent belong to Scheduled Tribe and 12 percent are Scheduled Caste. As per District Statistical Handbook 2001, 77% of the total families live below the poverty line. The population density of the district is 188 per square kilometer with the hilly portions of the district being sparsely populated.

Sector Context: Tasar sericulture has been a traditional practice and a major source of livelihood for the people living in forest fringe areas of this region. In the past 3 decades, Tasar sericulture has seen steady decline thus affecting the livelihood earning of a large number of marginalized families. The decline is caused by factors such as shortage of good quality DFL supply, lack of extension support from the Government especially in LWE areas and a general lack of institutional mechanism for credit and fairer market.

Odisha is second largest, after Jharkhand, in terms of number of producers in Tasar sericulture and raw silk production. In the north-western part of Odisha, Tasar silkworm rearing is part of traditional cultures of the tribal communities. Especially in the districts of Kendujhar and Mayurbhanj, Tasar rearing is an important source of livelihoods for a significant number of families. The agro climatic conditions and natural resources are suitable for Tasar Silkworm rearing. Tasar rearers are spread over the C.D. Blocks of Anandapur, Banspal, Harichandanpur, Kendujhar, Patana and Telkoi in Kendujhar district. In Mayurbhanj District, silkworm rearers are mainly concentrated in Sukruli, Karanjia and Thakurmunda blocks. Tasar silkworms are reared mainly in the natural forests in the Protected Forest areas. *Terminalia tomentosa* (*Asan*) is the dominant species of silkworm host trees in the forests. On an average, the entire family of the rearers spends 80-90 days in silkworm rearing in the forestland. In a good cropping season a rearer can earn up to Rs.7, 000/- that includes his own labour cost.

Odisha has been the only State where the Government had made systematic efforts to promote Tasar Producers' Cooperative as a means to strengthen the livelihoods of producers across the value chain. This

initiative was undertaken in the late '70s and early '80s with a focus to bring all the producers within the folds of collectives. The Cooperatives took responsibilities of organizing DFL supply, offered extension services and bought bulk of the cocoons from the rearer's at fair prices. Subsidies from the Government for setting up infrastructure, conducting training and for product promotion were also routed through the cooperatives. The Government had brought about changes in the policies that prevented transportation of cocoons outside the state. This was done to ensure supply of raw materials (cocoons) for the weavers at fair rates.

Rationale for Support under MKSP: With this construct in mind, PRADAN has conceived this project proposal for consideration under MKSP. This project proposes to build on the foundations of a) large scale social mobilization of women facilitated by PRADAN in Odisha and b) an array of livelihood propositions for the marginalized, based on Tasar sericulture that have been made standardized through decades of meticulous efforts by PRADAN with support from the Central Silk Board (CSB).

The project proposes to create over 2,654 sustainable livelihoods for the marginalized households, specially seeking involvement of Scheduled tribe communities and women in Kendujhar district of Odisha, which come under Tribal Sub-Plan Areas.

As mentioned earlier, the mainstay of livelihood interventions would be around Tasar Sericulture, a forest based activity, traditionally undertaken by communities living in forest villages. The proposed project would exploit the benefits of recent advancements in the sector to extend the livelihood opportunities to newer clusters, covering families with no prior experience to facilitate adoption of improved technologies of Tasar sericulture and enabling them to access mainstream markets and sustain economic gains.

This project is designed to capitalize on the revival and growth attained in Tasar sericulture in recent years in Bihar & Jharkhand through intensive efforts of PRADAN in collaboration with Central Silk Board to implement a Special SGSY Project for development of Tasar Sericulture. The idea here is to broad base the best practices of the above-mentioned project within Odisha to benefit a large number of poorer households. The proposed Special project would take 4 years for complete implementation of all the activities.

While selecting the area of intervention, we have taken into consideration two major factor conditions such as (i) presence of active Women Self help Groups (ii) existence of Tasar-host tree resources within the access of the local communities.

Another associated factor condition that would favor the project is the availability of fallow / wastelands owned by the SHG-member families. These lands are proposed to be utilized for raising host tree plantations in isolated patches. The project would promote, from among the participants, a group of rearer's who would be involved in seed stock multiplication in these isolated plantations under aseptic conditions. The seed stock would be processed to prepare Disease Free Laying (DFLs) or high quality Tasar seeds. Isolated plantations would thus be a unique feature of the project that would create capacities for large scale seed production in the next 4-5 years. Beyond the project period, this facility would serve at least double the number of families, who would be directly covered during the project period.

Besides enhancing the stake and involvement of the women in the income activities like Tasar sericulture, the project would work for strengthening their position at household. Although women play a central role in agriculture, yet low productivity of rain fed farming hardly supports the family to meet year-round food requirement. Food shortages affect women most, both physically as well as emotionally. As homemakers and rearer's of small children, they bear the emotional trauma of coping with hungry children, and are most likely to receive less or go without food in times of shortages. The project proposes to support at least 50% of the participating families to overcome food shortage by ways of increasing their paddy production. This

effort would be further supplemented by SHGs and Cluster associations, who will support their members to claim food grains from PDSs.

By way of activities, the project would:

- Strengthen the existing SHGs and clusters and orienting them to livelihood activities,
- Promote functional groups of Tasar silkworm rearer's comprising of women and men,
- Promote District / Block level aggregations (formal or informal) of the primary groups. These organizations would enable the producers to sustain their initiatives,
- Implement a variety of activities pertaining to Tasar sericulture to build capacity of producers, equipping them with implements and accessories, create assets such as seed production units, host tree plantations, reeling units, sorting-grading centre's,
- Set up Tasar Cocoon and silk Yarn banks as alternative marketing mechanisms,
- Support at least 50% of the participating families to adopt improved technologies and methods (such as SRI) of food grain production. The SHGs and Clusters would support the remaining families to claim their entitlements for food grains from PDS.
- Promote a cadre of community based service providers to provide hand holding assistance and linkages for credit and market for the participating families.
- Promote and nurture suitable producer organizations (cooperatives or producer companies as per the new Act) to provide sustainable systems for services to the project participants,
- Undertake activities pertaining to documentation of processes, impacts and for wider dissemination of experience.

1.1 Demographic Profile of the area

The Project is being implemented in the district of Kendujhar of Odisha. Even in the district focus is on two blocks namely Banspal & Jhumpura respectively. The demographic profile of the district is shown in the following table:

A Profile of Kendujhar district of Odisha state

Number of Households	326,784	Average Household Size(per Household)	5
Population-Total	1,561,990	Proportion of Urban Population (%)	13.6
Population-Rural	1,348,967	Sex Ratio	977
Population-Urban	213,023	Sex Ratio(0-6 Year)	962
Population(0-6Years)	243,655	Sex Ratio (SC)	983
SC Population	181,488	Sex Ratio (ST)	994
ST Population	695,141	Proportion of SC (%)	12
Literates	780,918	Proportion of ST (%)	45
Illiterates	781,072	Literacy Rate (%)	59
Total Workers	621,226	Work Participation Rate (%)	40
Main Worker	395,160	% of Main Workers	25
Marginal Worker	226,066	% of Marginal Worker	14

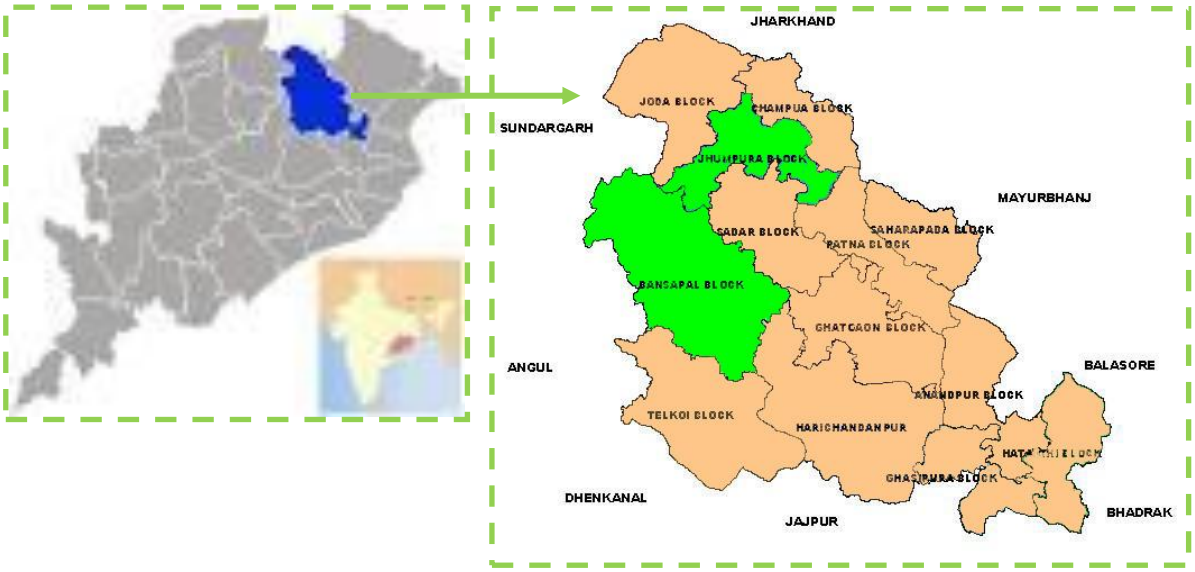
A Profile of Kendujhar district of Odisha state

Non Worker	940,764	% of non Workers	60
CL (Main+Marginal)	204,874	Proportion of CL (%)	33
Al (Main+Marginal)	225,837	Proportion of AL (%)	36
HHI (Main+Marginal)	27,882	Proportion of HHI (%)	4
OW (Main+Marginal)	162,633	Proportion of OW (%)	26

Source: Census2001

The area is characterized by high tribal population, low population density and high forest cover particularly in Banspal block. The literacy over the years has improved but it's yet to create enough opportunity in job related to non farm sector. The entire population of the two blocks is rural of Kendujhar District and the main occupation of the area is agriculture and collection of NTFP.

Project Area



1.2 Rural poverty context in the area

a. Poverty and Human Development:

There was a steady decline in the poverty ratio in Odisha between 1977–78 and 1993–94. In the second half of the 1990s, poverty ratio has remained almost stagnant. The poverty ratio in southern and northern NSS regions of Odisha has in fact increased between 1993– 94 and 1999–2000, and since almost 75 per cent of the state's poor belong to these regions, this has influenced the overall poverty ratio. Two spatial aspects of poverty are noteworthy. First, poverty in Odisha is overwhelmingly a rural phenomenon. Second, there are very significant regional differences in the incidence of poverty within Odisha. The rural poverty ratio in the southern region is more than two and half times and in the northern region more than one and half times the ratio in the coastal region. The incidence of poverty among Scheduled Caste (SC)

and Scheduled Tribe (ST) population in the southern and northern region is very high—it is in these regions that 88.56 percent of the state's ST population and 46.23 percent of the state's SC population reside. Of particular concern is the fact that it is only in the coastal region of the state that the rural poverty ratio has steadily and significantly declined between 1983–84 and 1999–2000. This has happened to a lesser extent in the northern region whereas in the southern region, the poverty ratio has been fluctuating around a high average value.

CHAPTER 2

The Scheduled Tribe (ST) population in Odisha (22%) is larger than the national average of 8% & the Scheduled Caste (SC)) population is 16%. Together they account for 38% of the population. The State has the third highest tribal population in the entire country, which accounts for roughly 11 percent of the total tribal population of India.

The tribal economy in the State of Odisha is primarily subsistence oriented and based upon a combination of agriculture, forestry and wage labour. Tribal women play an active role in both household affairs and also in providing economic input in some form or the other for survival of families. They contribute the major part of the labour required for agriculture and collection of Non-Timber forest produce. In addition to this, they take up wage labour whenever available.

Tribal remain the most disadvantaged section of Indian society in terms of poverty, illiteracy, poor nutritional & health status and lack of access to social & technical services. In addition tribal households face inter-related problems of land scarcity, low levels of agricultural productivity and the absence of economic alternatives which in turn lead to environmental degradation and borrowing from traders and money lenders at high rates of interest. This vicious cycle of low productivity, chronic indebtedness and decreasing incomes has progressively undermined livelihood security and has been accompanied by the weakening of tribal institutions, the worsening of gender relations, increasing economic stratification within tribal into wider political and economic structures which tribal men and women are powerless to influence.

Institutions and Infrastructure: The state is deficient in infra structure and there is felt need to substantially improving the extent and quality of infra structure in the state. The lack of access to rural infrastructure such as irrigation, roads, power, and access to bank (credit), educational institutions are far below the national average. In spite of government's focus on *Bijli, Sadaka and Pani* in recent times, pilferage in government line departments, and quality of assets built and lack of concerted planning in the state has not resulted in the outcomes that were expected and varies across the regions.

Thus, wide spread indifference, corruption, lack of accountability with poor reach of services are mounting in generating feeling of alienation among people. This unmet aspiration, political vacuum and absence of Government on ground are giving space to Left Wing Extremism.

There is thus, an overall absence of good mainstream institutions and hardly any social institutions of the poor themselves. This is a critical development challenge for Odisha.

Status of Women: There are gender disparities in Odisha in respect of several human development indicators. The female literacy is less than the national average. Although woman constitutes about 45% of the total work force in Odisha they are faced with the problem of child care, hostile host community, difficult working environment, lack of benefits etc.

Illiteracy, poverty, landlessness and high incidence of disasters make these women very vulnerable to exploitation even in their native village. The female headed households are usually the poorest in the village. While the female literacy rate of the state as a whole has increased phenomenally during the last

two decades (from 20.60% in 1981 Census to 64.36% in 2011 Census), there are pockets of very low female literacy. Districts of Malkangiri, Rayagada, Nabarangpur and Koraput have a female literacy rate of less than 40%. There is gender disparity in primary school enrolment and drop out. .

There is hardly any institutional space for women and her rights. Lived experience also tell us that there is increasing work load on women leading to drudgery and ill-health. Participation of women in household decision-making and affairs of village like in *Palli Sabha* is very poor. The practice of ostracizing single women / widows as *Dain* continues though seems to be lesser now. Patriarchal social norms and women's own self-view has inhibited her from being as dignified citizens. The number of females per thousand males of Odisha is 979 as per 2011 census.

b. Vulnerabilities:

a. Household level vulnerabilities

The context of household is very different in Odisha across state and within district itself. The state as well as the district is having 5 persons per household as per Census 2011 data. The project blocks are mainly dominated by tribal and irrespective of small households size comparatively, the landlessness is high. A household in the project blocks are more vulnerable as almost 60% and above are marginal farmers and having less than 1 hectare. Agriculture in this part is mostly rain fed as a result most of the lands are monocrop. Per capita income of people living in this part is much lower in comparison to the district average. As a result, other indicators of human development like literacy rate, women literacy rate are poor and IMR, MMR are also high.

Out of 30 districts in Odisha, Kendujhar is ranked at 24 in Human development index. The district is behind national and state average in most of the development indicators as below.

Development Indicators	Kendujhar[3]	Odisha	India	Data Source
Literacy rate (%)	59.24	63.08	64.84	*Census, 2001*
Female literacy rate (%)	46.22	50.51	54.16	*Census, 2001*
Retention rate in primary education	49.2	62.03	71.01	*NUEPA, 2005-06*
Infant mortality rate (IMR)	55	73	57	*SRS, 2006*
Maternal mortality ratio (MMR)	243	358	301	*SRS,2003*
Total fertility rate (TFR)	2.2	2.48	2.98	*NFHS-3*
Sex ratio	977	972	933	*Census, 2001*
Anemia among women (15-49 years)	85.7	62.8	55.3	*NFHS-3*
Percentage of BPL families	77	47	26	*Pancayatiraj Deptt.*
Yield rate of Paddy (Quintals/hectare)	15	15	21	*Agriculture Deptt.*

Within the district, there are lots of variations in socio-economic status of the people as shown in the following table.

[3] IMR, MMR, TFR and anemia among women of Kendujhar have been collected from NRHM office

Block	SC%	ST%	Literacy %	BPL %
Banspal	4	78	28	89
Jhumpura	6	51	54	75
Kendujhar District	**12**	**45**	**59**	**77**

Majority of farming families in the district and in one of the project block, Banspal are marginal farmers and small farmers as shown in the following table.

Category	Kendujhar District		Banspal Block	
	Numbers	Percentage	Numbers	Percentage
Marginal Farmers	103,016	48	7,950	61
Small Farmers	77,025	36	4,046	31
Big Farmers	33,403	16	1,041	8
Total	**213,444**	**100**	**13,037**	**100**

Source: Office of the Deputy Director (Agriculture), Kendujhar

The break-up of land utilisation in the district and one of the project blocks is as below:

Land use	Kendujhar District		Banspal Block	
	Area in Ha.	% of Total Area	Area in Ha.	% of Total Area
Forest	310,672	37.4	83,589	51.0
Misc. tree crops and grooves not included in net area sown	6,000	0.7	941	0.6
Permanent pastures & other grazing land	19,631	2.4	1,303	0.8
Culturable waste land	26,522	3.2	2,075	1.3
Land put to non agricultural uses	76,688	9.2	5,115	3.1
Barren uncultivable lands	93,614	11.3	54,941	33.5
Net sown area	297,823	35.8	15,820	9.7
Total geographical area	831,000	100.0	163,784	100.0

The cultivated area under different land type is as follows.

Land Type	Kendujhar District		Banspal Block	
	Cultivated area (Ha)	% of total cultivated area	Cultivated area (Ha)	% of total cultivated area
Upland	158,653	53	12,151	77
Medium land	99,832	34	3,075	19
Low land	39,388	13	594	4
Total	**297,873**	**100**	**15,820**	**100**

Source: Office of the Deputy Director (Agriculture), Kendujhar

The households inhabited in the project blocks are part of the hilly and forest parts of the district are relatively poorer than people from rest of the district. Almost the entire area of Banspal and Jhumpura blocks, and considerable parts of Ghatagaon, Harichandanpur, Telkoi, Anandpur, Kendujhar, Saharpada and Patna blocks are dominated by hills & forests. In these areas, majority of the families still depend on forest. Woodcutting is a major source of livelihood. Some families have moved from pure forest

dependence to a mix of small farming and migration based wage labour in recent past. In considerable areas of Banspal, Joda, Jhumpura and Kendujhar blocks, the youngsters prefer to work in mines and transports related to it, but there is not much improvement in family well being. Communities living in hilly & forest areas are generally Scheduled Tribes including a few hamlets of Primitive Tribal groups such as *Juanga*. Each household has a reasonable amount of homestead land (10 cents or more), used to grow maize, mustard (with residual moisture) and vegetables. The upland and medium land are placed under traditional varieties of paddy with low yields. Small parcels of lowland, if available with the household, are also placed under traditional varieties of paddy. Manure in the form of cow-dung or compost is used in limited quantity, inorganic fertilizers are not used. In few pockets people are into *Tasar* sericulture. Cattle are maintained essentially for draught purposes. A few goats and hens comprise the rest of the livestock which are often used as buffer. In some pockets, food insecurity, absence of basic amenities and employment opportunities has brought the inhabitants under the influence of extremists. Some of the specific issues of the area are as below

(a) Degradation natural resources and poor agriculture productivity

In spite of favorable climatic conditions, the production from agriculture and related activities are low. Lack of irrigation facilities, low adoption of improved crop practices and land development measures, and low investment because of poor economic situations lead to degradation of natural resources. Degraded resources in turn reduce the productivity. This way it forms the vicious cycle of poverty.

Although the poorer people don't leave agriculture, as survival mechanism they depend upon other sources of livelihoods like wood cutting from forest, wage labour, migration etc. Wood cutting from the forest as well as shifting cultivation and soil erosion from unbunded uplands further contributes to the land degradation.

Irrigation has been considered as a major input for enhancing the agricultural production. Like any other areas in agro-ecological zone-VII, there is not much scope for large or medium irrigation projects.

All the extension programmes for increasing production is focused upon demonstration of input use rather than practices, that too with limited number of families.

(b) Skewed distribution of benefits out of mining

Because of low productivity from land, the families near mines depend upon the unskilled work as their source of livelihood. Although the families are able to survive, there is not much change in their wellbeing status. For example, the literacy rate of Banspal is 28%. As people are not educated and are poor, they are not able to go for more skilled work or business. The earning from mines is only for survival. There is rare investment on human and natural resources. On the other hand, a few people are getting benefited from this large business, while a large mass is getting affected due to environmental pollution and road detoriation due to heavy traffic.

(c) Poor connectivity in hilly areas

There are a number of villages in forest fringe areas, not connected with suitable all weather roads affecting the reach of poor to mainstream for education, health and other services. The marketing of produces is also affected.

Although there are programmes for increasing rural connectivity, there is lacking in concentrated effort to connect all the habitations.

Major tourist spots are in the hilly parts of the district. The lack of proper connectivity along with other infrastructural facility is also a block for tourism development.

(d) Poor status of health, education and other basic services

The health and education status in the interior parts are very poor. Awareness among people, poor livelihood status and connectivity are the major reasons. The literacy rate is low as compared to state and national average. Although there are primary schools in each one or two villages, the people are not satisfied with quality as there is inadequate number of teachers. Teachers also don't prefer to stay in the interior parts, affecting the quality of education.

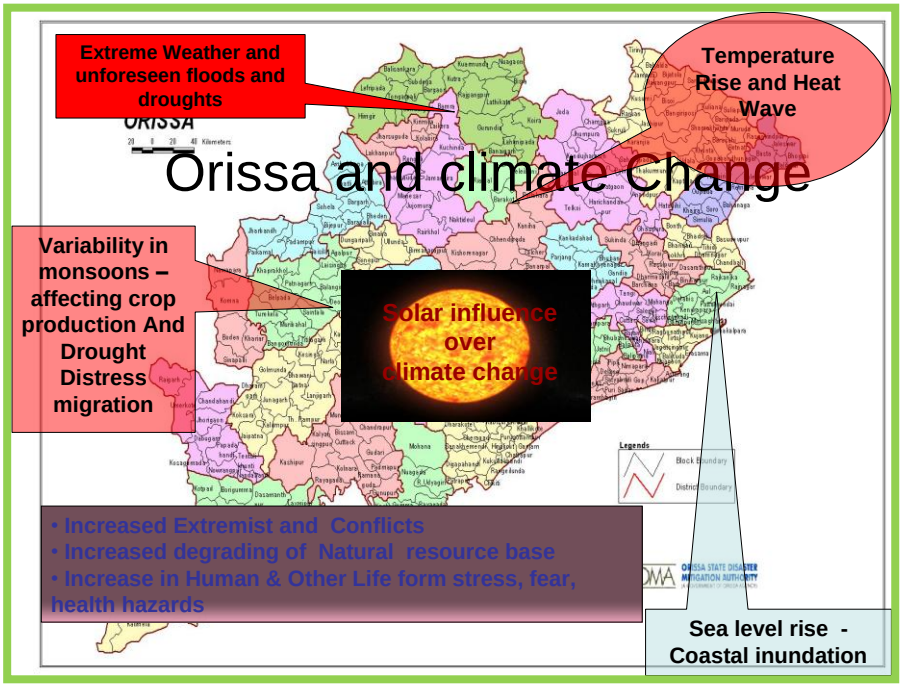
Although according to the official sources, almost all the habitations have drinking water facility; people have expectations to have the facility nearer to the house. In some habitations, there are no facilities at all. In spite of the government programme, very few rural families have toilets. The infant mortality, maternal mortality and malarial death are high in the area.

(e) Under developed livelihood sectors

There are programmes like SGSY, meant for livelihood enhancement of rural people. But the impact of the programme is not satisfactory, as it does not follow a cluster approach of sub-sector development with forward and backward linkages. For example, goat rearing is one of the key activities, as most of the families in forest fringe villages keep goats. Kid mortality is one of the key factors in the success of this activity. But, there is not much action taken to reduce the kid mortality. The livelihood enhancement programmes need to be more integrated in terms of community mobilization, skill enhancement, input and output market linkages.

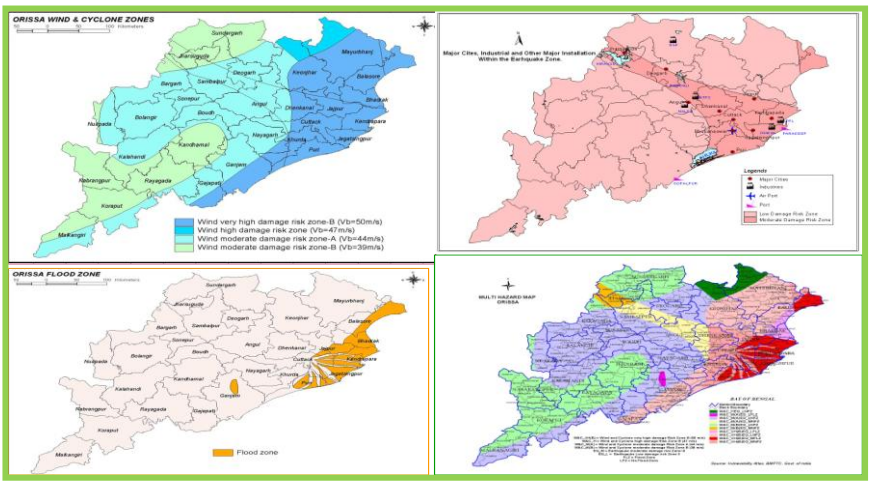
b. District/state level vulnerabilities

Drought, flood and cyclone have become serious problems to Odisha and regular occurrences particularly in coastal Odisha have become the part of normal life. The poor people are the worst affected. In most years, adjustment in household activities combined with relief works provides the minimal succors (employment, food, etc). However, occasionally the situation gets worsen like the case in coastal Odisha since late 1990s. The farmers and fishermen who are the traditional food producers living in such fragile environments become ecologically, geographically and economically marginalized. However, over time they have evolved certain coping mechanisms and adaptive strategies to reduce drought, flood and cyclone vulnerability.



In selected four years (1998-2002), calamities have claimed more than 30,000 lives mostly from coastal belt. Agricultural lands have become fallow and this has led to widespread malnutrition and even starvation deaths in some parts of the state. Further, this is one of the poorest states in India where more than two third of the population are below poverty line. The poverty has made the vulnerable segment of the population still more vulnerable to the consequences of natural disaster, especially for those living in high risk coastal areas.

Odisha unfortunately is in the path way of depressions and cyclones formed in the Bay of Bengal during south west monsoon. With advance in global warming if sea storms acquire greater destructive power as is being forecast, the state will be required to bear the brunt of such storms which means all the gains of development will be washed away in flood/storms waters. According to the state government's Human Development Report 2004, property loss has been steadily growing every year over the past few decades.



Even after the passage of 67 years of independence, people continue to struggle with the problems of deprivation and powerlessness. The extremity of the degree and implications of poverty is experienced by the situation that forces the people to live within a constant state of impoverishment, in circumstances where their most basic human rights, entitlements are need to rethink.

The intensity and frequency of droughts and floods appear to be increasing every year with declining vegetation and ground water availability followed by increasing of flash floods. There is media reporting that these regions are slowly moving towards desertification. Thus, under the changing climatic situation (arising as a result of natural phenomena and or outcomes of human made developments), the relationship between ecology and sustenance has been badly affected. As per Sarangi, 2005 the state has lost 4644 crore value of property since 1971 to 1999. In the macro context a UN study says that 91% disasters in 2009 due to weather, half of these disasters — mainly storms and floods — have taken place in Asia. In context of Odisha some vulnerability along with incidence are as follows:

Chronic hunger

The dreaded Kalahandi-Balangir-Koraput (KBK) belt of Odisha is yet to come out of the starvation-migration-death cycle. It accounts for 71 per cent of the state's families below poverty line (BPL).

source:https://mail.google.com/mail/?shva=1#inbox/12608ef2e0b8ca8c

High malaria mortality rate

The malaria mortality rate came down to 15 per cent till July 2009. But the mortality rate is still high, as about 239 died last year. We are aiming to reduce the mortality in the next five years," Health and Family Welfare Minister of Odisha *Prasanna Acharya* said.

High mortality rate

Starvation deaths have been reported from west and southern Odisha, especially from the infamous KBK districts (Undivided Koraput-Bolangir-Kalahandi districts), the recent news item of Hindustan Times reporting 50 people dying of starvation, has made it into a central issue of Odisha. Poverty, malnutrition, migration, starvation deaths and recently farmers' suicide have all become the hallmark of the western and southern districts of Odisha, including districts like Kendujhar, Kandhmal, Gajpati and Sundergarh, which are predominantly tribal. In these districts thousands die every year due to gastroenteritis, diarrhea, cholera, malaria and tuberculosis, under-nutrition, infant mortality and maternal mortality, anemia is among the highest in the country. The main cause is chronic poverty in these districts.

Source:http://timesofindia.indiatimes.com/city/bhubaneswar/High-mortality-

Farmers' Suicide and Agrarian Crisis in Odisha

Around 43 farmers have committed suicide in Odisha in 9 months of 2007. This indicates a severe agrarian crisis has gripped Odisha. Though farmers' suicide has been reported throughout the state including coastal districts,. These deaths are caused due to various factors, neoliberal policies, indebtedness, loss of access to land degradation, water sources, forest, distress sale, etc and total lack of access to water resources. Exploitative and insecure land tenures are a big factor in agrarian distress and farmers' suicide.

Destructive development projects, Mining and Displacement

In the year 2005 Survey of India estimated 48,000 acres of forestland, 31% of the geographical area out of this 28,000 is dense forest and 20,000 acres are degraded and due to various mine, dam and development projects and deforestation further degraded the land areas totally shattering their food security. Mining and displacement caused by mega projects like big dams and senseless industrialization is one of the most important factors in the present predicament of Odisha. Indoctrinate mining has caused widespread deforestation, soil erosion and degradation, and drying up of water sources.

A conservative estimate puts the number of displaced people from Independence to the end of the millennium at about 1 crore, one-fourth of the present population of Odisha. Almost 80%[4] of the people displaced are *Adivasis* and *Dalits*. Infact, the *Adivasis* are the biggest losers.

Odisha is having among the fastest rate of desertification. The ISRO study that he has referred to was a part of India's commitment to the UNCCD, signed in 1997, where the signatory countries were mandated to conduct 'desertification monitoring and assessment'. The Indian government had entrusted the ISRO to conduct that study. "Odisha is among the top four states that are on track of desertification".

1.3 Context of Social Inclusion and Social Mobilization

The advent of Mission Shakti, initiated by the Women & Child Development Department, Govt. of Odisha in the year 2001, has provided a boost to the micro finance movement in the state. As a promoting agency, Mission Shakti, along with a host of other stakeholders such as NABARD and smaller banks and NGOs is playing a meaningful role in widening the impact of micro finance at client level. At present Mission Shakti holding the largest stake in the SHG movement with 58% of SHG formation from the entire

[4] *Source – Kundan Kumar "Dispossessed and displaced: A brief paper on tribal issues in Odisha." epgOdisha.orgApril 2007.*

basket of all the Govt. agencies put together followed by 32% by the NGOs, 5% by banks and the rest by others.

As per the report of Microfinance India, State of the sector report-2012, there is having 540029 SHGs in the state of Odisha with a reported savings deposit of 3613.64 million INR by March 2012.

Indicators	Odisha
No of SHG's (March 2012)	540,029
No. of outstanding SHG loans (March 2012)	314,669
No. of SHG Members	6,771,964
Share of Odisha to total	6.78
Percentage of share of Poor	3.51
Average savings per SHG (INR)	6,691.57
Average loan outstanding per SHG (INR)	52,554

Source:Microfinance India, State of the Sector Report 2012

Under the programme of mission Shakti, Govt has formed more than 3 lakh SHGs which largely lack a perspective and systems to function as viable institution and are mostly dependent on the external intervener. Banking Institutions seem to have slowed down its speed in rural areas. The SHG-bank linkage agenda is no more an indicator that the bankers are tracking.

The Govt., through different programs and schemes, has heavy emphasis on the group based activities including governance, livelihoods, decision making and to enhance the collective agency of women and the poor. Although women contribute much to the society in all aspects of life, social and political role of women also suffer because of century old traditions and perceptions and in socialization processes that marginalizes women. Women suffer from violence, have limited or no role in decision making process at family, community and governance level. They suffer because they are given less priority in education and stay at home to tend to family needs. Their isolation from local governance process does not address their developmental needs from issues arising out of health needs, village basic necessities like drinking water, sanitation, infrastructure and others. In matters of rights and entitlements they are subjects as "second citizens" and fail to appropriate government schemes and provisions.

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 *gramsabha*.

Professional Assistance for Development Action (PRADAN) is working in Kendujhar district since 1993 with the focus on promoting and strengthening of existing as well as new livelihoods. The approach is mainly based on three broad strategies, improving the management and productivity of natural resources for increasing income and food sufficiency, promotion of non-farm enterprises and rural micro-credit programme with the poor women. PRADAN has promoted 456 women's Self–Help-Groups (SHGs) in the district and 125 in the project blocks till March 2012.

1.4 Context of Financial Inclusion

In most tribal areas, absence 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.

The formal financial system in India is dominated by banks and same is the case with Odisha. The average population per bank branch in Odisha declined from 16,800 in March 2003 to 13,800 in March 2011 which is somewhat comparable to the national average figure of 13,400. During this period the number of branches of commercial bank has increased from 2,240 to 3,234. But the situation is not so good in the context of Kendujhar; the district has 159 branches of all banks together and out of which 96 only are rural as per district credit plan 2012-13. Whereas, the state has approximately 13000 population per commercial branch the district has 16000 above population per commercial branch.

The real per capita income of Odisha was Rs 24,356 in 2010-11 which was around 68 per cent of All-India real per capita income of Rs 35,917. According to the 64th round of NSSO, the monthly per capita consumer expenditure (MPCE) for rural and urban Odisha is below the respective national averages.

As at end-June 2011, there were 46 scheduled commercial banks operating in Odisha including 25 public sector banks, 14 private sector banks, five regional rural banks (RRBs) and two foreign banks. The total number of branches of scheduled commercial banks (excluding RRBs) in the State was 2,136 at end-June 2011. The population group-wise distribution of these branches indicates that rural branches accounted for 45.5 per cent of the total number of branches in the State, as against their share of 29.2 per cent at the all-India level.

Banking Outreach in Odisha

Particulars	Total		Rural	
	Odisha	India	Odisha	India
Business/Branch	0.52	1.04	0.19	0.24
Deposit/Office	0.35	0.60	0.13	0.15
Credit/Office	0.17	0.45	0.07	0.09
Population/Branch	13936	13425	20168	24859
Per capita deposit (Rs)	25,116	44,379	6,355	5,967
Per capita credit (Rs)	12,469	33,369	3,303	3,571

Source: Quarterly Statistics on Deposit and Credit of Scheduled Commercial Banks, Key notes by Mr. Harun. R Khan, Deputy Governor RBI 24th February 2012 at Bhubaneswar

Odisha is an agrarian state with 70 per cent of the population of the State dependent on agriculture. The State has about 64.09 lakh hectares of cultivable area out of a total geographical area of 155.71 lakh

hectares, of which 60.18 lakh hectares is the net area sown. As mentioned earlier, agriculture contributes about 20 per cent of the Net State Domestic Product of the State. Year wise situation of share of agriculture in Net state Domestic Product of the state in comparison to countries situation is given below

Percentage Share of Agriculture NSDP of Odisha vis-à-vis all India NDP

Items/ Sectors	2006-07	2007-08	2008-09	2009-10	2010-11
Odisha					
Agriculture & allied activities	22.8	22.0	20.8	21.1	20.6
of which:					
Agriculture	79.2	79.8	79.2	81.4	81.3
Forestry & logging	15.1	14.6	14.9	13.4	13.3
Fishing	5.6	5.6	5.9	5.2	5.5
India					
of which:					
Agriculture & allied activities	18.1	17.5	16.4	15.2	15.0
Agriculture	84.3	84.8	84.4	84.2	84.7
Forestry & logging	11.1	10.6	10.9	11.2	10.8
Fishing	4.6	4.6	4.7	4.6	4.5
Sources: 1. Central Statistical Organization, GOI, 2. Economic Survey 2010-11, Government of Odisha					

1.5 Livelihood Context

Poverty is both deep and widespread in the area. The chief constraints that the programme faces are implicit in the programme objectives: the development models so far followed have not proved replicable or sustainable under the conditions of the tribal communities, and these communities have not been able effectively to exercise their rights over the management of their natural resources. Marginalized socially and politically, their isolation from the mainstream of the country's development has been accentuated by the lack of investment in infrastructure. When they had free access to the forest, this was not a constraint, as their production system was geared towards' 'Use of the forests, and as long as their access to it was not restricted, the forest provided adequately for a sustainable livelihood. When their access was restricted by law, they began to depend more on agriculture, but the pressure of population from outside the forest areas limited the extent to which they could expand on to agricultural land as immigrants from the non forest areas began to move closer to the edges of the forest and occupy what little suitable agricultural land there was there. The tribal communities were therefore forced to intensify their exploitation of marginal areas, beyond its sustainable level, and a process of land degradation began which has slowly intensified over time. Declining soil fertility, a lower natural replacement of forest resources as re growth is reduced, and drying up of water resources are typical reactions of an ecosystem under stress in these circumstances. At the same time, the farmer's capacity to cope with adverse weather conditions is reduced, and the unstable weather patterns of the last decade have aggravated.

The district, Kendujhar is surrounded by dense forest and thus many adjoining areas, basically constituting tribal families, from the main stream. Agriculture is the main livelihood source with significant contribution coming from wage labour and forests (in all the project blocks). Migration is an accepted fact of life in want of better options within the village. MGNREGS has had negligible impact on migration but it certainly has pushed the prevailing wage rates upwards.

As per as the district is concerned the traditional livelihood base from forests is declining, there has been an increasing shift by tribal communities towards agriculture and allied activities. Moreover, the pressure on the cultivable land has also increased in recent years and is making demands on the carrying capacity of the land leading to migration in search of alternate employment opportunities. Agriculture, marked with lowest levels of productivity, is the mainstay of the communities. For a significant number of the small and marginal farmers, income from the crop productivity from both the seasons taken together would approximate to a little over INR 10000 per annum from their land holding. With only about 40% to 60 % of the cultivable land currently being put to use that too with primitive traditional practices, there is great potential to increase the food sufficiency and as well as cash income opportunities with the right mix of improved agronomic interventions, change in crop pattern and encouraging commercial farming for cash income.

a. NTFPs

Odisha is rich in forest cover and has recorded 31.38% of total geographical area. Forest cover is unevenly distributed, mainly located in Eastern Ghats, central table land and northern plateau with around 50% of degraded forest. NTFP plays a major role in the economy and livelihood of the forest dwelling communities including tribal. Forests and trees have customarily played a critical role in the livelihoods of the tribal poor in Odisha. The majority of this group depends fully or in part on forest resources to meet their subsistence needs. For them, forests are also a source of construction material, fuel, medicines, animal feed and nutrients for crops. The tribal population thus has an organic link with forests as they depend on forest resources almost throughout the year (Pathy 2003, p. 2834). Many of these rural people are also forest producers, who plant trees along their farm boundaries. It has been estimated that 20–50 per cent of the household income per annum of these households comes from the so-called Non-Timber Forest Produce (NTFP).Odisha is the third largest producer of *kendu* leaf next to MP and Chhatishgarh. It has 9% of the country's total bamboo forest cover. Major timber species are Sal, teak, *Bija* and *sisoo*. The availability, diversity and quantity of NTFP are determined by the type and status of forests and the local practices of exploitation. People depend on the NTFPs for a variety of needs which range from gathering of edibles for meals to a well organized extraction for industries and export. However, the management is generally traditional and unsustainable causing depletion of the NTFP stock and poor economic return to the communities. General lack of facilities for processing, value addition, storage and marketing of NTFPs entails huge loss of the produce. Major NTFPs in the state are *Kendu* leaf, Sal seed, hill broom grass, bamboo, mango, tamarind, *Karanj, Mahua* flower and seed, Tasar, Lac, etc which contribute significantly to the household income of the families.

The Bhuyan and Munda tribes in the Kendujhar district have enjoyed a traditional dependency on forests and 70% of households in this area are involved in collection of non-timber forest produce. Decrease in forest coverage and the continuing degradation in productivity of the forest is narrowing the forest livelihood support system on which the tribal population had traditionally relied upon.

b. Agriculture and allied activities (horticulture)

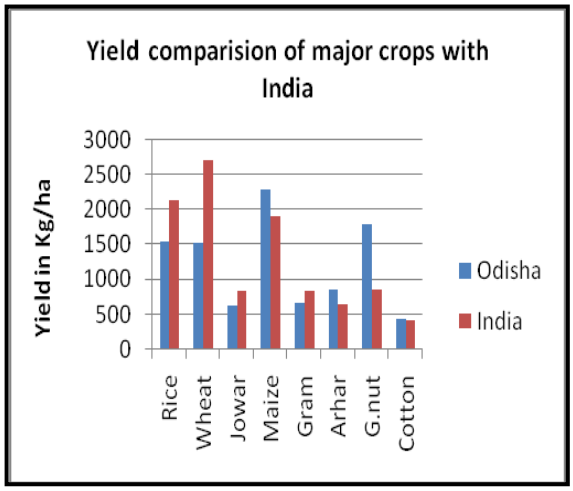
The agriculture and allied subsector dominates Odisha's economy but contributes less than 20 percent towards the states GDP. However it provides employment to 60% of workforce of the state. In this sense agriculture is the main stay of Odisha's economy. It suffers from frequent natural shocks, like cyclones, droughts and flash floods. Land utilization pattern in Odisha shows that land under agriculture is coming down and fallow land area has gone up.

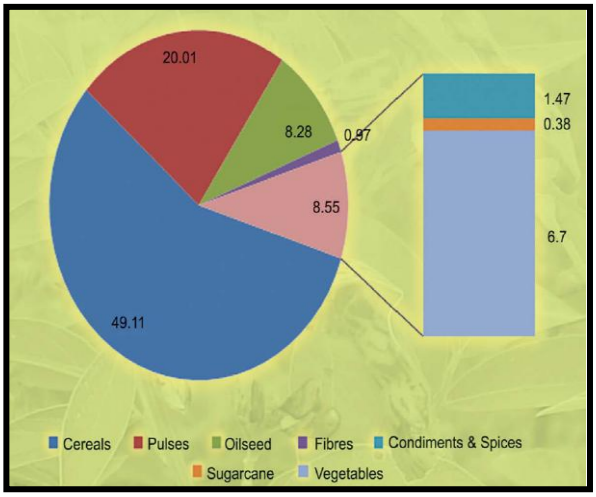
Land Utilizations pattern and trend *(area in 000ha)*

Year	Geographical area	Forest Area	Misc. trees	Permanent pasture	Land Put to Non agri. use	Barren and unculturable land	Current fallow	Other fallow	Net Sown Area
1990-91	15,571	5,476	859	726	746	499	150	214	6,304
2009-10	15,571	5,813	342	494	1,298	840	606	229	5,574

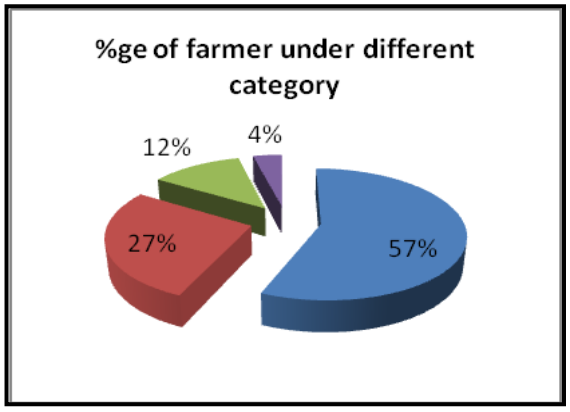
Paddy constitutes about 90% of the total production of food grains, though in terms of acreage there is a shift from paddy to cash crops like vegetables, fruits, flowers, spices etc. There is an increasing trend of productivity and area of these cash crops but it is much less than the national average. Area under vegetable is also growing in the recent past. Pulse area is going down though productivity is going up.

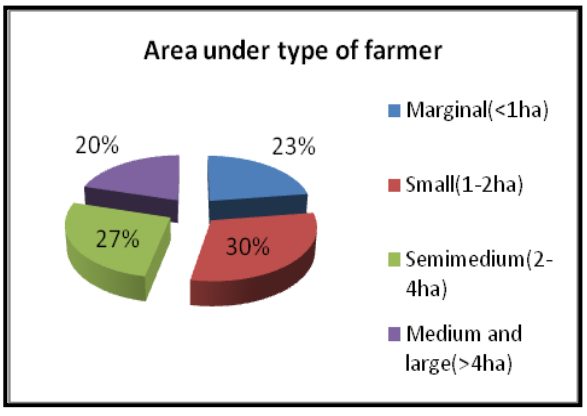
Crop wise break up of total Net sown area and yield comparison of major crops with India is as below





Break up of farmers as per operational holdings (area in ha)





84% of the farmers are small and marginal farmers holding 53% of total area. Marginal farmer's average land holding is 0.5ha.

Even though 60% of the people in Odisha depend upon agriculture, the land under agriculture is declining because of land converting to industries and construction, private players and influential people encroaching un-surveyed land mostly in south Odisha, etc. Per capita landholdings especially with small

and marginal farmers are reducing; also total landlessness is gradually increasing heavily. In few districts of south Odisha more than 40% households are land less; they do not have legal rights over the land on which they have access .Odisha Govt has focused on different land reforms legislation like *Vasundhara*, Odisha land reform act 1960, land ceiling act 1947, FRA 2006, etc, but inadequate implementation has not yielded the desired result. Still in recent past Odisha is one of the lead states in the country to implement these programmes.

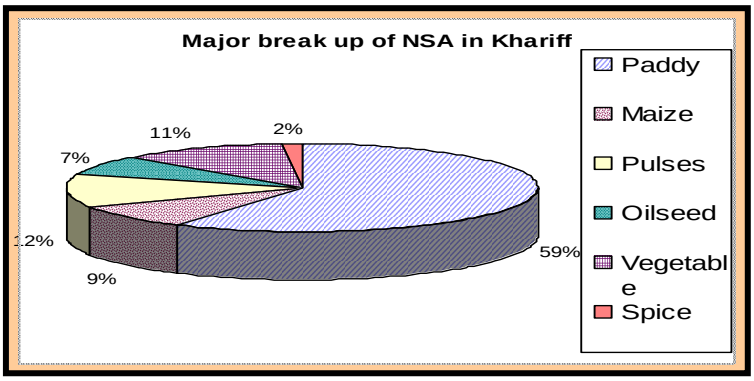
There are huge variations in the yield across the regions. Erratic rainfall and inadequate irrigation along with poor nutrient application remains a major constraint for improving agriculture and agriculture productivity. Irrigation intensity in the state was only 31% in 2006-07 in comparison to India average of 44%. Again in the hilly region of the state, irrigation area is very low in comparison with plain belts.

The average rainfall in the state varies from 1200 mm to 1700 mm. However it suffers from frequent natural shocks like cyclone, draught and flood. This causes a major threat to the agriculture sector. Drought proofing/watershed programmes have been initiated. Around 1.2-lakh hectare is covered under Watershed by2008-09, but the result is meager because of poor implementation. Research Institutions have less linkage with the farmer's field.

As per as the Kendujhar district is concerned, about 28 percent of the total geographical area of the district is cultivated. Most of the holdings are small. Small and marginal farmers constitute 74 percent of the total number of the farming families. Landlessness (29%) is widely prevalent.

Almost 90 percent of the net sown area is mono-cropped and rain-fed. Of the net sown area nearly 60 percent is under *kharif* paddy. The other main crops are maize, Niger and vegetables. Yield of all the crops are far below the national average. Mango and cashew are the major fruit crops that are limited to specific pockets.

Most of the lands are mono-cropped and no irrigation facility is available. The irrigated area created during Kharif and Rabi 2006-07 was 70,000 ha and 33, 500 ha respectively for Kendujhar district; 1,159 ha and 1,050 ha for Banspal Block. The cropping intensity of Kendujhar district was 129.41% and that of Banspal Block was 133.84% in the year 2006-07. The major crop in Kharif is Paddy.



Source: office of the Deputy Director (agriculture)

The productivity and area coverage of different crops in the district is given as below as per the office of the Deputy Director (agriculture)

Crops	Existing Yield (MT/ha)	Existing area (Ha)
Kharif Paddy	1.25	171,000
Kharif Maize	0.87	25,572
Biri	0.21	5,269

Crops	Existing Yield (MT/ha)	Existing area (Ha)
Arhar	1.00	7,049
Niger	0.20	14,553
Mustard	0.20	9,915
Ground nut	1.04	2,327
Sunflower	0.14	421
Ginger, turmeric	2.00	220
Chilli	1.00	3,320
Brinjal	9.00	4,000
Tomato	8.00	2,000

The present area under horticulture orchards is 22,075 ha which will increase to 42,075 ha.

Irrigated Area

Irrigated area created (in Hectares) in Kendujhar district and Banspal block by the year 2006-07 is as follows:

Type of irrigation	Kendujhar District		Banspal Block	
	Kharif	Rabi	Kharif	Rabi
Major	11,150	555	0	0
Medium	15,344	4,499	0	0
Minor	21,146	1,802	474	26
LIPs	3,272	1,859	104	0
Dug Wells	5,590	6,142	128	73
WHS	856	458	124	8
STW/Bore Well	2,090	3,256	0	0
Other Sources	6,331	10,730	330	201
Total	**65,779**	**29,301**	**1,160**	**308**

Area under Fruit crops

The area under different fruit crops is as below.

Sl.No.	Fruit Crops	Area (in Ha.) in 2006-07	
		Kendujhar District	Banspal Block
1	Mango	9,126	540
2	Guava	14,780	279
3	Citrus	1,294	42
4	Cashew	3,780	65
5	Coconut	761	22
6	Sapot	75	8
7	Other	5,560	495
Total		22,076	1,451

c. Livestock

Livestock, 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, all through the known history of the state. 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.

Common household animals are cattle, buffalo, goat and poultry. Local breed of cattle is small in size. People keep livestock for draft purposes and to meet emergencies except in small pockets of Anandpur sub-division where non-tribal families practice improved dairy. There are nearly 13,000 crossbred cows and 11,000 buffaloes in the district. The annual milk production of the district is nearly 40 thousand MT. The total chilling capacity available with the Milk Union works out to 20,000 liters per day.

There is large number of small village ponds, small and medium tanks covering an area of 3,195 hectares. The minor irrigation projects (MIPS) and reservoirs in the district have cumulative water area of 3,891 hectares. This reveals that there is ample scope for pisciculture in the district.

1.6 Performance of NREGA in the State

MGNREGA aims to achieve the objective as enunciated in the Article: 41 of the Indian Constitution- "giving citizens the right to work". The Act got first introduced in 200 most backward districts of the country in Feb 2006; it was proposed to extend to the remaining districts only after 5 years, after seeing the popularity of the Act. But in the next year itself the Act was extended further to 130 more districts & within a year after the Act got universalized by bringing the entire country under its horizon with the exception of districts that have a hundred percent urban population & got soon named after Mahatma Gandhi (in Oct 2nd, 2009) to make the Act more reachable to the masses and thus it became Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA). In the context of Odisha all the tribal dominated districts were covered from the very beginning. MGNREGA 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.

It was enforced in different parts of the states in three phases. The members of families willing to participate in the scheme were provided registration followed by issuance of job cards. The number of job cards issued till the end of January 2014 has been 6,394,432. This shows that issue of job cards has increased insignificantly and only 39,206 new families have been added since 2011-12, having even lesser enrolment at the project block levels i.e. 241 Households. The most important outcome of the MGNREGA is the numbers of days the households receive employment on demand during the year. During the Financial year 2012-13 total 546 lakh person days were generated by 15.99 lakh households under the programme.

Though MGNREGS has its own set of issues, which need serious attention like timely payment of wages, transparency in wage payment, smooth bank payment etc., 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 MGNREGS.

MGNREGA indicators	Cumulative No of HH issued Job Card				Cumulative No. of HH provided employment		Cumulative No. of HH completed 100 days		House Hold Employed < 15 days 2013-2014		Av. Person days per employed HH
	SCs	STs	Others	Total	HH	%	HH	%	HH	%	
Odisha	1,200,229	1,799,661	3,394,542	6,394,432	1,383,897	21.64	51,578	0.81	441,217	6.90	32
Kendujhar	46,258	139,085	136,550	321,893	96,488	29.98	4,817	1.50	25,078	7.79	36
Banspal	1,352	16,893	3,612	21,857	8,588	39.29	468	2.14	2,196	10.05	38
Jhumpura	3,386	10,950	8,872	23,208	6,964	30.01	422	1.82	1,354	5.83	39

Source: MGNREGA cell Odisha FY-2013-14

PRADAN has adopted some broad strategies for addressing poverty in the rain-fed and undulating terrain of the district through MGNREGA. The first step was, organizing women in Small Self Help Group (SHG), establishing savings and credit business in the SHGs, help them in livelihood planning, enable them to approach PRI, administration and bank for getting fund and loan for implementation of the livelihood programme. Besides helping these women to run their SHGs effectively, these SHG members were also been trained to implement the land & water activities under MGNREGA programme. Till date PRADAN has helped to prepare the five years perspective plan and first year action plan of MGNREGA in 5 Panchayat of Banspal block of Kendujhar district through hamlet level planning and *palli sabha.* The Annual plan outlay of the five Panchayat were 7.5 crore.

1.7 Existing Livelihood initiatives and social sector initiatives in the selected area

Though there are many schemes of both the State and Central Govt. meant for the benefit of Tribal, there is no visible impact of implementation in the project area. Unemployment and migration for work is still prevalent. Some of the major programmes under implementation in the district / project area are as under:

National Rural Employment Guarantee Program (NREGP):
The allotment of the work is based on the 100 days employment assurance in order to provide wage employment and stop migration. The work under the scheme will be related to soil and water conservation and road construction work in the village. Under this scheme, people are provided wages and food grains in the ratio of 20% cash: 80% food. The district and the project blocks show 35-39 Av. Person days per employed Household but shows only around 2% household are getting the mandated right to work.

SGSY:
The SGSY self employment programme has been launched by Government of India w.e.f. 1.4.1999 with a holistic approach by replacing schemes like Integrated Rural Development Project (IRDP), Trainign for Rural Youth and Self Employment Programme (TRYSEM), DWCRA, Supply of Improved Toolkit to Rural

Artisans (SITRA), MWS and Gramya Krushi Yojana etc. This subsidy linked credit programme envisages assistance to BPL families in rural areas enabling them to cross the poverty line by taking up income generating activities in farm / non farm sector either individually or in groups. In Banspal block, goat rearing has been the core activity under SGSY. The district was allocated 927.14 Lakh in 2010-11 and out of which 97% was spent as per DRDA, Kendujhar.

Indira Awas Yojana:
Housing is one of the basic requirements for human survival. For a normal citizen owning a house provides sufficient economic security and status in society. For a shelter less person a house brings about a profound social change in his existence endowing with an identity, thus integrating him with his immediate social milieu. IAY was a sub-scheme of JRY. Since 1st January 1996, it has been delinked from JRY and has been made an independent scheme. The programme envisages assistance to shelter less rural families for construction of huts. Indira Awas Yojana targets BPL families. There is also a provision to repair old huts and / or converting *kutcha* huts into *pucca* huts. A maximum of Rs. 20,000/- is provided under both the schemes. The district was allocated 2183.85 Lakh in 2010-11 and the expenditure was 69% as per DRDA Kendujhar. In the year 2010-11, 1386 houses were taken up in the project blocks through IAY but only 442 were only completed.

Integrated Tribal Development Programme:
Integrated Tribal Development Agencies were established in Scheduled Areas to function as nodal agencies for plan formulation, programme implementation and operationalisation of the Tribal Sub Plan (TSP) concept. There are 21 ITDAs functioning in the State covering 118 blocks with more than 50% tribal population in 12 districts. It aims at minimizing the gap that exist between them and the rest of the society, improving socio-economic conditions of tribal and strengthening infrastructure in tribal areas through various schemes that aim at income generation, asset creation and administrative and legal protection of tribal from exploitation. Major resources come from Special Central Assistance and Article 275 grant, Banspal block comes under ITDA, Kendujhar.

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

PRADAN started its operation in Odisha in 1993, when a team was placed in Kendujhar district to work with the poor tribal community. The initial focus was on promotion of community managed irrigation schemes, plantation and better crop production. The programme funds were mobilised from overseas donors and also from government. Subsequently, with support from World Food Programme and local administration, the work expanded to Mayurbhanj district and SHG promotion and INRM were promoted. In 1997, we placed a team in Ganjam district of Odisha on an invitation from the district collector to replicate our irrigation model in the poor pockets of the district. The programme funds were provided by the district administration. Later, the team moved to the poorer Kandhamal district on the request of the district administration. Gradually it ceased its operation in Ganjam and expanded in Kandhamal district. Here SHG promotion, goat rearing, improved agriculture and siali leaf plate making are the main activities. Last year we decided to enter the most underprivileged KBK region of the state and placed a team in Rayagada district to strengthen the SHGs promoted by the government and promote sustainable livelihoods for their members. ITC supported our team and capacity building of the community. The district administration too did its best to help us work with their SHGs. Presently PRADAN is working in Mayurbhanj, Kendujhar, Rayagada, Kandhamala, Koraput and Kalahandi

Government programme/ schemes being implemented presently

Mobilizing resources under government schemes have been core to our development strategy. We are implementing 150 farm ponds in Karanjia block of Mayurbhanj costing Rs 32.50 lakh. At our Balliguda location of Kandhamala district we have taken Odisha forestry sector support Programme (OFSSP) of Rs 26 lakh. Here the focus is to building institution for collective marketing of NTFP produce like *siali* leaf, tamarind, *harada, bahada* etc. In the last financial year, at Mayurbhanj as well as Kandhamala we have signed MOU with the district administration for capabilities building of PRIs & block staffs as well as demonstrating work under govt OREGS. The cost per district is Rs 26 lac.

Apart from this direct government project we are actively mobilizing funds under government SGSY schemes for our SHGs to take up activities like commercial poultry farming (at Kendujhar) and agricultural activities in location of Odisha.

In Kendujhar we have promoted poultry farming with 76 families through SGSY and ITDA. The total fund mobilized for infrastructure as well as working capital is Rs. 38 lakh. NABARD and ATMA has supported for training of the farmers. We are continuing to increase our outreach in this activity. We are targeting to reach nearly 200 families through this activity.

Presently, we are facilitating the preparation of district plan of Kendujhar which has been assigned by the government of Odisha. The expected outcomes of this assignment are the preparation of District Vision Document 2020, Five years perspective plan and Draft annual plan 2008-09. It needs to be prepared in consultative and participatory manner with the people, government department and PRIs. The total budget is Rs. 12.80 lakh.

All our livelihood activities like, improved agriculture, horticulture, broiler farming etc are implemented primarily with the tribal families. In Kendujhar district, we have promoted 451 women self help groups with membership of 5,700 out of which around 70% are tribal. Similar percentage of tribal families is there in all our activities as we mostly work with SHG families.

Horticulture: The organization has taken up horticulture plantation (mostly cashew) with the tribal families of Patna block of Kendujhar & Karanjia block of Mayurbhanj under the project "Prevention of land degradation through improved livelihood options in Odisha" supported by India Canada Environment Facility (ICEF). The total area is around 200 hectares and family outreach is around 1000 families.

Afforestation: We had taken up farm forestry under ICEF project in around 50 hectares in Patna block of Kendujhar & Karanjia block of Mayurbhanj under ICEF project.

Soil conservation: Soil conservation measures like 30X40 models, 5% model and field bunding were implemented with the tribal families of Patna block of Kendujhar & Karanjia block of Mayurbhanj under ICEF project in 60 hectares.

Water resources development: The ICEF project was mainly an integrated natural resource management based project where water resource development was a major component. Apart from soil-

water conservation (described above) 865 farm ponds were constructed in Kendujhar and Mayurbhanj district. At the same time we are involved in implementation of MGNREGA in Mayurbhanj and Kandhamal district in which we have helped the PRIs in implementation of around 100 farm ponds. We are continuing implementation of community managed lift irrigation, flow irrigation and creating decentralized small ponds and wells in upland, medium land and low land to save kharif paddy and to irrigate *rabi* crop in all our project districts.

Watershed development: Although the organization has been involved in watershed development in other states, in Odisha we have just started watershed projects under OTELP in Kandhamal district. The ICEF project "Prevention of land gradation through improved livelihood options in Odisha", implemented in Kendujhar and Mayurbhanj districts is in the same line of watershed development. The total cost of the project was Rs. 3.25 crores.

Community health: We have not taken directly any health related work in Odisha projects. However, we have provided supports to *Ekjut* to implement their project in our operational area of Kendujhar district.

Woman development activities: The bases of all our interventions are women SHGs; the members of our livelihood programme are drawn from SHGs. The SHGs are groomed and linked to different government institutions like block, bank and other development agencies for different services. Till now PRADAN has formed more than 1100 women SHGs in Odisha. In Kendujhar we have 451 SHGs out of which 135 SHGs were promoted with support from NABARD. The SHGs are organized into clusters for peer learning/monitoring as well as to take up different issues related to the village development and women. Promotion of a block level federation in Patna block is in process.

Agricultural development: With the focus of building the capacity of the families to have food sufficiency throughout the year as well as cash earning, the organization has emphasized on commercial agricultural development in all its project locations. Cultivation of vegetable and spices during Kharif season & Rabi season are being taken up with the farmers to generate additional income from the sale of the surplus. Improving yield of kharif paddy through seed replacement and adopting SRI method of cropping pattern has been the major focus in three of our project districts in Odisha. In Kendujhar district, in this year, we are working with more than 2000 families in agriculture development. Also in Kendujhar we have promoted vermi-composting. The total outreach is more than 5000 families in Odisha. At the same time, our focus is better utilization of created and existing irrigation infrastructures.

Non farm sector activities (including off-farm activities): We have developed a model of smallholder poultry (broiler rearing) to enable poor people to take advantage of the growing (10%+ annually) poultry industry. It comprises of a model of a private, home-based enterprise linked to a co-operative that provides all the services and also integrates backwards into feed manufacture and hatcheries. A poor woman can earn on an average INR 12,000 from this part-time activity. In PRADAN, we are working with more than 2000 smallholder and in Kendujhar district we are working with 76 families with support from SGSY, ITDA, NABARD and ATMA.

1.9 Basic PIA Information

1	Name of PIA	Professional Assistance for Development Action (PRADAN)
2	Legal Status (NGO / Network NGO / CBO / Producer Co. / Section-25 Co. / Pvt. Co/ Other – Please specify)	NGO
3	If Network NGO, number of partners being supported?	Not Applicable
4	Registration No. & Date of Registration	No. S/13434, Society Act of *1860* 18th day of 1983
5	Name of Donors in the past 3 years, if any (give max3)	▪ MoRD, Govt. of India ▪ Central Silk Board ▪ NABARD
6	Name with Size (Budget in INR) of relevant projects handled in the past 3 years (give max 3) in the proposed area	• Special SGSY project on Tasar. Budget Rs.1437 lakh • Sustainable community based livelihoods-Jharkhand. Budget Rs. 1137.38 lakh
7	Annual Revenue of PIA for the most recent audited financial year	Rs. 525,794,885
8	List ongoing projects (max 3.) and their Size (INR) in the proposed area	• Integrated Tribal Development Project of NABARD in Godda and Dumka district and project size Rs. 1699.115lakh • Special SGSY- INRM based livelihood project in Godda and Dumka district. Project size is Rs.2186 lakh • Tribal Development Project of NABARD on WADI in West Singhbhum District. The project size is Rs.384.34 lakh
9	Completion of last project (MM/YY)	• Special SGSY project for the Development of Tasar Sericulture on 31st March 2008 • Sustainable community based livelihood in Jharkhand on March 2010
10	Total value of assets available with the PIA in the proposed area?	Rs.188,620,375 (Assets, Corpus & Free Reserve at 31.03.2010)
11	Experience of working with, in the proposed area (i) Women SHGs/Groups (Y/N) (ii) NTFP based livelihoods with existing tribal groups	PRADAN has extensive experience of working with women self help groups and on agriculture based livelihoods with women's groups in some of the poorest pockets in the country – detail is provided in sections below.
12	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 - 75% External - 25%

13. Human Resource

#	Name	Sex	Location	Designation	Edu-Qualification	Experience in PRADAN (in Years)
1	Kirtti Bhusan Pani	M	Bhubaneswar	Programme Director	B.Tech	17.1
2	Ajit Kumar Naik	M	Bhubaneswar	Integrator (State Unit)	M.Tech	19.4
3	Nityananda Dhal		Bhubaneswar	Integrator (State Unit)	Master of Prof. Studies (Int. Devt)	18.4
4	Md. Shamshad Alam	M	Deoghar	Integrator (Tasar Theme)	B.Sc (Forestry)	17.4
5	Ashis Chakraborty	M	Deoghar	Integrator (Tasar Theme)	B.Sc (Forestry)	14.1
6	Rajendra Kr. Khandai	M	Deoghar	Integrator (Tasar Theme)	B.Sc (Ag)	8.5
7	Surjit Behera	M	Bhubaneswar	Integrator (State Unit)	M.Sc (Ag)	15.5
8	Dolagobina Panda	M	Kendujhar	Team Leader	M.F.Sc	8.8
9	Tara Prasad Tripathy	M	Kendujhar	Executive (Projects)	B.Sc (Ag)	8.1
10	Anjan Swar	M	Kendujhar	Executive (Projects)	B.Tech	6.3
11	Shisir Kumar Sahu	M	Kendujhar	Executive (Projects)	M.A.	6
12	Ajay Kumar	M	Kendujhar	Executive (Projects)	PGDM	4.5
13	Tapas Paul	M	Kendujhar	Executive (Projects)	MCA	3.3
14	Swetleena Panda	F	Kendujhar	Executive (Projects)	B.Tech	1.4
15	Sankarsan Behera	M	Kendujhar	Executive (Projects)	B.Tech	1.4
16	Ashish Kumar	M	Kendujhar	Executive (Projects)	B.Tech	1.3
17	Rakesh	M	Kendujhar	Executive (Projects)	B.Tech	1.3
18	Padma lochan naik	M	Kendujhar	Assistant (Agr)	B.Com(H)	2
19	Kailash Chandra Basa	M	Kendujhar	Assistant (FAA)	M.Com	18.6
20	Shubra Prakash Mohanta	M	Kendujhar	MIS Assistant	12th	2
21	Sunil Kumar Jena	M	Kendujhar	Project Assistant	B.Com	3
22	Niranjan Pradhan	M	Kendujhar	Project Assistant	B.A	3
23	Bibhuti Nayak	M	Kendujhar	Project Assistant	B.A	2
24	Lingaraj Singha	M	Kendujhar	Project Assistant	B.A	2
25	Dhruba Charan Nayak	M	Kendujhar	Project Assistant	12th	2
26	Mamta Bist	F	Kendujhar	project Assistant	12th	3
27	Atala Kumar Pattanaik	M	Bhubaneswar	Sr. Assistant (FAA)	B.Com	7.4

The staffs of the project implementation team mentioned above are as on 1st November, 2013. The recruitment of the new project personnel as per the requirement of the project will be intimated to the Coordination Agency in the process of implementation of the project.

Chapter 2: Detailed intervention strategy and phasing

2.1 Objectives of the project poverty context in the area

a. Vision of success

Helping poor farmers to enhance the quality of lives & livelihoods, of themselves and their families, through sustainable Tasar sericulture interventions, of these 1,525 farmer would form the core mass of the project, their experiences and learning's would create a ripple effect and create sufficient impetus which in turn would impact the perceptions and behaviour of the rest of the women in their immediate vicinity.

b. Goal

The Goal of the project is to eliminate abject poverty of 60% of the project families by income enhancement of Rs. 10,000 – Rs. 18,700 per annum per household on a sustainable basis from Tasar. From all sources together the incremental income will be Rs.22,800 to 26,777.

c. Thrust area and Key objectives

The proposed project will be implemented by PRADAN in Kendujhar district of Odisha seeks to work with 2,654 families particularly focusing on Tasar as a sub sector through women SHGs as the mobilization base.

The current state of affairs in Tasar sector in the State warrants attention to improve infrastructure support in seed multiplication, promoting establishment of Tasar host plants as economic block plantations, effective utilization of existing resources/infrastructure, extension support for effective dissemination of technologies/improved package of practices for cultivation, rearing of silkworms, upgrading skill levels of the farmers to undertake sericulture activities for income generation, generating adequate trained manpower with technical knowledge and motivational skills, revamping departmental machineries for implementation of development initiatives and their monitoring, coordinating with line Departments, directing efforts for privatization and emphasizing the development of entrepreneurship in Tasar silk sector, with the help of Community Based Organizations. The broad and specific objectives of the project are as follows:

- Building capacities of all participating families in adopting skills to effectively and profitably engage in livelihood activities based on Tasar sericulture,
- Introduction of improved technologies and practices to push the productivity frontiers for accelerated growth in Tasar Sector,
- Strengthening seed sector to eliminate the key supply constraint in Tasar sericulture.
- Investment to create alternative market mechanisms to ensure fair prices for cocoons.
- Promote Producers' collective to provide sustainable systems of services to producers.
- Design development and dissemination

The main focus of the this project is to facilitate rapid growth in the sub-sector of Tasar Sericulture through capacity building of poor tribal families to facilitate adoption of improved technologies and practices and enabling them to access mainstream markets to sustain the economic gains.

d. Key Outputs

The detailed processes / outputs during the project would include:

Sl.	Project Activity	Detailed processes / outputs during the project period
1.	Silkworm rearing	○ **1457** families would be involved in silkworm rearer's ○ Each family will be provided with rearing equipments. ○ Each family would produce 8,000 to 10,000 commercial grade cocoons. ○ Number of Rearer's Collectives – 2, would help in storage of cocoons to avoid distress sale ○ No. of producers' collective formed - **1**.
2.	Tasar seed production (Grainage)	○ Total number of Grainage: **38** ○ Each Grainage entrepreneur would be provided with grainage hall and required equipments. ○ Grainage would be an individual enterprise at village level ○ Each Grainage entrepreneur would produce 5,000 to 6,000 DFLs in one Grainage cycle ○ Individual Graineurs would serve the requirement of 25-30 rearer's in each Grainage cycle.
3	Basic seed production unit	○ Total number of basic seed production unit: **1** ○ Each basic seed production unit would be provided with one Grainage hall along with processing unit and required grainage equipment. ○ Basic seed production unit would be owned by the collective. ○ Each unit would produce 25,000 to 30, 000 basic seed Individual basic seed production unit would serve the requirement of 50 -60 Grainage entrepreneurs
4.	Building capacities of all participating families ,	○ Hamlet level visioning / planning exercises, ○ Technical training for productivity enhancement, ○ Handholding support by Community Resource Persons (CRPs), on a day-to-day basis, ○ Exposures for adopting improved practices, ○ Selection and extensive training of CRPs. Reviewing effectiveness and providing and on-field support.
5.	Promoting and nurturing Producer Institutions to ensure sustained availability of linkages and services for the participating families,	○ Number of producers' collective: **2** ○ Awareness building around the need to collectivize, ○ Membership training to build a sense of ownership and to understand the accountability as a member, ○ Exposure and training of the governing board members, ○ Training and support to staff to effectively deliver the goods and services mandated by the organization.
6.	Market Support	○ Design development in Tasar weaving clusters and its promotion ○ Design competition among weavers ○ Design competition among design student/ institutes The above would bring in brand image for Indian Tasar and also the required demand pull

Project Specific key Outputs in the project period:

- Total Family Coverage under the Project :2,654
- Total Family Coverage under Direct Livelihood :1,525
- Total Family Coverage through indirect livelihood benefits :381
- Total Families to be mobilized into SHGs :748
- Total Area (in Ha.) of Plantations to be raised :80
- Total Area (in Ha.) of Natural Forest to be rejuvenated :940
- DFLs to be produced by the end of 3rd Year:
  - Basic Seed DFLs (Lakh Units) :0.50
  - Commercial DFLs (Lakh Units) :4.15
- Total Cocoon Production by the end of 3rd Year :265 Lakh Pieces
- Value of the Project output by 3rd Year (Rs. In Lakh) :723

These would lead to additional income of Rs 10,000 -18700 from Tasar for 60 % of participant women

e. Guiding Principles

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

- The focus would be particularly on increasing the livelihood of a family with women at the centre stage.
- To utilize the potential of community led institutions – SHGs, TVS[5] and Producer Institutions.
- To achieve the vision with enabling approach.
- To make the initiatives based on community processes.

f. Values and Non-Negotiable

- Enabling approach
- Community Participation and community led initiative
- Equity
- Dignity of families to be upheld
- Integrity among staff and project participants
- Transparency in decision making

2.2 Project Strategy

PRADAN played a major role in creating a value chain. The main elements of the strategy included: creating village-based supply of disease-free layings (DFLs) of Tasar moth; promoting scientific rearing practices to reduce mortality among silk worms; raising plantations of host trees on privately owned wastelands and promoting Tasar yarn production among Tribal communities.

A major strategy of PRADAN was to collaborate with parastatal organization like the Central Silk Board that opened windows of opportunities by ways of access to improved technology, critical inputs like foundation seeds, exposure and training of professionals and funds for demonstration and up scaling of interventions and opportunities to collaborate with other mainstream stakeholders. PRADAN closely worked with CSB to develop an array training modules for the benefits of the producers.

[5] *Tasar Vikas Samiti*

Hamlet-level groups of cocoon producers called Tasar Vikas Samitis have been formed to support silkworm rearer's to access technology, services and fairer markets. On similar lines, the primary groups of yarn producers ensure year-round supply of raw materials (cocoons) for its members and support them for collectivized marketing. The primary producers' groups and the SHGs help their members to access credit from banks.

The overall initiatives undertaken in our project areas will be sustained by tiers of producers' collectives. Tasar sericulture will provide an incremental income of Rs. 10,000 to Rs. 18,700 to a producer-family (silkworm rearer's, Grainage entrepreneur, yarn producers and weavers) from their slack labor and idle assets (such as wastelands). Given the economic profile of households, many a times, this level of income contributes to almost 100% income enhancement of the household. Families are able to invest their earning in debt redemption, recovery of mortgaged lands, buying pump sets, repairing or constructing houses and in educating their children in good schools.

2.3 Community Institutions Architecture

a. Past experience of PIA

1. Past experience in forming/nurturing women based groups and experience of promotion of agriculture based livelihood promotion with them: For PRADAN, Self Help Group is the primary socio-economic institution to foster the drive for change. Through their systematic engagement in saving and credit activity the women and the concerned house hold get a platform to experience values of mutual help, trust, equality, and transparency. PRADAN professionals facilitate new areas of thought for different livelihood opportunity at the member/family level. We consider SHGs as foundation to assist community especially woman in her movement towards sustainable livelihoods and well-being in a way that she takes charge of her own development. PRADAN, Odisha worked to form and support 2800 SHGs with a membership of 36,000. Most of our SHG members belong to marginalized communities with 80% members are from SC/ST communities and the rest 20% are from OBC and Others.

It is envisaged that in addition to strengthening the existing SHGs, new groups would be promoted in the existing area of operation. Presently there are 200 clusters and four block level SHG federations to support the functioning of SHGs and work for the overall development of its members' families. Gradually these SHGs and its associated structures are expected to function independently without PRADAN's regular assistance with proper systems and processes in place. So far more than 7 crore net own fund is mobilized by the SHGs and around 12 crore is mobilized from the bank.

Due to continuous deliberation by our professionals about the larger role of SHG other than microfinance, it has been seen that there happened a change in the outlook of SHGs. About 58% of the SHGs are actively engaged in enhancing the livelihood activities of their households. This includes concrete plan and actions towards increasing period of food security at households through productivity enhancement of food grains and increasing cash earning by ways of diversifying into cash crops or embarking on business ventures. About 26% SHGs are actively discussing the issues other than microfinance. The discussions were more on midday meals, PDS, legal aid health and sanitation related. At the operational level, the major emphasis is on strengthening SHGs and associative tiers and the producers' collectives to prepare these bodies for sustainability of programmes.

PRADAN's experience of promotion of NTFP based livelihoods with tribal groups.

Tasar sericulture is one of the NTFP based livelihoods in which PRADAN has done extensive works over the past two decades to systematically create livelihood opportunities for the Tribal Families in the proposed project areas of Jharkhand and Bihar. PRADAN set up its Tasar project in Godda district of Santal Parganas in 1988 and extended its operations to cover Dumka, West Singbhum and Saraikela districts.

In the following we would provide an account of work done so far by PRADAN in Tasar Sericulture and the impact of the same on Tribal families:

- Organizing traditional rearer's, to protect and maintain their host tree stock (such as *Terminalia arjuna* and *Terminalia tomentosa*) in the Forest Revenue lands. Protection against illicit tree felling, regular pruning/ training resulted into rejuvenation of about 15,000 Hectares of Tasar host flora in the natural forests. These forests, brought to pristine form, are now being utilized by nearly 5,000 families for Tasar silkworm rearing to earn livelihoods.

- Raising 5,450 Hectares of plantations of Tasar host plant *Terminalia arjuna* in the wastelands owned by over 7,600 families. About 50% of the plantations were raised in forest-fringe villages to stabilize the production bases of the traditional rearer's. The remaining is undertaken in villages with no history of Tasar silkworm rearing. Here the purpose of the intervention is to create promote silkworm rearing in `non-traditional areas'.

- One of the major problems in Tasar, at the level of the silkworm rearer's, is lack of availability of good quality seeds. Only 15% of the total requirement for seed is met through supply from the Government sericulture establishments. PRADAN pioneered in establishing private seed production units called Grainage in Tasar sector. Grainage is an establishment where quality seeds or Disease Free Layings (DFLs), as these are termed; are prepared through scientific elimination of diseases from the Tasar eggs and are distributed among the rearer's. PRADAN trains young people from the rearer's community and helps them set up Grainage in their villages. These Grainage function as home based service enterprise to produce high quality DFLs and cater to the rearer's in the local area. So far, 300 such Grainage have been promoted to produce around 15-Lakh DFL units to cater to the requirements of 8000 silkworm rearer's. This intervention has significantly contributed to stabilize Tasar cocoon production in the sector.

- Promoting the concept of scientific rearing among silkworm rearer's. Use of DFLs, has been accepted as a regular practice by all the rearer's. Further, the rearer's have been trained to adopt early stage rearing under nylon nets to protect the young worms from elements and pest-predators. The average annual production of cocoons from PRADAN supported rearer's is about 50-60 million pieces, contributing to nearly 15% of the total production of the country.

- Participation of women in Tasar silkworm rearing is a significant feature in the project areas of PRADAN. Traditionally, participation of women (in their reproductive age) in Tasar silkworm rearing is a taboo. PRADAN has worked closely with the women SHGs that strongly advocated breaking the taboo and creating an equal ground for the women to carry out silkworm rearing and earn livelihoods.

Today, the enhanced productivity of cocoons in our project areas is widely attributed to the hard works of women.

- PRADAN has introduced Yarn production activity among women with no-prior history of the activity. Currently, the activity involves about 1050 women producers. The focus here is to introduce improved reeling / spinning technology, capacity building of women to become proficient producers of yarn and building service linkages to carry on the enterprises at the grassroots. On an average, about 15-18 MT of Tasar yarns are produced in the project areas that meet the specifications of discerning markets.

- Created a pool of 350 Community Service Providers, capable of providing efficient services pertaining to input supply, production management and marketing of various produces. The CRPs fill in the critical gaps related to expertise and services at the level of the producers to enhance the overall performance of the sector. These people play significant roles for the extension of Tasar sericulture activities in the project areas.

- PRADAN has built a team of Professionals and Subject Matter Specialists, trained to work with the producer communities, competent to handle the complexities of extending the activities in remote locations, maintaining high performance standards and fostering formal / informal producers' collectives to put them at the forefront of the sectoral growth.

- The Collaboration between PRADAN and the Central Silk Board, the apex sericulture organization in India for over a decade, is perhaps the longest GO-NGO partnership to promote grassroots action in Sericulture sector. This collaboration resulted into significant policy changes, large scale public investments in Tasar sector (which normally receives much less investment compared to Mulberry silk) and creation of a community based model for sericulture development to eradicate mass poverty.

2. Best practices adopted by women groups promoted by PRADAN: PRADAN has played a major role in demystifying technology suited to the rural community and trained cocoon and yarn producers to adopt improved technologies. The training programmes have included both men and women. Up gradation /introduction of skills through training and introduction of improved technologies have meant that income levels for women have increased significantly.

All the producers have been covered under various trainings; the method included a series of in-house and field training followed by refresher events. The trainings were followed up by rigorous monitoring and review. PRADAN follows group approach that facilitates experience sharing among producers, distilling best practices and adoption of the same. Each producer is supported for periods of 2-3 years to pass the learning curve. Some of the best practices widely adopted by the producers are as following:

- Utilizing large tracts of privately owned fallow / wastelands for raising Tasar Host plantations,
- Use of only Disease Free Layings for silkworm rearing,
- Use of nylon net to protect young larvae from elements and pest-predators,
- Use of prophylactic measures to avoid disease outbreak,
- Monitoring quality parameters of Tasar eggs in private grainages by the producers collectives,
- Paying the cost of CRPs by the producers against the services,
- Data collection and review of performance in the primary level organizations,
- Use reeling / spinning machine by women for yarn extraction,
- Use of Solar power for reeling units,

These best practices ensure income to the producers on a sustainable basis and help the producers to attain self-reliance.

3. Strategies undertaken in the past in enabling access to credit and markets through the women groups/federations: PRADAN played a major role in creating a value chain. The main elements of the strategy included: creating village-based supply of disease-free layings (DFLs) of Tasar moth; promoting scientific rearing practices to reduce mortality among silk worms; raising plantations of host trees on privately owned wastelands and promoting Tasar yarn production among Tribal communities.

Hamlet-level groups of cocoon producers called Tasar Vikas Samitis have been formed to support silkworm rearer's to access technology, services and fairer markets. On similar lines, the primary groups of yarn producers ensure year-round supply of raw materials (cocoons) for its members and support them for collectivized marketing. The primary producers' groups and the SHGs help their members to access credit from banks.

Tasar production is now a major economic activity in the area. The production of Tasar cocoons from the project promoted producers (over 7500 Tasar silkworm rearer's) constitutes about 15% of the national production. The overall initiatives undertaken in our project areas are being sustained by tiers of producers' collectives. Tasar sericulture now provides an incremental income of Rs. 10,000 to Rs. 15,000 to a producer-family (silkworm rearer, Grainage entrepreneur, yarn producers and weavers) from their slack labor and idle assets (such as wastelands). Given the economic profile of households, many a times, this level of income contributes to almost 100% income enhancement of the household. Families are able to invest their earning in debt redemption, recovery of mortgaged lands, buying pump sets, repairing or constructing houses and in educating their children in good schools.

b. Proposed plans/ strategies as part of the Project

1. Proposed strategies to ensure implementation of the project community processes including use of community resource persons and enhancement of their capacities

It is essential for the project to create appropriate mechanism for rigorous monitoring, door step delivery of services and enabling the producers to follow strict quality control regime. PIA would create cost-effective and efficient mechanism by involving village based resource persons who would perform the key functions of managing input-output linkages and ensure delivery of inputs and services at the doorstep. These people will manage linkages for seeds, would help the community in procuring inputs such as fertilizers, seedlings, DFLs, establishment of village level nursery for the production of seedlings and also help them in storage and marketing of cocoons under the project. Village level Community Resource Persons will be selected and provided with all relevant training on the implementation and management of the project and delivering different kindly of service even after the end of the project. The technical training to the CRP would be provided jointly by PRADAN and CSB resource person.

2. Systems and checks put in place to ensure that the local resource persons are accountable to / managed by the women institutions.

The Local resource persons would be nested /hosted at Primary level organizations such as Tasar Vikas Samiti or Yarn Producers' groups. PRADAN would work intensively with the primary groups to enable them to govern the Community Resource Persons (CRPs). From the beginning, the systems of submission of monthly plans by CRPs and review of the same by the primary groups would make the governance process participatory and effective. In medium to longer term, the primary groups would pay the CRPs against the services rendered. This arrangement would demand accountability and performance from the CRPs.

3. Plans to enable women institutions/producers' collectives to put in place a transparent self monitoring and review mechanism internally for program improvement.

At the primary level, the producers' groups are small—based on a hamlet or a village. The smaller size of the group would help in strengthening group processes chiefly through face-to-face interaction. Such a setting is ideal for promoting an ambiance of openness through proper facilitation. The members learn from each other through experience sharing, setting goals collectively and jointly monitor their movement towards goal attainment. Normally, after every production / business cycle, the producers share their results and assess performance and take corrective actions.

4. Briefly elaborate on systems/ and procedures that you propose to put in place for adoption of best practices by the women institutions /producers' collectives.

Rigorous training, exposure, facilitating experience sharing among producers and an internal review mechanism among the producer groups for assessing member performance and CRPs would go a long way towards supporting producers to adopt best practices, set better standards and create space for mutual learning. PRADAN would involve the women institutions / producers' groups at every stage from planning, implementation and review in order to create a strong stake of the villagers. Delegating financial responsibility to the primary groups—including the task of fund handling, record keeping and periodic reporting of progress would be important procedures to build ownership of people in the project.

5. Building federations at different levels for sustaining collective action.

The project will ensure federated bodies at two different dimensions integrating and differentiating both social and livelihood perspectives. In the social front federated bodies of SHG will anchor whereas Producer collectives will knit tightly the variables of livelihood. These federated bodies shall play the role of overall monitoring and also create linkages for its member groups and positive synergy with other stakeholders in the project context in local area. The producers collective would come as and when the production volumes of different commodities go up and also the demand for related services emerges – it would also take up the mandate of developing input and output linkages. Creation of appropriate organizations, designed to enhance the stake and control of the producers, would be a major challenge in the context of Tasar as majority of the producers come from the tribal and backward communities and are financially very poor. However, it is envisaged to create relevant institutions with the involvement of the producers and enabling them to exert their control in the long run.

6. Role of Community professional and community resource person

Emphasis will be given on selection of beneficiaries, organizing Self Help Groups (SHGs) for various activities, signing of agreement with beneficiaries, development of infrastructure etc during the early period of the project, to get maximum project output and keep the tribal's interested in Tasar culture, utilization of the existing Tasar food plants in the forest areas/ raised under other schemes, Skill up-gradation, handholding support to beneficiaries in creation of activity groups are the primary activities which will be achieved by engaging Community Resource Persons (CRP). Disease monitoring, technological support etc will also be looked after by these groups of resource person's. Development of pool of Community Resource Persons will be a prime focus of the project. The SHG/VLC members shall identify from their villages one person with certain skills set like basic mathematical ability, writing and communication skills, acceptable to all/most families and one who is willing to extend himself/herself for supporting others in and around the village as community service providers.

Large pool of CRP will be built under the ISDS project of CSB that would help the project to run in a better way.

7. Control of CBOs over the fund flow mechanism

The project would be implemented by existing PRADAN team based at District level and headed by a team leader and anchor the project implementation. The team would set up a Field Implementation Units (FIU) at Block level that would spearhead grassroots action. The FIU would comprise Professionals, Subject Matter specials and assistant.

At village level where there is a potential of sericulture, all the women would be organized in to SHGs and after conducting a baseline survey the Tasar producers would be organized in to an activity group called "Tasar Vikas Samity" (TVS) out of SHGs comprise plantation farmers, rearer's, Graineurs, reelers and spinner. The TVS would further form a small group out TVS as Project Execution Committee" (PEC) to implement the project

The implementation structure will create space for the individual activities and will be supported by well stated processes to guide the implementation structure. At first village level planning will be done by the activity group (TVS) where individual families will express their interest, resource base etc. and based on the physical plan, TVS will place their requisition for the transfer of fund in to TVS account specially dedicated for the project implementation. The requisition will be further verified by the concerned PRADAN professional and will be submitted to PRADAN. Based on the requisition PRADAN team at District level would transfer the fund in to TVS accounts.

The individual families with the help of PEC and the community service provider will implement the activities and the bills/ Master rolls of the works will be raised on weekly basis and payments will be made as per the bills/ Master rolls of the works produced. The bills against the grants will be submitted to PRADAN after verification by the representative of PRADAN along with representatives from PEC and the community service provider. Here the role of monitoring will be undertaken by the PEC & PRADAN. Individual families will carry out the activity under the handholding support of Service Provider and the Representative of PRADAN. TVS will submit the entire bill to PRADAN at the end of every month and after settling all the accounts fresh requisition will be placed based on the plan along with the physical and financial report.

The project implementation plan will be developed and the detailing of the plan will be done by conducting a specific TVS meeting for the planning process and proper minutes will be kept. The members of PEC will also be trained by PRADAN around the processes, financial management, monitoring etc.

Keeping such a small group will help members of the TVS to interact with each other effectively, maintain the regimentation of the activity. These Primary level organization's (called `Tasar Vikas Samity') main concern will be selection of rearer's, selection of proper rearing site, maintenance of host plants, promotion of new plantations, monitoring of quality standard of DFLs and helping rearer's to access services for rearing and marketing of cocoons.

Rigorous training, exposure, facilitating experience sharing among producers and an internal review mechanism among the producer groups for assessing member performance and CRPs would go a long way towards supporting individual families/ producers to adopt best practices, set better standards and create space for mutual learning. The PIAs would involve the women institutions / producers' groups at every stage from planning, implementation and review in order to create a strong stake of the villagers. Delegating financial responsibility to the primary groups—including the task of fund handling, record keeping and periodic reporting of progress would be important procedures to build ownership of people in the project.

Chapter 3: Detailed Program Components

3.1 Detail of Proposed Action

This project proposes to build on the foundations of a) large scale social mobilization of women facilitated by PRADAN for nearly two decades in Odisha and b) an array of livelihood propositions for the marginalized, based on Tasar sericulture that have been made standardized through decades of meticulous efforts by PRADAN with support from the Central Silk Board (CSB).

As mentioned earlier, the mainstay of livelihood interventions would be around Tasar Sericulture, a forest based activity, traditionally undertaken by communities living in forest villages. The proposed project would exploit the benefits of recent advancements in the sector to extend the livelihood opportunities to newer clusters, covering families with no prior experience to facilitate adoption of improved technologies of Tasar sericulture and enabling them to access mainstream markets and sustain economic gains.

This project is designed to capitalize on the revival and growth attained in Tasar sericulture in recent years in Bihar & Jharkhand through intensive efforts of PRADAN in collaboration with Central Silk Board to implement a Special SGSY Project for development of Tasar Sericulture. The idea here is to broad base the best practices of the above-mentioned project within Odisha to benefit a large number of poorer households.

Besides enhancing the stake and involvement of the women in the income activities like Tasar sericulture, the project would work for strengthening their position at household. Although women play a central role in agriculture, yet low productivity of rain fed farming hardly supports the family to meet year-round food requirement. Food shortages affect women most, both physically as well as emotionally. As homemakers and rearer's of small children, they bear the emotional trauma of coping with hungry children, and are most likely to receive less or go without food in times of shortages. The project proposes to support at least 50% of the participating families to overcome food shortage by ways of increasing their paddy production. This effort would be further supplemented by SHGs and Cluster associations, who will support their members to claim food grains from PDSs.

By way of activities, the project would:

- Strengthen the existing SHGs and clusters and orienting them to livelihood activities,
- Promote functional groups of Tasar silkworm rearer's comprising of women and men,
- Promote District / Block level aggregations (formal or informal) of the primary groups. These organizations would enable the producers to sustain their initiatives,
- Implement a variety of activities pertaining to Tasar sericulture to build capacity of producers, equipping them with implements and accessories, create assets such as seed production units, host tree plantations, reeling units, sorting-grading centre's,
- Support at least 50% of the participating families to adopt improved technologies and methods (such as SRI) of food grain production. The SHGs and Clusters would support the remaining families to claim their entitlements for food grains from PDS.
- Promote a cadre of community based service providers to provide hand holding assistance and linkages for credit and market for the participating families.
- Promote and nurture suitable producer organisations (cooperatives or producer companies as per the new Act) to provide sustainable systems for services to the project participants,

- Undertake activities pertaining to documentation of processes, impacts and for wider dissemination of experience.

1. Plans for promoting and enhancing food and nutritional security for women farmers

The initiatives proposed viz., improved agriculture and vegetable cultivation in the backyard would provide required food security round the year resulting in arresting the malnutrition in the tribal populace. PRADAN will also try to encourage the members for the consumption of vegetables and food grain produced to increase the nutritional security of the members.

2. Strategies addressing sustainable/evergreen/regenerative NTFP practices

Research Institutes of the Central Silk Board have come out with many technologies in seed, pre-cocoon and post-cocoon sectors, which were tried and fine tuned adding the indigenous knowledge of the tribal's who are practicing Tasar culture as tradition. The proposed project interventions would help in increasing green cover through rejuvenating and safe guarding Tasar host flora in the fringe forest areas and also taking up block plantations in private waste lands.

Pre harvest, harvest and post harvest protocols development: Community protocols will be developed by integrating traditional and scientific knowledge in regeneration, maintenance and rearing management techniques based on best practices elsewhere with required modification. The project will train the project participants in various activities of Tasar culture on best practices and provide improved rearing, grainage equipment and cocoon reeling machines to them.

Use of indigenous knowledge: The project will make use of rich indigenous knowledge and technologies in Tasar host plant regeneration, Tasar silkworm dfl incubation, and seed production etc for sustainable use of resources for enhancement of tribal livelihoods.

Suitability of technology to the local agro-ecology: The existing practices and technologies will be studied, validated and community consultation will be facilitated to assess the suitability of technology for adoption before introducing.

Resilience to climate change – Integrated Natural Resource Management: The project is also encouraging NTFP/MAPs for additional income. The project is also promoting agro forestry models by developing land and water resource development so as make it integrated natural resource management. All these initiatives will have reasonable resilience to climate change factor.

Soil and water moister conservation steps proposed would improve the soil condition, check soil erosion etc. Intercropping, improved agriculture practices and vegetable cultivation would bring improvement in soil health and productivity.

PRADAN will encourage the use of organic matters in all the activities along with that PRADAN will seek support from CSB to provide alternative solutions of inorganic practices.

3. Targeting : Approach and Details on tribal NTFP collectors as project participants

Informal village level groups like Tasar Vikas Samity (TVS), Producer's Collective, Rearer's' Collective and other Activity sericulture groups are responsible for various project activities. Their role includes planning, implementing and monitoring the entire range of activities. These groups would meet once in 15 days to

plan and budget for various activities. These groups will have their own bank account for thrift, and maintain its accounts and stock book for material transactions, which are audited. With formation of these groups, increased tribal participation was sought at every stage of project activities starting from site selection, planning, budgeting, and taking up the related activity with all required care. All the financial and material transactions with individuals in the villages are carried out through the respective activity groups.

At the start of the work, these groups are facilitated to prepare a detail work plan and budget based on their abilities to contribute labor and material. The work plan and the budget of the groups are submitted to Project Implementing Agency (PIA) office through the functionary of PIA operating in the area. Once the work starts in the village, PIA functionary assesses the progress of the work and monitors the expenditure details and recommends release of the next indent directly to the bank account of the groups. The groups incur the expenditure for the said purpose and submit the work done/ utilization certificate to PIA. Due to group involvement, it would be relatively easy to collect the beneficiary share and also to resolve local issues besides group can exert pressure on individuals to increase their contribution so as to improve the group's financial position for lean periods.

The PIA shall constitute various committees such as Beneficiary Selection Committee, Purchase Committee etc. and follow the prevailing rules, regulations and standard practices. The transactions and dealings shall be transparent and the books of accounts, records shall be made available to the Officers associated with implementation of the project at any time. The PIA shall maintain the Accounts by following standard practices and books of accounts, get the accounts audited as per the rules and procedures followed by the PIA in respect of funds received from Govt. of India and other sources, shall submit UCs along with audited statement of Accounts every financial year. The PIA shall submit quarterly progress reports to the CA and Chairman, PMB in the prescribed formats.

Major technological inputs viz., *chawki* nylon nets, microscopes etc., will be purchased through centralized purchases as per recommendation of Purchase Committee (comprising the CSB, PIA, DOS or any other Line Department, as the case may be) for the project on a rate contract for the entire project period. Release of project funds to carry out remaining activities would be directly to accounts of the activity groups as per recommendation of work plans by CBOs.

4. Plans for Post-project Sustainability and Scaling-up strategies

Tasar culture is an age old practice in the project area of the rural poor specially the Scheduled Tribes. The assured availability of quality commercial seed, improved technologies and the means for its adoption provided under the project, increase in the food plant population by maintaining Tasar host flora in natural forests/ private waste lands and chawkie garden leads not only to the increased production and productivity but also to sustain the project beyond the project period.

Organization of beneficiaries and different stakeholders into manageable groups, SHGs, TVS, and integrating them into Producers Organizations would strengthen the development of the industry. Establishment of required infrastructure within the project area, capacity building through training programmes and study tours, establishment of credit linkages with financial institutions helps in sustainability of the project. The increased earning capacity of the beneficiaries with increased productivity and quality, development of viable rural enterprises such as Private Grainage, Seed rearing, reeling, spinning, etc would take the project beyond simple sustenance to a viable commercial activity.

The project empowers rural poor in general and the women in particular economically with the introduction of the activities through technologies, which are women friendly, child unfriendly, hygienic and superior in terms of both quality and quantity production. This would along with introduction of improved machinery and technologies, establishment of backward and forward linkages between various groups would definitely result in self-sustainability of different activities.

The present Project is formulated based on the experience and lessons learnt during the earlier developmental Projects with an emphasis on formation of groups and producers' collective with establishment of effective forward and backward linkages. The biodiversity conservation is another important issue that is being effectively addressed through raising of plantations and scientific utilization of the forest trees. These measures on adoption by the existing Tasar rearer's as well as by those who take up the new rural micro enterprises like the private Grainage by the middle level educated unemployed, contributes to the sustainability of the project beyond the project period. The economics of various activities like private Graineurs, seed and commercial rearing besides yarn production activities indicates that the Project components rightly contributes towards poverty reduction, gender equity and has all the potentialities of a sustainable rural model for socio-economic development. Project output would be compared with the following indicators.

- Cocoon Productivity: 40 seed cocoons per dfl in the Seed crop and 50 Cocoons per dfls in the commercial crop.
- The entire requirement of dfls in the commercial crop would be met through village based private Grainage to be established under this project.
- Gestation period for newly raised plantations would be limited to 3 years by adopting recommended technologies.
- By the end of fourth year, the producer's institution would attain self-reliance to sustain targeted standards of production.
- Producers' collective will be self sustainable in operation.

5. Plans aiming at drudgery reduction for women NTFP collectors

The technology inputs and small equipment in Tasar host plant raising, Grainage and silkworm rearing are women friendly and help them to carry out the activity without drudgery. Even the small branches of Tasar host plants at the time of cocoon harvest would help them to get required firewood instead of depending on forests for its collection.

6. Plans for awareness generation with regard to " NTFP Collector's" rights entitlements under different schemes related to her identity as "NTFP Collector":

Tasar for time immemorial is considered to be male domain, even in many places females are not allowed in the rearing sites with a belief that they will bring bad omen. However, with the introduction of Tasar block Plantations, engagement with SHG's, continuity of focus on women has somehow eased the penetration of women in the activity. But still the development of a major portion of the human resource is completely neglected. Having recognized this acute imbalance 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

- Sensitization of stakeholders on the issue of Gender discrimination in SHG, TVS and *gramsabha* meetings
- Increase role of women in decision making and income through various initiatives
- To bring the services at the farmers doorstep and technical support at village level to ensure women participation.
- Introduction of drudgery reduction tools and equipments and with different women friendly techniques
- Technical support and extension services to be provided at the level of Self Help Groups - market information, credit facilities.

7. Strategies for Development of pro poor value chain around Women NTFP collectors ensuring increased access to market and market information for better marketing of their products

Micro-entrepreneurial models evolved and tested on scale during the Special SGSY Projects in Bihar and Jharkhand viz., nursery raising, seed and commercial rearing, Tasar seed production would be key livelihoods besides improved agriculture and vegetable cultivation. Viable linkages would be developed amongst these activities and also with value addition across the Tasar chain.

At present key constraint in the Tasar value chain viz., Tasar basic and commercial seed production and supply is being addressed through the initiative. Organization of beneficiaries and different stakeholders into manageable groups, SHGs, TVS, and integrating them into Producers Organizations would strengthen the living conditions of tribal's with increased access to knowledge, credit and market. Establishment of required infrastructure within the project area, capacity building through training programmes and study tours, establishment of credit linkages with financial institutions helps in sustainability of the project. The increased earning capacity of the beneficiaries with increased productivity and quality, development of viable rural enterprises such as Private Grainage, Seed rearing, reeling, spinning,etc would take the project beyond simple sustenance to a viable commercial activity.

Introduction of improved technologies and establishment of backward and forward linkages between various groups would definitely result in self-sustainability of different activities. Above all, the adoption of best practices of the earlier phase of special SGSY project would make the whole proposed interventions robust and sustainable. The economics of various activities like private Graineurs, seed and commercial rearing indicates that the Project components rightly contributes towards poverty reduction and has all the potentialities of a sustainable rural model for socioeconomic development. At present, average disease free laying consumption per ha ranges between 150 and 250 only. Under the project, it is proposed to increase the brushing capacity to 300 dfls per ha by providing inputs to the existing systematic plantation and also by raising block plantation. With the farm inputs provided under the project and adoption of improved rearing technology, the cocoon productivity would increase to 50 cocoons per dfl and a farmer would be getting an estimated additional annual income of over Rs 14,000/- for engagement of about 100 days. Additional income through private Grainage would be around Rs. 18,700/- and through that of Basic Seed Production would be around Rs. 68,000/-. In case of intercropping in block plantation, an additional income of about Rs 4,000 to 5,000/- would be generated, which will enable the farmers to maintain the systematic plantation during the gestation period.

Further, linkages with the existing conversion facility available in the state would be made to the cocoon producers for assured marketability. In view of the huge demand –supply gap of Tasar silk in the country efforts would be made to promote conversion clusters in the project areas in the next phase once the production of cocoons stabilizes.

8. Strategies for disseminating knowledge. Including plans for skill up gradation among women.

Women are the back bone of the tribal community. Women plays significant role in both household and economic activities, still they are having socially lower status. Organizing women into SHGs and building capacity through training would make them driving force of the village. Training and capacity building would very important component of the project. PIA team would require exposure visit to different organization for learning best practices and new technologies relevant to the project.

All the members of SGH would be provided with membership training, leadership training, book keeping and livelihood visioning. Promoting and nurturing these organizations around SHGs of this area would be meaningful and facilitate pro development processes. They will be actively involved in various trainings on Tasar and other sectoral activities, on-field training by CRPs etc.

Men and women of the target families can be taken to see related works of different agencies to broaden their understanding on natural resource management. To groom women to mature SHG members, knowledgeable and skilled human resources, these women need different trainings like membership training of SHG, technical training, entrepreneurial training, membership of people's institution, etc.

For every aspect of interventions, there will be a strong focus on building required skills and capacities among the beneficiaries in order to enable them manage their livelihoods in the long run. Training would be provided to all categories of beneficiaries to help them acquire technical skills. Additionally, Entrepreneurial Motivational Training (EMT) for the beneficiaries to promote self-reliance among producers in their business would be included. All the technical training would be provided in collaboration with CSB. A large number of village based community resource persons would be trained under the project. This resource person would be part of a rigorous follow-up mechanism to offer handholding support to the beneficiaries of the project.

9. Plans for increasing access of credit to women farmers and women groups.

While credit would be mobilized from the SHG savings for routine activities and for activities like seed production, the groups would approach the financial institutions to mobilize credit for the working capital requirements.

10. Please elaborate on the direct 'incremental' income (returns) to farmers through proposed project.

The incremental income should be sustainable. Proposal may include cash flow projections to indicate changes at the level of project participant, the cash flows will include savings through reduction in costs - e.g. low external inputs use sustainable technology, regeneration.

Prior to the similar initiatives in Bihar and Jharkhand through SGSY Projects, most of the traditional Tasar farmers were rearing occasionally that to as part of their tradition and not on commercial scale. While models of seed production are absent in the proposed project area, average income from Tasar is in the

range of Rs. 4000 to Rs. 5000/-. The present initiative can build all the required linkages so as to make available critical inputs and services available at the door steps, would ensure taking up Tasar silkworm rearing on a regular basis and following the technologies for assured higher incomes.

Plantations raised and rejuvenated would take care of the Tasar silkworm rearing for over four decades with initial project support for raising and maintaining them. While the initial costs are quite high will be mobilized from project assistance, for the later years system is built in to keep aside fund required for minimal maintenance costs, from the cocoon sales. Due to well knit linkages between basic seed Grainage, seed rearer's and private Grainage within the cluster would sustain beyond the project period.

With the proposed interventions while commercial rearer's can get an estimated incremental annual income of over Rs 10,000/- per crop. Additional income through private Grainage would be around Rs. 18,700/- and through that of Basic Seed Production would be around Rs. 68,000/- for the group. In case of intercropping in block plantation, an additional income of about Rs 4,000 to 5,000/- would be generated, which will enable the farmers to maintain the systematic plantation during the gestation period. Except the income through intercropping, incremental incomes through other activities do not only sustain would definitely increase due to capacity utilization, improvement in quality due to increased skill levels. Further, the costs of production would come down and earnings would increase due to technology intervention and capacity building. Also due to linkages amongst the activity groups dependency on others will come down which reduce the incidental expenditure to take up various activities.

11. Community Contribution:

It is planned to raise community contribution in almost all the activity components namely – Raising of block plantation, Assistance to different strata of rearer's, Grainage etc. Apart from these, the community shall be encouraged to pay for services of CRPs at a later stage preferably just after the project period. The contribution would come in different ways:

- Depositing in cash – The family can deposit the contribution amount as decided in the TVS meeting to the Project Execution Committee (PEC) account before the work starts.
- Depositing in installments - If the family is not able to pay the amount upfront, then they can pay the amount in different as the work progresses from their own wage payment or other means in that proportion.
- During work through Labour – The families with whom the activity is done, if their family members work in that activity, they would not take the part/full wage payment till the point their share of contribution amount is completed.
- In the form of Kind – For agriculture operations, contributions for farm inputs can come from farmers own inputs.

The contribution amount collected shall be deposited with PEC along with its records.

3.2 Convergence with MGNREGA and other line Departments

The total project cost will be raised from three sources respectively MoRD, CSB, contribution from Beneficiaries and credit, other than that convergence from any other sources are not considered during conceptualizing the project. MoRD and CSB will provide the total grant of 85.98% having individual share of

64.5% & 21.5% respectively, the remaining 14% will be contributed by the project families either from their own contribution or by arranging loan. However, with emerging opportunities and latest guidelines issued around Tasar Plantation under MGNREGA, it will always be emphasized to take the Raising of Block Plantation activity under the convergence from MGNREGA, besides exploring convergence opportunities from other sources including RKVY, NABARD etc.

3.3 Training and Capacity building of communities

Success of the project and sustainable development of the industry largely depend on the well-equipped human resources in the state. Exposure to the industry to study the practices adopted in the other traditional states or the project areas where Tasar culture is being practiced would pay rich dividends in overall development. It is proposed that all the beneficiaries would be trained in their respective activities and also on the community related aspects. Tasar sericulture may be an entirely new vocation for the families to be selected. Thus for every aspect of interventions, there will be a strong focus on building required skills and capacities among the beneficiaries in order to enable them manage their livelihoods in the long run. Training is needed to help people acquire technical skills. Additionally, PRADAN proposes to carry out Entrepreneurial Motivational Training (EMT) for the beneficiaries to enable them embark on new ventures. Some of the community specific trainings are as follows

❖Technical training for Households for implementation of sericulture activities-1,906 training days will be imparted to ensure the technical skill around different activities of Tasar Sericulture like Nursery raising techniques of Arjuna plants, Seed crop Rearing, Commercial rearing, Grainage etc. The families will also be taken for exposure in different established areas to see the impacts of Tasar Sericulture.

❖Technical training for sectoral activities- 2,168 training days will be imparted around technicalities of improved agriculture, vegetable cultivation and along with that exposure visits will also be conducted in the successful adjoining areas.

❖Institution building of Producer Collectives- 1,587 training days will be imparted in leadership, membership; Governance related trainings, so that the activities can fully run by the collectives. The board members will also be given exposure to successful collectives.

❖Nurturing of New Self-Help-Groups (SHGs) – 1,567 training days will be imparted in leadership, membership; book keeping and livelihood visioning of the SHG members. The trainings will build the basics of SHG members and will also help them to actualize the visualized change. The SHG members will also be taken to good SHG's to understand the processes and systems and to implement & follow them in their own SHG's.

3.4 Training and Capacity building of Community Professionals

PRADAN will also use the services of a number of village based resource persons who would be part of a rigorous follow-up mechanism to offer handholding support to the beneficiaries of the project. The CRPs play a critical role in extension services, taking the knowledge and delivering it to the farmers based on their context. The CRPs thus need constant training and exposures in process, communication and technological parameters, handling of tools and equipment to enhance their knowledge and skills. A series of trainings and exposures have been planned for CRPs right from the stage of planning, on-going implementation phase and also post seasons review. They are provided training on documentation, yield estimation process. 37

CRPs are expected to be trained within the project period and they are going to impart 3,319 training days altogether in the project period.

Chapter 4: Implementation Arrangements

4.1 Implementation Plan

a) Elements of Implementation Process

The implementation would be centered on activity group and its collectives. The proposed project would be anchored at the village node, with forming an implementation body among the rearer's themselves of the respective villages. A CRP would be assisting these members of activity group and working under them. For smooth implementation this group with CRP would meet weekly for planning & monitoring and supervising during the week. All the members would sit together reviewing the performance in monthly meetings.

Grassroots mobilization:

- ❖Identification of potential cluster
- ❖SHG saturation in the selected area,
- ❖Formation of activity groups,

Engaging with producers for livelihood promotion:

- ❖Livelihood planning with families,
- ❖Training of families with focus on skill development of women,
- ❖Introducing systems of accounts keeping in the activity groups and fund transfer to groups,
- ❖Supporting activity groups (Primary Level Groups) to raise plantations, build infrastructure,
- ❖Supporting producers to carry out production,
- ❖Facilitating product aggregation and marketing,
- ❖Facilitating experience sharing in producers' groups,

Engaging with external stakeholders

- ❖Building linkages with banks and sharing credit plan,
- ❖Connecting producers' groups with input suppliers,
- ❖Market promotion and Establishing contacts with buyers,
- ❖Disseminating project experience among wider stakeholder groups.

Programme Monitoring and Reporting:

- ❖Data capturing and collation
- ❖Periodic field visits by the Team and central unit members
- ❖Quarterly review meetings with project staff
- ❖Joint field visit with CSB
- ❖Submission of QPR for physical and financial progress,
- ❖Annual Audit report

PRADAN's role would be more towards capacity building of the participant family from implementation to management, and build simple systems and processes to implement and monitor the program smoothly.

The involvement directly in the field for implementation with the activity group & CRPs would be an integral role, and focus would be to build capacities of the women

b) Project Implementation Plan & Flow:

PRADAN teams at the district level would anchor the implementation of the project. The teams would make plan (as part of the Annual plan of the Team) and set up Field Implementation Units that would spearhead grassroots action. The field implementation units would be based at Block level and would be constituted of Professionals, Subject Matter specials. The FIU would work in the existing SHG clusters and would directly engage with the producers to form primary groups, train producers and CRPs, provide support in planning and implementation and create mechanisms for sustenance.

The thematic and overall programme support to the teams would be provided by a central Unit, which would be responsible for the implementation of Tasar sericulture projects in multiple states. The Central Unit (Project Facilitation and Resource Cell) would be constituted of domain experts who would be responsible for mobilizing HR, training of staff and CRP, offering support for technology, finance management, programme monitoring, documentation and networking with stakeholders.

I. Internal structure for implementation

The project would be organized around the existing structure of operations of PRADAN, the team model. In every block one to two Executives (Projects) would be placed in the role of Programme coordinator, under them one Subject Matter Specialist (SMS), preferably sericulture background, and one Assistant (Minimum graduate) would be placed to implement this proposed project. The project would be integrated at District level under the Team Leader, in the role of Project Anchor. At the central level, the Project would anchor by Project Facilitation Unit for overall responsible for providing guidance and shape to the project, reviewing & monitoring, initiating linkages and orchestration. The unit would bring in new knowledge and integrating the implementation and sharing learning's across states. The Project coordinators would be responsible for implementation of the proposed project at village level with the based institutions. The capacity building, field level guidance and handholding of the institutions and leaders would be their responsibility. Importantly, these people would work to bring in transformative changes among the participating family. They would be assisted by SMS & Assistants. The SMS would help with technical guidance at the field level to all, and support the Coordinators. The Assistants would help the Coordinator by doing repetitive jobs like muster roll checking & collection, everyday field monitoring while infrastructure creation work going on, helping CRP with accounts book maintenance, etc. The SMS and Assistants would report to the Coordinator. Review of the programmes would be done in monthly team meetings.

II. Role of CRP- Knowledge dissemination, monitoring and scaling up

There is pressing need to engage with the community to build their skills, making them aware about new scientific practices of doing in the field of Tasar Sericulture and building their vision and understanding around collectives. So there is a high need to create a sector specialist cadre who works with a belief that engagement at cutting edge will bring the theory of change and one of our major strategies will be to create such a pool. CSB sanctioned ISDS (Integrated Skill Development Scheme) project to PRADAN for Skill Development for the existing producers of special SGSY projects in Bihar and Jharkhand. The training will be provided jointly by PRADAN and CSB and skilled person would be utilized in the field for the

implementation of such projects. Emphasis will be given on selection of beneficiaries, organizing Self Help Groups (SHGs) for various activities, signing of agreement with beneficiaries, development of infrastructure etc during the early period of the project, to get maximum project output and keep the tribal's interested in Tasar culture, utilization of the existing Tasar food plants in the forest areas/ raised under other schemes, Skill up-gradation, handholding support to beneficiaries in creation of activity groups are the primary activities which will be achieved by engaging Community Resource Persons (CRP). Disease monitoring, technological support etc will also be looked after by these groups of resource person's. Development of pool of Community Resource Persons will be a prime focus of the project. A large number of village based resource persons would be trained under the project. This resource person would be part of a rigorous follow-up mechanism to offer handholding support to the beneficiaries of the project.

III. Role of project staff and community professionals

The sector in the present context where states are reducing its size, there is high need of young and energetic people to rejuvenate it. The professional influx will help to anchor a multi-stakeholder in complex socio-cultural region of the country to deliver the mandate of establishing and spreading Tasar sector. This will strengthen the human resource systems for direct work, inclusion of new areas by influencing other actors, especially by strengthening capabilities of other civil society actors. PRADAN will also use the services of Subject Matter Specialist (SMS) to provide technical support to the beneficiaries at different stages of growth period.

There will be multiple numbers of trainings to cater the knowledge deficits of professionals, SMS; trainings around extension services, handholding support to communities, improved agriculture, Vegetable cultivation, Institution buildings of Producer Collectives and Nurturing of SHG's will remain the prime focus. The HR development is a year round programme and therefore will continue throughout the year or seasonal if the activities are seasonal in nature. The engagements of trainings are elaborately mentioned in the Gantt chart.

IV. Geography and Yearly distribution

The project activities would be implemented in 2 blocks of Kendujhar district. However, given the scope and range of activities, not all of them shall be initiated in all the blocks simultaneously. The table below presents the year wise plan of different activities:

Sl. No.	Component/ Activity	Unit	PHYSICAL			
			Yr-1	Yr-2	Yr-3	Total
1	**Raising of Block plantation**					
1.1	Raising Tasar host plantation	Hac.	40	40	-	80
1.2	Maintenance of host plant - 1st Year	Hac.	-	40	40	80
1.3	Maintenance of host plant - 2nd Year	Hac.	-	-	80	80
2	**Assistance to Nucleus Seed Rearer's**					
2.1	Supply of rearing equipments	No.	-	40	-	40
2.2	Supply of inputs for maintenance of block plantation	Hac.	-	28	28	56
2.3	Assistance for Tasar silkworm rearing	No.	-	40	40	80
2.4	Crop insurance	Dfls	-	8,000	8,000	16,000
2.5	Rearer's insurance	No.	-	40	40	80
3	**Assistance to Basic Seed Rearer's**					

Sl. No.	Component/ Activity	Unit	PHYSICAL			
			Yr-1	Yr-2	Yr-3	Total
3.1	Supply of rearing equipments	No.	61	60	32	153
3.2	Supply of inputs for maintenance of block plantation	Hac	43	85	74	202
3.3	Assistance for Tasar silkworm rearing	No.	61	121	124	306
3.4	Crop insurance	Dfls	12,200	24,200	24,800	61,200
3.5	Rearer's insurance	No.	61	121	124	306
4	**Assistance to Commercial Rearer's**					
4.1	Supply of rearing equipment	No.	500	500	264	1,264
4.2	Assistance for Tasar silkworm rearing	No.	500	1,000	1,029	2,529
4.3	Crop insurance	Dfls	100,000	200,000	205,714	505,714
4.4	Rearer's insurance	No.	500	1,000	1,029	2,529
5	**Assistance to Private Graineurs**					
5.1	Construction of grainage building	No.	15	15	8	38
5.2	Supply of grainage equipment	No.	15	15	8	38
5.3	Working capital	No.	15	15	8	38
5.4	Grainage consumables	No.	15	30	31	76
6	**Assistance to Basic Seed Production Units**					
6.1	Construction of grainage building	No.	1	-	-	1
6.2	Supply of grainage equipment	No.	1	-	-	1
6.3	Working capital	No.	1	-	-	1
6.4	Grainage consumables	No.	1	1	2	4
7	**Assistance to Rearer's Collectives**					
7.1	Cocoon storage facilities	No.	1	1	-	2
7.2	Common facilities	No.	1	1	-	2
8	**Human Resource Development**					
8.1.	Technical training of project personnel	No.	3	2	-	5
8.2.	**Technical training for Project Families for implementation of sericulture activities**					
8.2.1	Nursery farmers	No.	15	15	-	30
8.2.2	Nucleus Seed Rearer's	No.	-	40	-	40
8.2.3	Basic Seed Rearer's	No.	61	60	32	153
8.2.4	Private Graineurs	No.	15	15	8	38
8.2.5	Commercial Rearer’s	No.	500	500	264	1,264
8.2.6	Study tour/ Exposure visit	No.	148	158	76	381
8.3.	**Technical training for sectoral activities**					
8.3.1	Improved Agriculture	No.	576	615	304	1,495
8.3.2	vegetable cultivation	No.	115	123	61	299
8.3.3	Exposure of Project families to improved practices	No.	144	154	76	374
8.4.	**Training of Community Resource Persons (CRPs) for extension of activities**					
8.4.1	Orientation and training on Tasar	No.	14	15	8	37
8.4.2	Exposure to improved practices	No.	7	8	4	19
8.4.3	Technical and Refresher Training	No.	14	15	8	37
8.5.	**On-field training / handholding provided by CRPs to the Project Families**					
8.5.1	Tasar Silkworm Rearing	No.	561	600	296	1,457
8.5.2	Tasar Seed Production	No.	15	15	8	38
8.5.3	Est. of Community Arjuna Nursery	No.	15	15	-	30
8.5.4	Improved agriculture	No.	576	615	304	1,495
8.5.5	Vegetable cultivation	No.	115	123	61	299
8.6.	**Institution building of Producer Collectives**					
8.6.1	Membership training	No.	576	615	304	1,495

Sl. No.	Component/ Activity	Unit	PHYSICAL			
			Yr-1	Yr-2	Yr-3	Total
8.6.2	Leadership/ Governance Training	No.	29	31	15	75
8.6.3	Exposure of Board members & staff	No.	6	7	3	17
8.7.	**Nurturing of New Self-Help-Groups (SHGs)**					
8.7.1	Membership training (25%)	No.	144	154	76	374
8.7.2	Leadership Training (20%)	No.	115	123	61	299
8.7.3	Book keeping Training	No.	43	46	23	112
8.7.4	Exposure of Cluster & Federation Members	No.	13	14	7	34
8.7.5	Livelihood Visioning (50%)	No.	288	308	152	748
Sub-total						
8.8.	**Trainers Training programme**	LS	1	-	-	1
9	**Publicity and extension**					
9.1	Workshop/seminar	No.	1	-	1	2
9.2	*Krishi mela*		1	1	2	4

The above year wise plan indicates approximate number of participant families for each of the activities and depending on experiences they may be changes

Chapter 5: Implementation Schedule

Gantt chart of schedule of activities (Phasing out strategy)

The implementation schedule has been broken down into sub-activities and schedule for first year is illustrated on a Gantt chart below:

ACTIVITIES	M 1	M 2	M 3	M 4	M 5	M 6	M 7	M 8	M 9	M 10	M 11	M 12
Month→	(Nov)	(Dec)	(Jan)	(Feb)	(Mar)	(Apr)	(May)	(Jun)	(July)	(Aug)	(Sep)	(Oct)
Year→	2013		2014									
PLANNING												
Preparation of Inception Report												
Preparation of DPR												
Staff deployment												
Staff orientation/ Training												
Finalization of villages												
Identification of SHG members												
PEC formation, training												
Community exposure												
Family/Village level Planning												
ACTIVITY												
Raising of Block Plantation												
Raising of Kisan Nursery												
Selection of private entrepreneurs/SHGs												
Preparation of land for nursery												
Collection of Arjuna seeds												
Making cattle proof trench												
Procurement of FYM, Poly Bags etc.												
Filling up of poly bags												
Soaking of seed, Heap formation & germination of seeds												
Placing germinated seed into poly bags												
Maintenance of seedlings												
Supply of seedlings												
Raising of Plantation												
Survey & selection of villages & Govt./												
private land/waste land etc												
Selection of beneficiaries												
Formation of Self Help Groups												
Allotment of land to beneficiaries/SHGs												
Land husbandry												
Making cattle proof trench												
Digging of pits & filling with rooting media												
Procurement of seedlings												
Transplantation of seedlings												
Maintenance of plantation												
Assistance to Nucleus Seed Rearer's												
Selection of Nucleus Seed Rearer's (NSR)												

ACTIVITIES	M 1	M 2	M 3	M 4	M 5	M 6	M 7	M 8	M 9	M 10	M 11	M 12
Month→	(Nov)	(Dec)	(Jan)	(Feb)	(Mar)	(Apr)	(May)	(Jun)	(July)	(Aug)	(Sep)	(Oct)
Year→	**2013**		**2014**									
Signing of agreement with NSR												
Supply of inputs for maintenance of plantation												
Supply of Nucleus seed to NSR												
Crop & Rearer's' insurance												
Conducting silkworm rearing												
Silkworm Rearing assistance to NSR												
Assistance to Basic Seed Rearer's												
Selection of seed farmers												
Signing of agreement with BSRs												
Supply of inputs for maint. of block plantation												
Supply of Basic seed to BSRs												
Crop & Rearer's' insurance												
Conducting silkworm rearing												
Harvesting of seed cocoons												
Disposal of seed cocoons												
Assistance to Private Graineurs												
Identification of private graineurs												
Construction of Grainage building												
Procurement & supply of grainage equipment												
Supply consumables												
Procurement of seed cocoons by graineurs												
Processing of seed cocoons												
Production of commercial DFLs												
Sale/supply of pierced cocoons												
Assistance to Commercial Rearer's												
Identify Commercial Rearer's (CR)												
Establish linkages												
Supply inputs for rearing												
Supply rearing equipment												
Provide insurance cover to com. crops & rearer's												
Procurement of commercial DFLs												
Silkworm Rearing assistance to CR												
Creation of Infrastructure facilities under the project												
Assistance to Basic Seed Production Units												
Assistance to Rearer's' Collectives												
HUMAN RESOURCE DEVELOPMENT												
Trainers Training Programme												
Technical training of project personnel												
Technical training for Households for implementation of sericulture activities												
Nursery farmers												
Nucleus Seed Rearer's												
Basic Seed Rearer's												
Private Graineurs												
Commercial Rearer's												

ACTIVITIES	M 1	M 2	M 3	M 4	M 5	M 6	M 7	M 8	M 9	M 10	M 11	M 12
Month→	(Nov)	(Dec)	(Jan)	(Feb)	(Mar)	(Apr)	(May)	(Jun)	(July)	(Aug)	(Sep)	(Oct)
Year→	**2013**		**2014**									
Study tour/ Exposure visit												
Technical training for sectoral activities												
Improved Agriculture												
vegetable cultivation												
Exposure of beneficiaries to improved practices												
Training of Community Resource Persons (CRPs) for extension of activities												
Orientation and training on Tasar												
Exposure to improved practices												
Technical and Refresher Training												
On-field training / handholding provided by CRPs to the Project Families												
Tasar Silkworm Rearing												
Tasar Seed Production												
Est. of Community Arjuna Nursery												
Improved agriculture												
Vegetable cultivation												
Institution building of Producer Collectives												
Membership training												
Leadership/ Governance Training												
Exposure of Board members & staff												
Nurturing of New Self-Help-Groups (SHGs)												
Membership training (25%)												
Leadership Training (20%)												
Book keeping Training (7.5%)												
Exposure of Cluster & Federation Members (2.25%)												
Livelihood Visioning (50%)												
Trainers Training programme												
PUBLICITY AND EXTENSION												
Workshop/seminar												
Printing passbook/pamphlets												
Krishi mela												
DISEASE MONITORING												
DOCUMENTATION AND EVALUATION												
DESIGN DEVELOPMENT & DIVERSIFICATION												
CONSULTANCY AND ADVOCACY												
TECHNOLOGY EXTENSION AND BUSINESS DEVELOPMENT SUPPORT												
PROJECT ADMINISTRATIVE EXPENSES												
PROJECT MONITORING COST												

Chapter 6: Results Framework

Project: Promotion of Large Scale Tasar Sericulture Based Livelihoods in Odisha

Goal:- The Goal of the project is to eliminate abject poverty of 60% of the project families by income enhancement of Rs. 10,000 – Rs. 18,700 per annum from Tasar on a sustainable basis		
Objective 1: Building capacities of all participating families in adopting skills to effectively and profitably engage in livelihood activities based on Tasar sericulture **Objective 2**: Introduction of improved technologies and practices to push the productivity frontiers for accelerated growth in Tasar Sector **Objective 3**: Strengthening seed sector to eliminate the key supply constraint in Tasar sericulture **Objective 4**: Investment to create alternative market mechanisms to ensure fair prices for cocoons **Objective 5**: Promote Producers' collective to provide sustainable systems of services to producers **Objective 6**: Design development and dissemination		
Activities	**Outputs**	**Outcome**
Silkworm rearing	➢ **1,457** families would be involved as silkworm rearer's ➢ Each family will be provided with rearing equipments. ➢ Each family would produce 8,000 to 10,000 commercial grade cocoons. ➢ Number of Rearer's Collectives – 2, would help in storage of cocoons to avoid distress sale ➢ No. of producers' collective formed - 2. ➢ 80 ha of plantation will be raised and 940 Ha of natural forest will be rejuvenated	➢ Participating families profitably engage in livelihood activities based on Tasar sericulture: Cocoon Productivity: 40 seed cocoons per dfl in the Seed crop and 50 Cocoons per dfl's in the commercial crop. ➢ Plantation raised & rejuvenated ➢ Assistance to nucleus seed graineurs would help produce 26 million quality cocoons, which would help earn Rs. 25,652 per household per season. ➢ Commercial rearer's would earn Rs14,020 per season/ per household
Tasar seed production (Grainage)	➢ Total number of Grainage: **38** ➢ Each Grainage entrepreneur would be provided with grainage hall and required equipments. ➢ Grainage would be an individual enterprise at village level ➢ Each Grainage entrepreneur would produce 5,000 to 6,000 DFLs in one Grainage cycle ➢ Individual Graineurs would serve the requirement of 25-30 rearer's in each Grainage cycle.	➢ The entire requirement of dfl's in the commercial crop would be met through village based Grainage ➢ Availability of quality dfl's at village level ➢ Graineurs would earn Rs 18,668 Per season/per household
Basic seed production unit	➢ Total number of basic seed production unit: **1** ➢ Each basic seed production unit would be provided with one Grainage hall along with processing unit and required grainage equipment. ➢ Basic seed production unit would be owned by the collective. ➢ Each unit would produce 25,000 to 30, 000 basic seed ➢ Individual basic seed production unit would serve the requirement of 50 -60 Grainage entrepreneurs	➢ Availability of quality DFLs in field locations ➢ Strengthening of the value chain ➢ Dependency on government departments to self sufficiency
Building capacities of all participating families ,	➢ Hamlet level visioning / planning exercises, ➢ Technical training for productivity enhancement, ➢ Handholding support by Community Resource	➢ A cadre of community based service providers (CRP) provide on-field support to the rearing families and help them in credit

Goal:- The Goal of the project is to eliminate abject poverty of 60% of the project families by income enhancement of Rs. 10,000 – Rs. 18,700 per annum from Tasar on a sustainable basis		
Objective 1: Building capacities of all participating families in adopting skills to effectively and profitably engage in livelihood activities based on Tasar sericulture **Objective 2**: Introduction of improved technologies and practices to push the productivity frontiers for accelerated growth in Tasar Sector **Objective 3**: Strengthening seed sector to eliminate the key supply constraint in Tasar sericulture **Objective 4**: Investment to create alternative market mechanisms to ensure fair prices for cocoons **Objective 5**: Promote Producers' collective to provide sustainable systems of services to producers **Objective 6**: Design development and dissemination		
Activities	**Outputs**	**Outcome**
	Persons (CRPs), on a day-to-day basis, ➢ Exposures for adopting improved practices, ➢ Selection and extensive training of CRPs. Reviewing effectiveness and providing and on-field support.	and market linkages ➢ 37 trained community resource persons providing technical support to 1,457 households on Tasar rearing activities ➢ 1,457 persons trained in take up Tasar rearing, of which ➢ 30 farmers trained on nursery raising, 40 trained nucleus seeds rearer's, 153 trained basic seed rearer's, 38 trained private graineurs and 1,264 trained commercial rearer's ➢ 1,495 Households in Improved agriculture and 299 Households in Vegetable cultivation will be trained
Promoting and nurturing Producer Institutions to ensure sustained availability of linkages and services for the participating families,	➢ Number of producers' collective: **2** ➢ Awareness building around the need to collectivize, ➢ Membership training to build a sense of ownership and to understand the accountability as a member, ➢ Exposure and training of the governing board members, ➢ Training and support to staff to effectively deliver the goods and services mandated by the organization.	➢ The self sustained District / Block level aggregations of the primary groups enable the producers to sustain their targeted standards of production. ➢ Interdependency
Market Support	➢ Design development in Tasar weaving clusters and its promotion ➢ Design competition among weavers ➢ Design competition among design student/ institutes	➢ Fair price to the silkworm rearer's against their produce ➢ Stabilization of yarn prices and create alternative marketing mechanisms

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 organization. The MIS would generate reports about farmer's individual engagement, SHG related parameters both at individual and institutional level, Livelihood activity parameters, CRPs engagement etc. Family level data is collected at a specific interval. 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 and reviewing 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 three levels – within PRADAN, in the community and by the executing/ coordinating agency and the different systems of reviewing are 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 sectoral 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 TVS level, in their weekly and monthly meeting respectively. At a later stage the producer collectives will also play a crucial role in review the process, performance and analyzing it. 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 farmers collective shall also keep track of the business data and present it to its governing board members and also the SHG federated structures. 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.

By executing/ coordinating agency: Central Silk Board being the executing/ coordinating agency shall coordinate with MORD in fund release, monitoring, mid-term review and mid-course corrections, if required. CSB also ensures timely fund release to PIAs besides extending required technical support in training personnel involved in project implementation (Trainers Training Programme), identification of the Consultants/ Resource persons/ Trainers for the various training programmes, supply of entire nucleus seed as per the allocations for the state concerned, coordination with Line Departments viz., State Rural Development Department & Forest Department and disease monitoring besides overall management at project level.

7.3 Project Monitoring

State Level monitoring committee (SLMC): The SLMC would closely monitor the implementation of the project by reviewing the overall physical and financial progress every quarter and suggest necessary actions for successful implementation of the Project, as per yearly work plans.

The SLMC will be headed by the CEO of SRLM and they will constitute the committee at state level.

State Level Technical Project Support Group: As the proposed projects intend to transfer the proven technologies evolved by research institutes in seed, pre-cocoon and post-cocoon sector, to address any technical issues raised during implementation of the projects, a State Level Technical Project Support Group is proposed under the project, which will be chaired by the Director/ Commissioner of Department of sericulture. The Director/ Commissioner would constitute the committee at state level.

Project Review Committee: A Project Review Committee is constituted at State level with the Secretary (Rural Development) of the state as the Chairman and the CEO of SRLM as Member Convener. The committee will be constituted by RD secretary at state level and they would monitor and periodically review the project..

Project Management Board: The Member Secretary of CSB would be the Chairperson of the Project Management Board (PMB) with the Scientist in-charge of the projects, Central Silk Board and the Project Coordinator as Member Convener of the PMB. The PMB would take care of linkages amongst the MKSP Projects in Tasar sector in other states besides review and revision of the project after mid-term evaluation, if required.

7.4 Role of the organizations involved

Central Silk Board (CSB): Being the Coordinating Agency, shall coordinate with MORD in fund release, monitoring, mid-term review and mid-course corrections, if required. CSB also ensures timely fund release of its share to PIA besides extending required technical support in training personnel involved in project implementation (Trainers Training Programme), identification of the Consultants/ Resource persons/ Trainers for the various training programmes, finalizing the training material/modules, supply of entire nucleus seed and basic seed.

It shall also coordinate with State Sericulture Department and disease monitoring besides overall management at project level. Project Management Board (PMB), chaired by the Member Secretary, CSB and convened by the Project Coordinator, will decide on overall project management aspects including revisions, if required. CSB would also finalize the composition and ToR for the PMB. CSB also facilitate dovetailing the CDP scheme in coordination with DOS to bridge the gaps, if any. The Project Coordinator will coordinate all project related issues with the Ministry of Rural Development, Central Silk Board & its nested units and PIA/FIA besides other line departments. PMB will also suggest on the innovative components to be incorporated under the project within 5% of the project grant by proposing to SLMC or utilizing the savings, as the case may be.

Project Officer nominated preferably from the field office (BSM&TC) of BTSSO in the state or from the Regional Office of CSB in the state, would coordinate the required technological inputs in pre-cocoon sector (from field office of CTR&TI, Ranchi or the main institute), seed sector (in consultation with BTSSO, Bilaspur) and in post-cocoon sector (from field/ Zonal office of CSTRI, Bangalore or the main institute). The Project Officer will provide technologies for adoption under the projects in consultation with the institutes concerned besides assist in programming, implementing and supervision of the and report specific feedback to the SLMC, STPSG and

PMB, for reviewing and planning future strategies for implementation, in co-ordination with the Regional Office of CSB, SRLM and the Department of Sericulture. CSB will also take disease containment measures in association with DOS, PIA and other stakeholders. It would also plan and train various categories of project participants under ISDS directly or involving PIA concerned.

Department of Sericulture (DOS): State Level Technical Project Support Group (STPSG) would be chaired by the Commissioner of Sericulture of the Project State, which would advise FIA/PIA on the additional requirements, dovetailing of schemes, up scaling etc. The Group would also discuss on dovetailing/ converging other schemes to upscale and also to improve income augmenting efforts besides suggesting revisions if any to PMB. DOS shall help in front loading the project by making available the infrastructure and resources for nucleus and basic seed rearing, cocoon storage and cocoon conversion to the community besides nominating an officer to coordinate in implementation of the project directly and also by involving its District Officers in the project districts. Besides, DOS shall actively involved in beneficiary identification/ base line survey wherever necessary, Purchase Committee, training of stake holders, extension support, joint verification, marketing, wherever possible.

State Rural Livelihood Mission (SRLM): State Level Monitoring Committee (SLMC) will be headed by CEO/Mission Director, SRLM involving CSB, DOS, PIA/FIA, Dept. of Tribal Welfare, Forests, Agriculture and others, as the case may be. CEO, SRLM would also facilitate constitution of Project Review Committee headed by the Secretary-RD and will be the Member Convener of the same. Both CSB and the PIA will keep CEO, SRLM updated on the releases to PIA and also on physical and financial progress to be furnished to MoRD. SRLM would help PIA in SHG formation, as it is mandatory under MKSP. It would also facilitate convergence with other development schemes like MGNREGS, RKVY etc., to leverage the effect of the project grant available under the project.

Project Implementing Agency (PIA): PIA will enter into MoU with the CSB and implementation of the project components as per the project document/ revisions if any, will be the sole responsibility of PIA. PIA will place the indent to both MoRD and CSB as per the stipulated guidelines and terms, receive funds for project implementation or in turn release it to FIA/ District level units of PIA (team) for field level implementation. It will be the responsibility of PIA to ensure proper utilisation of funds at project level. As much as possible, the programme funds will be released to the group/ cluster level accounts by PIA. It will also ensure submission of the physical and financial progress reports in the prescribed formats to both MoRD and CSB besides uploading required information and data in the project website. It will also coordinate with the DOS/SRLM for utilising the existing infrastructure and also to dovetail with available schemes so as to upscale the project coverage. Proper care to complement efforts of the DOS in covering all the stakeholders in the project cluster will be taken by PIA so that all the stakeholders in the clusters will be involved to get a visible impact. At the same time, PIA shall arrange for engaging the required number of person power at grass root and cluster level, in view of the number of families to be covered, terrain and coverage of the project area, issues pertaining to land procurement, pre-requisites to take up soil treatments/ plantation and creation of infrastructure activities under the Project, so that envisaged project objectives and output can be achieved.

Other Line Departments: Department of Rural Development, Forests, Agriculture, Tribal Welfare etc., would play an equally crucial role to augment efforts of CSB, SRLM, DOS and PIA, wherever possible, which would be facilitated by DOS/ SRLM or CSB. While Department of Rural Development would help in convergence with MGNREGS and also CFT (Cluster Facilitation Team) in applicable blocks for augmentation of Tasar host plants, Dept. of Forests will help to address the issues related to access to food plants in the fringe forest area, supply of seedlings of host plants for plantation, census of Tasar host plants, including Tasar host plants under their afforestation programmes etc. Tribal Welfare Dept., through its agencies like ITDA would facilitate convergence with their existing schemes so as to scale up the coverage.

Chapter 8: Budget

Project Investments/ Support requested under MKSP, Rationale

The project plans to invest primarily in creation of large scale Tasar Sericulture based livelihood in Odisha, including broad basing the community based organization with women at centre stage, sustainable agricultural practices, developing a cadre of community based resource persons and helping the producers in market access. The financial investments are proposed around these activities as described below. To create the appropriate budget heads, the budget is segregated into three broad heads

8.1. Project Investments and Support requested under MKSP

The Project is proposed to be implemented at an outlay of **Rs. 555.999 Lakh** for a period of three years. Of this, people's own contribution and credit mobilization is Rs. 77.967 Lakh. A total grant assistance of **Rs. 478.033 Lakh** is budgeted under the project of which **Rs. 358.586 Lakh** (75% of the grant component) is being sought as Government of India share under the MKSP and the remaining **Rs. 119.447 Lakh** (25% of the grant component) will be shared by the Central Silk Board from its CDP schemes.

8.2. Rationale for the various line items related to Proposed Action

Unit costs of various project components/ activities are detailed as separate annexure. Various items of unit costs are arrived due to field experience under the recently concluded special SGSY projects in Bihar and Jharkhand, ongoing NABARD-TDF projects and MKSP Tasar projects in other Tasar producing states besides the flagship programme of the CSB i.e., Catalytic Development Programme (CDP).

Further, the unit costs of some of the activities might be modified as per the field needs and also unit costs for new and innovative components will be finalized by PIA and the Coordinating Agency from time to time. PIA and Coordinating Agency will have liberty to modify the unit costs of various components/ activities as per field requirements and request of PIA based on the feasibility without change in MoRD share and decreasing the total number of beneficiaries to be covered.

8.3. Analysis of main cost components along with sub components along with timeline

A. **Programme Cost:** In this budget head mainly the cost incurred at the community level, creation of resources and infrastructure is taken into account. The budget line items are as follows:-

I. Raising of Block Plantation: Large tracts of Upland available in the project district, which are highly degraded and it is very difficult for a poor tribal family to convert it in to agricultural purpose. These waste lands which have been remained idle for over few decades are day by day degrading and converting in to ravine and large gully. These lands are also suitable for raising *Arjuna* plantation, which would also conserve the soil and moisture in the area besides generating income for the individual family up to Rs.15000/- every year 3rd year onwards for over five decades. Under the project it is proposed to support plantation families with 0.7 hac *Arjuna* plantation to individual family to cover the entire wasteland. The spacing of plants would be 10ft x 6ft to promote umbrella

shaped canopy with sufficient quantity of foliage so that the maximum number of worms could be hosted by single tree. Wider spacing would also help to take up inter-crop in good quality of soils, besides mechanization.

While the plantations would be ready to take up Tasar silkworm rearing only after three years, will be utilized for nucleus and basic seed rearing in the 3rd year itself and transfer the adult worms to forest plants. From 4th year onwards, they would conduct the entire rearing on these plantations. Each rearer with 0.7 ha is estimated to support 200 dfls per year per crop. Taking into consideration the location of the existing block plantations and as far as possible, the PIA would try to organize raising the block plantation in such a manner that all the BSM&TCs in the Project state shall have no difficulty in selecting Adopted Seed Rearer's and the Seed Rearer's to whom the dfls are supplied by them and are situated in their proximity for close monitoring the ASR's and SR's rearing. The activity do include

- Raising nursery to support seedlings to the plantation
- Cattle proof trench in the upland (CPTs) for protection of plantation
- Soil and moisture conservation for better growth in the stipulated time period
- Intercropping for better return from per unit area as well as to ensure better growth of the plantation
- Maintenance of Tasar host plants

New plantations would be in private lands in the one district of Odisha (wherever possible) and the forest patches which are vacant after allocating (usufructs rights or tree *patta*) to forest dweller's with their participation since beginning. Even the land patches under control of DOS/ created by DOS would also be considered for the purpose. All the existing plantations (block plantations and natural host flora) to be utilized under the project would be provided with inputs for their maintenance and considered as new plantation depending on population of Tasar host plants in absence of availability of private/govt./forest lands for taking up new plantations. The plantation having provisions in the budget line item will be preferred in the project period through MGNREGA convergence. In case of such convergence the amount allocated for raising of plantation could be used for increasing the number of rearer's and project specified other related activities as per the sanction cost norms applicable.

The particular budget head will includes Cost of raising the plantation, cost of nursery raising, cost of soil conservation works in the plantation, maintenance of plantation, Fertilizer & medicine cost, Cost of intercropping and all the related activities and payments needed to raise the plantation.

II. Assistance to Nucleus Seed Rearer's (NSR): In order to organize production and supply of required basic seed in the project area, it is proposed to organize Nucleus seed rearing through NSRs and procure the seed cocoons for preservation and processing. As already indicated earlier, a progressive Tasar rearer with consistent good record in production of Tasar cocoons and having well maintained Tasar host plants in fringe forest areas or block plantation of 0.7 ha. (When it is productive during 4th year) would be selected as a Nucleus Seed Rearer. These NSRs would be conducting the rearing of Nucleus seed during the commercial crop season.

Other than capital investments towards rearing equipment to the seed rearer's, the fund allocated for the purpose will be maintained as Community Investment Fund and utilized for procurement of quality silkworm seed till the seed requirement is addressed locally. However, caution will be taken by PIA to maintain the Community Investment Fund as non-erodable and modalities of utilization can be decided by Producer Groups/CFs and in consultation with PIA/CA.

The budget head include cost incurred for the supply of rearing equipments, supply of inputs for maintenance of plantation, assistance in the rearing, cost of insurances of the crop and the rearer.

III. Assistance to Basic Seed Rearer's (SR): Basic Seed Rearer's (BSRs) is organized for production of seed cocoons for production of commercial dfls in the project area by private Graineurs. As already indicated earlier, a progressive Tasar rearer with consistent good record in production of Tasar cocoons and having well maintained Tasar host plants in fringe forest areas or block plantation of 0.7 ha. (When it is productive during 4th year) would be selected as a Basic Seed Rearer. These BSRs would be conducting the rearing of basic seed during the seed crop season and the selected seed cocoons would be procured by private Graineurs concerned. Private Graineurs in consultation with the PIA shall select the BSRs.

This include cost incurred for the supply of rearing equipments, supply of inputs for maintenance of plantation, assistance in the rearing, cost of insurances of the crop and the rearer.

IV. Assistance to Commercial Rearer's (CR): Commercial Rearer's, mostly tribal people live in the forest or in the fringe areas though, agriculture is the primary livelihood of these people. However considering the low yields of paddy in the rain fed areas, people look for additional livelihood opportunities. Tasar rearing starts after the agriculture season i.e., September, when the opportunity cost of labor remains low. The rearer's traditionally rear Tasar silkworms in the nearby forest areas.

All the commercial rearer's would be extended project assistance of 90% for supply of chawkie rearing equipment and about 12.6% of the cost of Tasar silkworm rearing. The commercial crops are proposed to be insured against vagaries of nature besides extending insurance cover to the beneficiaries under personal accident policy and their hut under fire and theft policy. 100% of the premium amount would be met from the project cost (CSB & MORD) for a period of two years and later they would be facilitate to continue from their earnings.

As there is no provision for inputs for maintenance, the fund allocated under the component will be maintained as Community Investment Fund and utilized for supply of inputs for maintenance of plantations/ natural host flora for one year as one time grant and also procurement of quality silkworm seed till the seed requirement is addressed locally. However, caution will be taken by PIA to maintain the Community Investment Fund as non-erodable and modalities of utilization can be decided by Producer Groups/CFs and in consultation with PIA/CA.

This budget head includes cost incurred for the supply of rearing equipments, assistance in the rearing, cost of insurances of the crop and the rearer.

V. Assistance to Private Graineurs: For silkworm rearing activity, the rearer's require an assured supply of DFLs or seed material. Grainage enterprises are set up in the villages for improving the supply of DFLs to the commercial rearer's and increasing area of coverage under Tasar silkworm rearing. The project proposes to set up Grainage enterprise units in the Tasar rearing villages, involving local youths as the entrepreneurs. Each such Grainage would have a production capacity of 5000-6000 DFLs per cycle to cater to the needs of 25 to 30 rearer's, in the surrounding villages. A typical Grainage will have 300 sq.ft areas and provided with equipments such as microscopes necessary for identifying and eliminating diseases and for ensuring good hatching in Tasar eggs. Besides this, the Grainage would have wooden furniture and other accessories to facilitate easy operation. These identified private Graineurs would be trained in latest seed production technology, moth examination techniques for production and supply of quality disease free seed to commercial rearer's besides management inputs for successful running of the enterprise, in maintaining records etc. The PIA would organize these Graineurs in to suitable manageable groups and assist in establishing backward and forward linkages with the seed rearer's for seed cocoon and commercial rearer's for selling the commercial dfls.

Preparatory work for Grainage starts from March onwards like Identification of Grainage owners, Construction of Grainage building, Procurement and supply of Grainage equipment, Supplying consumables, Procurement of Seed cocoon etc. While, existing private Grainage would be supported for construction of additional infrastructure viz., ovi-position, egg washing etc., repair of existing building, and equipment supply besides part of the working capital. New set of Graineurs would also be promoted with all the required support.PIA/CA will decide on requirements of clubbing the provisions available to 3-4 private Grainage units to establish low cost Grainage houses recommended by BTSSO so that these structures can also be utilized for production of basic seed to meet entire seed requirement locally. The fund available towards working capital will be maintained as Community Investment Fund and utilized for procurement of seed cocoons including production incentives and maintained as non-erodable fund with modalities of utilization decided by Producer Groups/CFs and in consultation with PIA/CA.

Though the private Grainage is being promoted as individual enterprise with ownership of *TVS*/ activity group/ SHG, Producer Groups/CFs and in consultation with PIA/CA may decide to transfer the unit to suitable producer or *TVS* if the quality standards and other requirements are not met by the private Graineurs concerned. Hence, the private Graineurs will enter in to such an agreement with *TVS*/ activity group/Producer Group/SHG. In such cases; he/she would be entitled to receive back the personal investments made for the purpose besides the rent for the premises from the Community Investment Fund.

This budget head includes the cost incurred in the construction of the Grainage building, cost of equipments for the grainage, Working capital for the grainage activity and cost for the consumables used in the grainage activity.

VI. Assistance to Basic Seed Production Units (BSPU): There is a great deal of demand for Basic seeds in the project areas to increase dfl production by at least 50%, over and above the current scale of production. Further, the recent initiatives of to expand Tasar sericulture in Tasar producing states would need additional supply of basic seed. It is thus clear that any further expansion of Tasar sericulture would require augmenting the supply of basic seeds.

However, in view of the requirement of basic seed in large quantities, in addition to supply of basic seed from BSM&TC in the state, it is proposed to establish one Basic Seed Production Units (BSPUs) under private sector, which was successfully tried under Special SGSY Project in Bihar and Jharkhand.

As this is a large construction work therefore activity needs to be completed before the monsoon. Preferably it should be constructed in between January to June then only it is going to help the Tasar families to catch the season. The unit will be constructed in a major Tasar producing cluster. Though it is proposed to establish BSPU at one place, based on requirement and availability of infrastructure the provisions may be utilized to strengthen the existing infrastructure available with DOS and other organizations private or public to be utilized by the community for basic seed production. PIA would explore the possibility of getting community land for the purpose so that it would be in the vicinity of the villages and plantation for better monitoring. Else it would take support from DOS to establish in govt. land. They would also be utilized during the commercial Grainage for better utilization of the infrastructure. Invariably, the unit will be the property of the producer groups and the working capital would be maintained as Community Investment Fund which will be maintained as non-erodable fund for purchase of seed cocoons and also for payment of production incentives, engaging moth testers etc., as the case may be.

This budget head includes the cost incurred in the construction of the Grainage building & its wall, cost of equipments for the grainage, Working capital for the grainage activity and cost for the consumables used in the grainage activity.

VII. Assistance to Rearer's Collectives: To start with, the beneficiaries covered under the project will be brought together under the Rearer's groups/ SHGs. These Beneficiaries/groups/SHGs shall be formed in to a *Tasar Vikas Samity* (*TVS*) or any other formal/ informal body. The main objective of these entities is to bring effective coordination among the rearer's, provide support services and ensure timely procurement of cocoons at remunerative prices. In addition, these cooperatives shall establish forward linkage with the reeler's groups and other marketing agencies for effective sale of cocoons at remunerative prices and also with the financial institution for credit facilities to meet working capital requirement. These entities would receive all the technical inputs and other support from the PIA. The Rearer's' Collectives shall be managed by the members themselves in accordance to prevailing acts, rules and regulations of the state. This would not only facilitate easy communication but also help in jointly protecting the forests, coordinating plantation activities and planning rearing etc.

Large-scale development of sub-sectors would require strong institutions, which would spearhead and sustain initiatives for the development of the sub-sector in the long run. Appropriate policy formulation, raising financial resources for investments, creating demands for research and extension, vigorous promotion of products, protecting the entitlements of the producers and widening stakeholder base are some of the important areas in Tasar Sericulture, which would require strong initiatives. Creation of appropriate organizations, designed to enhance the stake and control of the producers, would be a major challenge in the context of Tasar as majority of the producers come from the tribal and backward communities and are financially very poor. However, it is envisaged to create relevant institutions with the involvement of the producers and enabling them to exert their control in the long run.

If PIA can accommodate the requirements of the collective by allocating any other suitable building from DOS or other public or private organization, the allocation can well be utilized for other essential purposes including the inputs for maintenance of natural host flora for commercial rearing and rearing helpful activities, production incentives, advance towards cocoon procurement, disinfection sprays etc with community participation for better maintenance against agreement and maintained as non-erodable Community Investment Fund.

This budget head includes cost for the creation of the Cocoon storage and office facilities along with equipments and furniture cost for supporting the Rearer's collectives.

B. Human Resource Development cost: In this budget head mainly the cost incurred to build the capacity and skill at all the levels right from community to Community Resource Persons to different level functionaries of PRADAN will be catered. This includes cost of travel, boarding, lodging, honorarium to resource persons from community/ PIA/ CA/ others, stationery and training materials, hiring equipments and infrastructure for the training, printing and all other related costs to the training.

I. Technical Training of Project Personnel: This includes all the Costs related to the training of the personnel involved in the implementation of the project of the PIA.

II. Technical training of households for implementation of sericulture activities: This includes all the Costs related to the training to improve the technicalities of the community engaged in Tasar Sericulture activities. The training includes training of Nursery farmers, Nucleus Seed Rearer's, Basic Seed Rearer's, Private Graineurs, Commercial Rearer's and study tour & exposure visits of them.

III. Technical training for sectoral activities: This includes all the Costs related to the training to improve the technicalities of the community engaged in Sectoral activities. The training includes training in improved agriculture, Vegetable cultivation and study tour & exposure visits of them.

IV. Training of Community Resource Persons (CRPs) for extension of activities: This includes all the Costs related to the training to improve the technicalities of the Community Resource Persons (CRPs) engaged in extension of the Tasar Sericulture and other Sectoral activities. The training includes training in orientation on Tasar, Exposure to improved practices around Tasar Sericulture, Vegetable cultivation, improved agriculture and times to time their refresher training on technicalities.

V. On-field training/ handholding provided by CRPs to the Project Families: This includes all the Costs related to the on field training and handholding support given to the project families by the CRPs. The cost incurred to support the Tasar silkworm rearing, Tasar seed production, Establishment of Community Arjuna Nursery & raising of plantation, improved agriculture and Vegetable cultivation.

VI. Institution building of Producer Collectives: This includes all the Costs related to the training of the producers to build their institution. The cost incurred for the trainings to build membership, build leadership, building of Governance structure and their exposure to different areas to build their perspective will be catered.

VII. Nurturing of New Self-Help-Groups (SHGs): This includes all the Costs related to the training of the SHGs. The cost incurred for the trainings to build their membership, build leadership, Book keeping

& maintenance of accounts, Livelihood visioning of the SHG members and their exposure to different areas to build their perspective around clusters and federation structures will be catered.

VIII. Trainers Training Programme: To generate motivated trained resource personnel and extension workers who could catalyze developmental process, one trainer's Training Programme will be organized in the state. CSB shall organize the programme covering managerial, technical, co-operative, motivational and behavioral aspects with an objective of successful implementation of the project. The key filed personnel associated with the implementation of the project from PIA, BTSSO, CTR&TI and CSTRI would be participated. The resource person will be from CSB, PRADAN and some external and programme will be anchored and co-ordinated by Central Silk Board. This includes all the Costs related to the training of the trainers involved in the implementation of the project.

While all the categories of training have to be carried out as per the envisage targets, PIA will have flexibility to modify the unit costs within various categories subject to covering the envisaged number of trainings and the persons trained, within the total allocation under the HRD, in consultation with PIA/CA. Additionally, PIA may also use the services of Subject Matter Specialist (SMS) to provide technical support to the beneficiaries at different stages of the Tasar Sericulture activity.

PIA may also propose specific requirements of capacity building in core Tasar activities for CRPs, Producer Groups and Opinion makers across the value chain to CSB so as to consider under ISDS of CSB.

C. Programme support Implementation cost: In this budget head mainly the cost incurred to support the programme, workshops, *Krishi mela*s, disease monitoring, documentation and evaluation, consultancy & advocacy, monitoring and the cost for the implementation will be catered:-

I. Publicity and Extension: It is envisaged to take up Publicity & Extension Activities especially for technology dissemination and community models etc with the help of different Resource organization like CSB, consultants and PRADAN's internal pool.

The CA/ PIA may organize seminars/ Workshops at a suitable place in the project area to share experience, exchange ideas and concepts among the project personnel. The Scientists/ technocrats from CSB may also be invited to educate know-how of the latest innovations/ developments made in the technology etc., and also to provide answers to the field problems, if any. On this occasion, the best commercial rearer, reeler, spinner, weaver, SHG etc. may be awarded.

The PIA may also bring out pamphlets/ brochures in the local language or language neutral material of the improved technology practices of different activities so that the beneficiaries would easily understand the technology/ processes involved. Further, all the beneficiaries may be issued with a pass book to record details of rearing, activities undertaken, assistance and credit received, income generated, repayment of credit, insurance particulars etc.

It is proposed to organize Farmers' day to bring the extension officials, progressive beneficiaries, group leaders, providers of support services etc., to a common platform to exchange the experience, ideas, problems and concepts etc. PIA will have the flexibility to organize more number of similar events including *vichar ghoshti* for benefit of the beneficiaries within the total allocation.

This includes all the Costs related to the publicity of the project and its extension. All type of costs for organizing Workshops & seminars, printing of passbook, pamphlets and other resource materials and cost to organize *Krishi melas* will be incurred under this head.

II. Design Development & Product Diversification: In order to increase producer's share locally nominal provisions have been made for design development and product diversification. Help of CSTRI, Bangalore, CTR&TI, Ranchi, Designers, and production houses like Eco-Tasar pvt ltd etc will be sought for the purpose.

This includes all the Costs related to the in the purpose of development of designs and diversification of the Tasar based products taking help from mentioned and other resource agencies.

III. Disease monitoring: In order to encourage quality regime and to ensure higher productivity to achieve desired income levels, joint disease monitoring is proposed which will be taken care by BTSSO unit of Central Silk Board.

The system of monitoring disease has been introduced during the course of special SGSY projects implementation in the states of Bihar and Jharkhand. It has very positive impact in the control of diseases at the village level and enhanced the productivity by 20%.

The constituted committee of Central Silk Board would regularly visit the field and assesses the disease level in the field at all levels right from the preparation of rearing field to the harvest of cocoons and also assessing the incidence of diseases. The committee will also visit the grainage at the time of cocoon preservation and grainage operation for conducting a disease assessment and guidance.

The committee will be headed by BTSSO and other members of the committee will be representative from PRADAN, Department and Community Based organization.

In order to encourage quality regime and to ensure higher productivity to achieve desired income levels, joint disease monitoring is proposed which will be taken care by BTSSO unit in the State.

This includes all the Costs related to the monitoring of the diseases of the different sectoral activities.

IV. Documentation and Evaluation: PIA will decide on the various requirements viz., base line survey, documentation of gender sensitization, impact assessment, case studies, public disclosure etc. in consultation with Coordinating agency.

This includes all the Costs related to periodic evaluation of the project and documentation of the best practices & learning's.

V. Consultancy and Advocacy: Funds under this component may be utilized for hiring services of experts from resource organizations for drafting various training modules, MoU/ agreements for operating CFCs/ CIF/ infrastructure from state, case studies, baseline/ impact studies etc. The

resource person can be from within PRADAN, technical institutions like CSB, Research organizations like C-DAC and other essential support hired.

This includes all the Costs related to the support hired for the better implementation of the project, research & development around new ideas & constraints, policy level advocacy works and all other works which require external support to build on the project and to overcome the issues.

D. **Project administrative expenses:** Cost of Institutional overheads and other expenses for the project management at state level and district level offices. Project Administration costs amounting to 5% of the project grant shall be released to PIA for project administrating above field level. This includes salary and travel costs of staff engaged in administrating the project. It also includes printing & stationary, Office Rent, Electricity, Office Furniture & Office Equipments etc.

E. **Technology Extension and Business Development support:** This includes all the Costs related to the project implementation at block and village level. Project Implementation costs amounting to 5% of the project grant shall be released to PIA for project implementation at field level. This includes salary and travel costs of staff engaged in administrating the project. It also includes printing & stationary, Office Rent, Electricity, Office Furniture & Office Equipments etc.

F. **Project Monitoring cost:** This includes all the Costs related to the periodic monitoring of the project at different levels by the fund routing/ coordinating agency (CSB).

The timeline of each component and sub component is mentioned in the activity chart in chapter-5, implementation schedule and will generally be followed accordingly.

8.4 Analysis and Benchmarks of proposed cost

The MKSP budget component analysis is provided in the accompanying table. The proposed project seeks support of Rs.18012 per family under the project out of which Rs.945 for the organizational administrative expenses and similar amounting for implementing the project at field level. The various component specific budget, budget share and cost per family are given below.

MKSP Component Analysis	Total Budget (Lakh Rs)	Rs/ Family
Cost of Total project cost per family	556.00	20,949.48
Cost of Contribution (Self contribution & Credit) cost per Family	77.97	2,937.70
Cost of Total grant support per Family	478.03	18,011.78
Cost of Program cost per Family	284.68	10,726.28
Cost of Human resource Development per Family	77.74	2,929.15
Cost of Programme support Implementation cost per Family	58.00	2,185.38
Cost of Project administrative expenses per Family	25.07	944.50
Cost of Technology Extension and Business Development support per Family	25.07	944.50
Cost of Project Monitoring cost per Family	7.48	281.96

Multi-State Project under MKSP-NTFP for Promotion of Large Scale Tasar Sericulture Based Livelihoods in ODISHA

Year Wise Physical & Financial Phasing and Sharing Pattern

(Rs. in Lakhs)

Sl. No.	Component/ Activity	Unit	PHYSICAL				Unit cost (Lakhs)	FINANCIAL				SHARING PATTERN				Project Grant
			Yr-1	Yr-2	Yr-3	Total		Yr-1	Yr-2	Yr-3	Total Cost	Credit	Benefi-ciary	MORD	CSB	
1	**Raising of Block plantation**															
1.1	Raising Tasar host plantation	Hac.	40	40	-	80	0.44742	17.90	17.90	-	35.79	-	7.12	9.48	19.20	28.68
1.2	Maintenance of host plant - 1st Year	Hac.	-	40	40	80	0.07016	-	2.81	2.81	5.61	-	0.80	4.81	-	4.81
1.3	Maintenance of host plant - 2nd Year	Hac.	-	-	80	80	0.09386	-	-	7.51	7.51	-	1.14	6.37	-	6.37
Sub-total								**17.90**	**20.70**	**10.32**	**48.92**	**-**	**9.05**	**20.66**	**19.20**	**39.86**
2	**Assistance to Nucleus Seed Rearer's**															
2.1	Supply of rearing equipments	No.	-	40	-	40	0.06100	-	2.44	-	2.44	-	0.24	0.98	1.22	2.20
2.2	Supply of inputs for maintenance of block plantation	Hac.	-	28	28	56	0.09450	-	2.65	2.65	5.29	-	0.37	2.28	2.65	4.92
2.3	Assistance for Tasar silkworm rearing	No.	-	40	40	80	0.02388	-	0.96	0.96	1.91	0.96	0.18	0.27	0.50	0.77
2.4	Crop insurance	Dfls	-	8,000	8,000	16,000	0.00002	-	0.16	0.16	0.33	-	-	0.16	0.16	0.33
2.5	Rearer's insurance	No.	-	40	40	80	0.00031	-	0.01	0.01	0.02	-	-	0.01	0.01	0.02
Sub-total								**-**	**6.22**	**3.78**	**9.99**	**0.96**	**0.79**	**3.71**	**4.54**	**8.25**
3	**Assistance to Basic Seed Rearer's**															
3.1	Supply of rearing equipments	No.	61	60	32	153	0.06100	3.72	3.66	1.95	9.33	-	0.92	3.75	4.67	8.42
3.2	Supply of inputs for maintenance of block plantation	Hac	43	85	74	202	0.09450	4.04	8.00	7.01	19.05	-	1.33	8.20	9.53	17.72
3.3	Assistance for Tasar silkworm rearing	No.	61	121	124	306	0.02388	1.46	2.89	2.96	7.31	3.67	0.67	1.05	1.91	2.96
3.4	Crop insurance	Dfls	12,200	24,200	24,800	61,200	0.00002	0.23	0.46	0.47	1.16	-	-	0.58	0.58	1.16
3.5	Rearer's insurance	No.	61	121	124	306	0.00031	0.02	0.04	0.04	0.09	-	-	0.05	0.05	0.09
Sub-total								**9.46**	**15.05**	**12.43**	**36.94**	**3.67**	**2.92**	**13.62**	**16.73**	**30.35**
4	**Assistance to Commercial Rearer's**															

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(Rs. in Lakhs)

Sl. No.	Component/ Activity	Unit	PHYSICAL				Unit cost (Lakhs)	FINANCIAL				SHARING PATTERN				Project Grant
			Yr-1	Yr-2	Yr-3	Total		Yr-1	Yr-2	Yr-3	Total Cost	Credit	Benefi-ciary	MORD	CSB	
4.1	Supply of rearing equipment	No.	500	500	264	1,264	0.06100	30.50	30.50	16.12	77.12	-	7.59	37.93	31.61	69.54
4.2	Assistance for Tasar silkworm rearing	No.	500	1,000	1,029	2,529	0.02003	10.01	20.03	20.60	50.63	30.34	13.91	6.38	-	6.38
4.3	Crop insurance	Dfls	100,000	200,000	205,714	505,714	0.00002	2.04	4.08	4.19	10.31	-	-	5.15	5.15	10.31
4.4	Rearer's insurance	No.	500	1,000	1,029	2,529	0.00031	0.16	0.31	0.32	0.78	-	-	0.39	0.39	0.78
Sub-total								**42.71**	**54.91**	**41.23**	**138.85**	**30.34**	**21.49**	**49.86**	**37.15**	**87.01**
5	**Assistance to Private Graineurs**															
5.1	Construction of grainage building	No.	15	15	8	38	1.00000	15.03	15.03	7.94	38.00	-	1.90	15.20	20.90	36.10
5.2	Supply of grainage equipment	No.	15	15	8	38	0.42000	6.31	6.31	3.34	15.96	-	-	7.98	7.98	15.96
5.3	Working capital	No.	15	15	8	38	0.35000	5.26	5.26	2.78	13.30	3.80	2.28	0.57	6.65	7.22
5.4	Grainage consumables	No.	15	30	31	76	0.03000	0.45	0.90	0.93	2.28	0.38	0.38	0.76	0.76	1.52
Sub-total								**27.05**	**27.50**	**14.99**	**69.54**	**4.18**	**4.56**	**24.51**	**36.29**	**60.80**
6	**Assistance to Basic Seed Production Units**															
6.1	Construction of grainage building	No.	1	-	-	1	36.34250	36.34	-	-	36.34	-	-	33.83	2.51	36.34
6.2	Supply of grainage equipment	No.	1	-	-	1	2.94400	2.94	-	-	2.94	-	-	2.94	-	2.94
6.3	Working capital	No.	1	-	-	1	2.97500	2.98	-	-	2.98	-	-	2.98	-	2.98
6.4	Grainage consumables	No.	1	1	2	4	0.10000	0.10	0.10	0.20	0.40	-	-	0.38	0.02	0.40
Sub-total								**42.36**	**0.10**	**0.20**	**42.66**	**-**	**-**	**40.13**	**2.53**	**42.66**
7	**Assistance to Rearer's Collectives**															
7.1	Cocoon storage facilities	No.	1	1	-	2	7.50000	7.50	7.50	-	15.00	-	-	12.00	3.00	15.00
7.2	Common facilities	No.	1	1	-	2	0.37300	0.37	0.37	-	0.75	-	-	0.75	-	0.75
Sub-total								**7.87**	**7.87**	**-**	**15.75**	**-**	**-**	**12.75**	**3.00**	**15.75**
Sub- Total (1-7)								**147.35**	**132.35**	**82.94**	**362.64**	**39.15**	**38.81**	**165.23**	**119.45**	**284.68**
8	**Human Resource Development**															
8.1.	Technical training of project personnel	No.	3	2	-	5	0.10000	**0.30**	**0.20**	**-**	**0.50**	**-**	**-**	**0.50**	**-**	**0.50**
8.2.	**Technical training for Project Families for implementation of sericulture activities**															

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(Rs. in Lakhs)

Sl. No.	Component/ Activity	Unit	PHYSICAL				Unit cost (Lakhs)	FINANCIAL				SHARING PATTERN				Project Grant
			Yr-1	Yr-2	Yr-3	Total		Yr-1	Yr-2	Yr-3	Total Cost	Credit	Benefi-ciary	MORD	CSB	
8.2.1	Nursery farmers	No.	15	15	-	30	0.00978	0.15	0.15	-	0.29	-	-	0.29	-	0.29
8.2.2	Nucleus Seed Rearer's	No.	-	40	-	40	0.01139	-	0.46	-	0.46	-	-	0.46	-	0.46
8.2.3	Basic Seed Rearer's	No.	61	60	32	153	0.00949	0.58	0.57	0.30	1.45	-	-	1.45	-	1.45
8.2.4	Private Graineurs	No.	15	15	8	38	0.12506	1.88	1.88	0.99	4.75	-	-	4.75	-	4.75
8.2.5	Commercial Reare'rs	No.	500	500	264	1,264	0.00690	3.45	3.45	1.82	8.72	-	-	8.72	-	8.72
8.2.6	Study tour/ Exposure visit	No.	148	158	76	381	0.00943	1.39	1.49	0.72	3.60	-	-	3.60	-	3.60
Sub-total								**7.45**	**7.99**	**3.84**	**19.27**	**-**	**-**	**19.27**	**-**	**19.27**
8.3.	**Technical training for sectoral activities**															
8.3.1	Improved Agriculture	No.	576	615	304	1,495	0.00328	1.89	2.02	1.00	4.90	-	-	4.90	-	4.90
8.3.2	vegetable cultivation	No.	115	123	61	299	0.00219	0.25	0.27	0.13	0.65	-	-	0.65	-	0.65
8.3.3	Exposure of Project families to improved practices	No.	144	154	76	374	0.00345	0.50	0.53	0.26	1.29	-	-	1.29	-	1.29
Sub-total								**2.64**	**2.81**	**1.39**	**6.84**	**-**	**-**	**6.84**	**-**	**6.84**
8.4.	**Training of Community Resource Persons (CRPs) for extension of activities**															
8.4.1	Orientation and training on Tasar	No.	14	15	8	37	0.25530	3.68	3.92	1.94	9.54	-	-	9.54	-	9.54
8.4.2	Exposure to improved practices	No.	7	8	4	19	0.01553	0.11	0.12	0.06	0.29	-	-	0.29	-	0.29
8.4.3	Technical and Refresher Training	No.	14	15	8	37	0.01277	0.18	0.20	0.10	0.48	-	-	0.48	-	0.48
Sub-total								**3.98**	**4.24**	**2.10**	**10.31**	**-**	**-**	**10.31**	**-**	**10.31**
8.5.	**On-field training / handholding provided by CRPs to the Project Families**															
8.5.1	Tasar Silkworm Rearing	No.	561	600	296	1,457	0.00719	4.03	4.31	2.13	10.47	-	-	10.47	-	10.47
8.5.2	Tasar Seed Production	No.	15	15	8	38	0.00863	0.13	0.13	0.07	0.33	-	-	0.33	-	0.33
8.5.3	Est. of Community Arjuna Nursery	No.	15	15	-	30	0.01438	0.22	0.22	-	0.43	-	-	0.43	-	0.43
8.5.4	Improved agriculture	No.	576	615	304	1,495	0.00431	2.48	2.65	1.31	6.45	-	-	6.45	-	6.45

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(Rs. in Lakhs)

Sl. No.	Component/ Activity	Unit	PHYSICAL				Unit cost (Lakhs)	FINANCIAL				SHARING PATTERN				Project Grant
			Yr-1	Yr-2	Yr-3	Total		Yr-1	Yr-2	Yr-3	Total Cost	Credit	Benefi-ciary	MORD	CSB	
8.5.5	Vegetable cultivation	No.	115	123	61	299	0.00207	0.24	0.25	0.13	0.62	-	-	0.62	-	0.62
Sub-total								**7.10**	**7.56**	**3.64**	**18.30**	**-**	**-**	**18.30**	**-**	**18.30**
8.6.	**Institution building of Producer Collectives**															
8.6.1	Membership training	No.	576	615	304	1,495	0.00690	3.97	4.24	2.10	10.32	-	-	10.32	-	10.32
8.6.2	Leadership/ Governance Training	No.	29	31	15	75	0.02588	0.75	0.80	0.39	1.93	-	-	1.93	-	1.93
8.6.3	Exposure of Board members & staff	No.	6	7	3	17	0.05175	0.33	0.36	0.18	0.87	-	-	0.87	-	0.87
Sub-total								**5.05**	**5.40**	**2.67**	**13.12**	**-**	**-**	**13.12**	**-**	**13.12**
8.7.	**Nurturing of New Self-Help-Groups (SHGs)**															
8.7.1	Membership training (25%)	No.	144	154	76	374	0.00460	0.66	0.71	0.35	1.72	-	-	1.72	-	1.72
8.7.2	Leadership Training (20%)	No.	115	123	61	299	0.00700	0.81	0.86	0.43	2.09	-	-	2.09	-	2.09
8.7.3	Book keeping Training	No.	43	46	23	112	0.00840	0.36	0.39	0.19	0.94	-	-	0.94	-	0.94
8.7.4	Exposure of Cluster & Federation Members	No.	13	14	7	34	0.00640	0.08	0.09	0.04	0.22	-	-	0.22	-	0.22
8.7.5	Livelihood Visioning (50%)	No.	288	308	152	748	0.00190	0.55	0.58	0.29	1.42	-	-	1.42	-	1.42
Sub-total								**2.46**	**2.63**	**1.30**	**6.39**	**-**	**-**	**6.39**	**-**	**6.39**
8.8.	**Trainers Training programme**	LS	1	-	-	1	3.00000	**3.00**	**-**	**-**	**3.00**	**-**	**-**	**3.00**	**-**	**3.00**
Sub- Total (8.1-8.8)								**31.98**	**30.83**	**14.93**	**77.74**	**-**	**-**	**77.74**	**-**	**77.74**
9	**Publicity and extension**															
9.1	Workshop/seminar	No.	1	-	1	2	4.00000	4.00	-	4.00	8.00	-	-	8.00	-	8.00
9.2	Printing passbook/pamphlets	LS			NA			2.00	1.00	-	3.00	-	-	3.00	-	3.00
9.3	Krishi mela		1	1	2	4	0.50000	0.50	0.50	1.00	2.00	-	-	2.00	-	2.00
Sub-total								**6.50**	**1.50**	**5.00**	**13.00**	**-**	**-**	**13.00**	**-**	**13.00**

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Year Wise Physical & Financial Phasing and Sharing Pattern

(Rs. in Lakhs)

Sl. No.	Component/ Activity	Unit	PHYSICAL				Unit cost (Lakhs)	FINANCIAL				SHARING PATTERN				Project Grant
			Yr-1	Yr-2	Yr-3	Total		Yr-1	Yr-2	Yr-3	Total Cost	Credit	Benefi-ciary	MORD	CSB	
10	**Disease monitoring**	LS	NA					**5.00**	**5.00**	**-**	**10.00**	**-**	**-**	**10.00**	**-**	**10.00**
11	**Design Development & Diversification**	LS	NA					**2.00**	**3.00**	**-**	**5.00**	**-**	**-**	**5.00**	**-**	**5.00**
12	**Documentation and evaluation**	LS	NA					**2.00**	**5.00**	**3.00**	**10.00**	**-**	**-**	**10.00**	**-**	**10.00**
13	**Consultancy & Advocacy**	LS	NA					5.00	10.00	5.00	**20.00**	**-**	**-**	**20.00**	**-**	**20.00**
14	**Technology Extension and Business Development support**	LS	NA					10.01	9.39	5.67	**25.07**	**-**	**-**	**25.07**	**-**	**25.07**
15	**Project administrative expenses**	LS	NA					10.01	9.39	5.67	**25.07**	**-**	**-**	**25.07**	**-**	**25.07**
16	**Project Monitoring cost**	LS	NA					3.00	2.82	1.66	**7.48**	**-**	**-**	**7.48**	**-**	**7.48**
Sub- Total (9-16)								**43.515**	**46.106**	**25.996**	**115.617**	**-**	**-**	**115.617**	**-**	**115.62**
GRAND TOTAL								**222.841**	**209.288**	**123.870**	**555.999**	**39.155**	**38.812**	**358.586**	**119.447**	**478.03**
Percentage to total financial outlay								**40.079**	**37.642**	**22.279**	**100.000**	**7.042**	**6.981**	**64.494**	**21.483**	**85.98**
Percentage to the Project assistance														**75.0**	**25.0**	**100.00**

ANNEXURES

Annexure-1

Project at a glance

1	Title		**Promotion of Large Scale Tasar Sericulture Based Livelihoods in Odisha**		
2	Project area	District	Kendujhar		
		Blocks	Banspal and Jhumpura		
3	Coordinating Agency		Central Silk Board, Min.of Textiles, Govt. of India		
4	Project Implementing Agency		PRADAN		
5	Total Project Cost (Rs. In Lakhs)		**555.999**		
6	Funding Pattern (Rs. in lakhs)		CREDIT & BENEFICIARY (Rs. in lakhs)	MORD (Rs. in lakhs)	CSB (Rs. in lakhs)
			77.967	358.586	119.447
	Sharing pattern (%)		14.02	64.49	21.48
			Cost/beneficiary (Rs)	%	
	Investment per Family		18,011.77	100.00	
	Cost of capacity building per Family		2,929.15	16.26	
	Cost of program cost per Family		10,726.28	59.55	
	Cost of Program support cost per Family		4,356.34	24.19	
7	Project Period		2013-14 to 2015-16 (Three years)		
8	Beneficiaries to be covered (Direct)				
	Nursery farmers		30		
	Nucleus Seed rearer's		40		
	Basic Seed rearer's		153		
	Commercial rearer's		1,264		
	Private Graineurs		38		
	Community Resource Persons		37		
	BSPU members (15 per unit)		15		
	Improved agriculture		1,495		
	Vegetable cultivation		299		
	Women SHG members		748		
	Indirect beneficiaries		381		
	Total Project Beneficiaries		2,654		
9	Infrastructure to be created				
a	Block plantation (Forest/ private/ revenue lands) (ha.)		80		
b	Regeneration of block plantation (ha.)		940		
c	Basic Seed Production Units (No.)		1		
d	Rearer's' Collective (No.)		2		
10	Project Output (during the Project period):				
	Tasar basic seed (Lakh dfls)		0.5		
	Tasar commercial seed (Lakh dfls)		4.15		
	Tasar Reeling Cocoons (Lakh Nos.)		265		
11	Value of the Project output (Lakh Rs.)		723.07		

Annexure-2

Promotion of Large Scale Tasar Sericulture Based Livelihoods in Odisha

Productivity norms

#	PARAMETERS	TASAR
1	Spacing/ number of plants in Tasar host plantation per ha.	
	Block plantation (3.0 m x 1.8m)	1,852
	Chawkie garden (1.8m x 1.8m)	3,086
	Block plantation with Chawkie garden (90:10)	1,975
2	Requirement of seedlings per ha. including 10% mortality	
	Block plantation (3.0 m x 1.8m)	2,037
	Chawkie garden (1.8m x 1.8m)	3,395
	Block plantation with Chawkie garden (90:10)	2,173
3	Number of seedlings/ *kisan* nursery	76,400
4	Cost of seed cocoons (Rs./ cocoon)	1
5	Cocoon. Dfl ratio (Basic seed cocoons to Comm.dfls)	4:1
	Cocoon. Dfl ratio (Nucleus seed cocoons to Basic seed)	5:1
6	Dfl : Dfl multiplication ratio	1:8
7	Extent of food plants per farmer (Ha.).	0.7
8	Average brushing per family (Dfls)	200
9	No. of crops/year/rearer	1
10	Insurance premium / 100 dfls (Rs.)@ 7% of sum assured	
	I crop	188.8
	II crop	203.8
	III crop	218.8
11	JPA with spouse / dependent (Rs.)	31
12	Cost of Tasar silkworm seed (Rs.)	6
13	Yield of cocoons / dfl (No.)	
	By Seed Rearer's	40
	By Adopted Seed Rearer's (BV)/ Commercial Rearer's	50
14	Yield of seed cocoons / dfl (No.) by seed rearer's	
	Bivoltine/ Trivoltine- I & II crop	32
15	Yield of raw silk / 1000 cocoons (kg.)	
	Bivoltine	1
	Trivoltine	0.65
	Average	0.75
16	Yield of spun silk from reeling waste / 1000 cocoons (Kg.)	
	Bivoltine	0.3
	Trivoltine	0.25
	Average	0.25
17	Yield of spun silk from pierced cocoons / 1000 cocoons (kg.)	0.8

Promotion of Large Scale Tasar Sericulture Based Livelihoods in Odisha

Productivity norms

#	PARAMETERS	TASAR
18	Average rate of reeling cocoons / '000 cocoons (Rs.)	
	Bivoltine	1,600
	Trivoltine	1,300
19	Raw silk production / mc./yr. (kg.)	40
20	Spun silk production /mc./yr. (kg.)	40
	No. of working days/ year	300
21	Avg. Rate/kg. raw silk (Rs.)	2,800
22	Avg. Rate/kg. spun silk (Rs.)	1,800

Activities	NSR	SR
Brushing / rearer /crop [dfl]	200	200
Selection of seed cocoons [%]	75%	80%
Preservation loss [%]	15%	---

Annexure-3

Year Wise Physical Phasing

Sl. No.	Component/ Activity	Unit	PHYSICAL			
			Yr-1	Yr-2	Yr-3	Total
1	**Raising of Block plantation**					
1.1	Raising Tasar host plantation	Hac.	40	40	-	80
1.2	Maintenance of host plant - 1st Year	Hac.	-	40	40	80
1.3	Maintenance of host plant - 2nd Year	Hac.	-	-	80	80
2	**Assistance to Nucleus Seed Rearer's**					
2.1	Supply of rearing equipments	No.	-	40	-	40
2.2	Supply of inputs for maintenance of block plantation	Hac.	-	28	28	56
2.3	Assistance for Tasar silkworm rearing	No.	-	40	40	80
2.4	Crop insurance	Dfls	-	8,000	8,000	16,000
2.5	Rearer's insurance	No.	-	40	40	80
3	**Assistance to Basic Seed Rearer's**					
3.1	Supply of rearing equipments	No.	61	60	32	153
3.2	Supply of inputs for maintenance of block plantation	Hac	43	85	74	202
3.3	Assistance for Tasar silkworm rearing	No.	61	121	124	306
3.4	Crop insurance	Dfls	12,200	24,200	24,800	61,200
3.5	Rearer's insurance	No.	61	121	124	306
4	**Assistance to Commercial Rearer's**					
4.1	Supply of rearing equipment	No.	500	500	264	1,264
4.2	Assistance for Tasar silkworm rearing	No.	500	1,000	1,029	2,529
4.3	Crop insurance	Dfls	100,000	200,000	205,714	505,714
4.4	Rearer's insurance	No.	500	1,000	1,029	2,529
5	**Assistance to Private Graineurs**					
5.1	Construction of grainage building	No.	15	15	8	38
5.2	Supply of grainage equipment	No.	15	15	8	38
5.3	Working capital	No.	15	15	8	38
5.4	Grainage consumables	No.	15	30	31	76
6	**Assistance to Basic Seed Production Units**					
6.1	Construction of grainage building	No.	1	-	-	1
6.2	Supply of grainage equipment	No.	1	-	-	1
6.3	Working capital	No.	1	-	-	1
6.4	Grainage consumables	No.	1	1	2	4
7	**Assistance to Rearer's Collectives**					
7.1	Cocoon storage facilities	No.	1	1	-	2
7.2	Common facilities	No.	1	1	-	2
8	**Human Resource Development**					
8.1.	Technical training of project personnel	No.	3	2	-	5
8.2.	**Technical training for Project Families for implementation of sericulture activities**					
8.2.1	Nursery farmers	No.	15	15	-	30
8.2.2	Nucleus Seed Rearer's	No.	-	40	-	40
8.2.3	Basic Seed Rearer's	No.	61	60	32	153
8.2.4	Private Graineurs	No.	15	15	8	38
8.2.5	Commercial Rearer's	No.	500	500	264	1,264
8.2.6	Study tour/ Exposure visit	No.	148	158	76	381

Year Wise Physical Phasing

Sl. No.	Component/ Activity	Unit	PHYSICAL			
			Yr-1	Yr-2	Yr-3	Total
8.3.	**Technical training for sectoral activities**					
8.3.1	Improved Agriculture	No.	576	615	304	1,495
8.3.2	vegetable cultivation	No.	115	123	61	299
8.3.3	Exposure of Project families to improved practices	No.	144	154	76	374
8.4.	**Training of Community Resource Persons (CRPs) for extension of activities**					
8.4.1	Orientation and training on Tasar	No.	14	15	8	37
8.4.2	Exposure to improved practices	No.	7	8	4	19
8.4.3	Technical and Refresher Training	No.	14	15	8	37
8.5.	**On-field training / handholding provided by CRPs to the Project Families**					
8.5.1	Tasar Silkworm Rearing	No.	561	600	296	1,457
8.5.2	Tasar Seed Production	No.	15	15	8	38
8.5.3	Est. of Community Arjuna Nursery	No.	15	15	-	30
8.5.4	Improved agriculture	No.	576	615	304	1,495
8.5.5	Vegetable cultivation	No.	115	123	61	299
8.6.	**Institution building of Producer Collectives**					
8.6.1	Membership training	No.	576	615	304	1,495
8.6.2	Leadership/ Governance Training	No.	29	31	15	75
8.6.3	Exposure of Board members & staff	No.	6	7	3	17
8.7.	**Nurturing of New Self-Help-Groups (SHGs)**					
8.7.1	Membership training (25%)	No.	144	154	76	374
8.7.2	Leadership Training (20%)	No.	115	123	61	299
8.7.3	Book keeping Training	No.	43	46	23	112
8.7.4	Exposure of Cluster & Federation Members	No.	13	14	7	34
8.7.5	Livelihood Visioning (50%)	No.	288	308	152	748
Sub-total						
8.8.	**Trainers Training programme**	LS	1	-	-	1
9	**Publicity and extension**					
9.1	Workshop/seminar	No.	1	-	1	2
9.2	*Krishi mela*		1	1	2	4

Annexure-4

Physical outlay at the end of the project

Sl. No.	Particulars	Unit	No.
1	Basic Seed Production Units	No.	1
2	Basic seed production	Lakh dfls	0.50
3	Private Graineurs	No.	38
	Basic seed rearer's	No.	153
	Nucleus seed rearer's	No.	40
4	Basic seed requirement	Lakh dfls	0.612
	Nucleus seed requirement	Lakh dfls	0.160
5	Silk worm rearer's- Commercial	No.	1264
6	Basic Seed cocoon production	Lakh nos.	24.48
7	Commercial dfl production	Lakh dfls	4.15
8	Reeling cocoon production	Lakh nos.	265

Annexure-5

Year Wise Physical and Financial Phasing

(Rs. in Lakhs)

Sl. No.	Component/ Activity	Unit	PHYSICAL				Unit cost (Lakhs)	FINANCIAL			
			Yr-1	Yr-2	Yr-3	Total		Yr-1	Yr-2	Yr-3	Total Cost
1	**Raising of Block plantation**										
1.1	Raising Tasar host plantation	Hac.	40	40	-	80	0.44742	17.90	17.90	-	35.79
1.2	Maintenance of host plant - 1st Year	Hac.	-	40	40	80	0.07016	-	2.81	2.81	5.61
1.3	Maintenance of host plant - 2nd Year	Hac.	-	-	80	80	0.09386	-	-	7.51	7.51
Sub-total								**17.90**	**20.70**	**10.32**	**48.92**
2	**Assistance to Nucleus Seed Rearer's**										
2.1	Supply of rearing equipments	No.	-	40	-	40	0.06100	-	2.44	-	2.44
2.2	Supply of inputs for maintenance of block plantation	Hac.	-	28	28	56	0.09450	-	2.65	2.65	5.29
2.3	Assistance for Tasar silkworm rearing	No.	-	40	40	80	0.02388	-	0.96	0.96	1.91
2.4	Crop insurance	Dfls	-	8,000	8,000	16,000	0.00002	-	0.16	0.16	0.33
2.5	Rearer's insurance	No.	-	40	40	80	0.00031	-	0.01	0.01	0.02
Sub-total								**-**	**6.22**	**3.78**	**9.99**
3	**Assistance to Basic Seed Rearer's**										
3.1	Supply of rearing equipments	No.	61	60	32	153	0.06100	3.72	3.66	1.95	9.33
3.2	Supply of inputs for maintenance of block plantation	Hac	43	85	74	202	0.09450	4.04	8.00	7.01	19.05
3.3	Assistance for Tasar silkworm rearing	No.	61	121	124	306	0.02388	1.46	2.89	2.96	7.31
3.4	Crop insurance	Dfls	12,200	24,200	24,800	61,200	0.00002	0.23	0.46	0.47	1.16
3.5	Rearer's insurance	No.	61	121	124	306	0.00031	0.02	0.04	0.04	0.09
Sub-total								**9.46**	**15.05**	**12.43**	**36.94**
4	**Assistance to Commercial Rearer's**										
4.1	Supply of rearing equipment	No.	500	500	264	1,264	0.06100	30.50	30.50	16.12	77.12
4.2	Assistance for Tasar silkworm rearing	No.	500	1,000	1,029	2,529	0.02003	10.01	20.03	20.60	50.63
4.3	Crop insurance	Dfls	100,000	200,000	205,714	505,714	0.00002	2.04	4.08	4.19	10.31
4.4	Rearer's insurance	No.	500	1,000	1,029	2,529	0.00031	0.16	0.31	0.32	0.78

Year Wise Physical and Financial Phasing

(Rs. in Lakhs)

Sl. No.	Component/ Activity	Unit	PHYSICAL				Unit cost (Lakhs)	FINANCIAL			
			Yr-1	Yr-2	Yr-3	Total		Yr-1	Yr-2	Yr-3	Total Cost
Sub-total								**42.71**	**54.91**	**41.23**	**138.85**
5	**Assistance to Private Graineurs**										
5.1	Construction of grainage building	No.	15	15	8	38	1.00000	15.03	15.03	7.94	38.00
5.2	Supply of grainage equipment	No.	15	15	8	38	0.42000	6.31	6.31	3.34	15.96
5.3	Working capital	No.	15	15	8	38	0.35000	5.26	5.26	2.78	13.30
5.4	Grainage consumables	No.	15	30	31	76	0.03000	0.45	0.90	0.93	2.28
Sub-total								**27.05**	**27.50**	**14.99**	**69.54**
6	**Assistance to Basic Seed Production Units**										
6.1	Construction of grainage building	No.	1	-	-	1	36.34250	36.34	-	-	36.34
6.2	Supply of grainage equipment	No.	1	-	-	1	2.94400	2.94	-	-	2.94
6.3	Working capital	No.	1	-	-	1	2.97500	2.98	-	-	2.98
6.4	Grainage consumables	No.	1	1	2	4	0.10000	0.10	0.10	0.20	0.40
Sub-total								**42.36**	**0.10**	**0.20**	**42.66**
7	**Assistance to Rearer's Collectives**										
7.1	Cocoon storage facilities	No.	1	1	-	2	7.50000	7.50	7.50	-	15.00
7.2	Common facilities	No.	1	1	-	2	0.37300	0.37	0.37	-	0.75
Sub-total								**7.87**	**7.87**	**-**	**15.75**
Sub- Total (1-7)								**147.35**	**132.35**	**82.94**	**362.64**
8	**Human Resource Development**										
8.1.	Technical training of project personnel	No.	3	2	-	5	0.10000	**0.30**	**0.20**	**-**	**0.50**
8.2.	**Technical training for Project Families for implementation of sericulture activities**										
8.2.1	Nursery farmers	No.	15	15	-	30	0.00978	0.15	0.15	-	0.29
8.2.2	Nucleus Seed Rearer's	No.	-	40	-	40	0.01139	-	0.46	-	0.46
8.2.3	Basic Seed Rearer's	No.	61	60	32	153	0.00949	0.58	0.57	0.30	1.45
8.2.4	Private Graineurs	No.	15	15	8	38	0.12506	1.88	1.88	0.99	4.75
8.2.5	Commercial Rearer's	No.	500	500	264	1,264	0.00690	3.45	3.45	1.82	8.72
8.2.6	Study tour/ Exposure visit	No.	148	158	76	381	0.00943	1.39	1.49	0.72	3.60
Sub-total								**7.45**	**7.99**	**3.84**	**19.27**
8.3.	**Technical training for sectoral activities**										
8.3.1	Improved Agriculture	No.	576	615	304	1,495	0.00328	1.89	2.02	1.00	4.90
8.3.2	vegetable cultivation	No.	115	123	61	299	0.00219	0.25	0.27	0.13	0.65

Year Wise Physical and Financial Phasing

(Rs. in Lakhs)

Sl. No.	Component/ Activity	Unit	PHYSICAL				Unit cost (Lakhs)	FINANCIAL			
			Yr-1	Yr-2	Yr-3	Total		Yr-1	Yr-2	Yr-3	Total Cost
8.3.3	Exposure of Project families to improved practices	No.	144	154	76	374	0.00345	0.50	0.53	0.26	1.29
Sub-total								**2.64**	**2.81**	**1.39**	**6.84**
8.4.	**Training of Community Resource Persons (CRPs) for extension of activities**										
8.4.1	Orientation and training on Tasar	No.	14	15	8	37	0.25530	3.68	3.92	1.94	9.54
8.4.2	Exposure to improved practices	No.	7	8	4	19	0.01553	0.11	0.12	0.06	0.29
8.4.3	Technical and Refresher Training	No.	14	15	8	37	0.01277	0.18	0.20	0.10	0.48
Sub-total								**3.98**	**4.24**	**2.10**	**10.31**
8.5.	**On-field training / handholding provided by CRPs to the Project Families**										
8.5.1	Tasar Silkworm Rearing	No.	561	600	296	1,457	0.00719	4.03	4.31	2.13	10.47
8.5.2	Tasar Seed Production	No.	15	15	8	38	0.00863	0.13	0.13	0.07	0.33
8.5.3	Est. of Community Arjuna Nursery	No.	15	15	-	30	0.01438	0.22	0.22	-	0.43
8.5.4	Improved agriculture	No.	576	615	304	1,495	0.00431	2.48	2.65	1.31	6.45
8.5.5	Vegetable cultivation	No.	115	123	61	299	0.00207	0.24	0.25	0.13	0.62
Sub-total								**7.10**	**7.56**	**3.64**	**18.30**
8.6.	**Institution building of Producer Collectives**										
8.6.1	Membership training	No.	576	615	304	1,495	0.00690	3.97	4.24	2.10	10.32
8.6.2	Leadership/ Governance Training	No.	29	31	15	75	0.02588	0.75	0.80	0.39	1.93
8.6.3	Exposure of Board members & staff	No.	6	7	3	17	0.05175	0.33	0.36	0.18	0.87
Sub-total								**5.05**	**5.40**	**2.67**	**13.12**
8.7.	**Nurturing of New Self-Help-Groups (SHGs)**										
8.7.1	Membership training (25%)	No.	144	154	76	374	0.00460	0.66	0.71	0.35	1.72
8.7.2	Leadership Training (20%)	No.	115	123	61	299	0.00700	0.81	0.86	0.43	2.09
8.7.3	Book keeping Training	No.	43	46	23	112	0.00840	0.36	0.39	0.19	0.94
8.7.4	Exposure of Cluster & Federation Members	No.	13	14	7	34	0.00640	0.08	0.09	0.04	0.22
8.7.5	Livelihood Visioning (50%)	No.	288	308	152	748	0.00190	0.55	0.58	0.29	1.42
Sub-total								**2.46**	**2.63**	**1.30**	**6.39**
8.8.	**Trainers Training programme**	LS	1	-	-	1	3.00000	**3.00**	**-**	**-**	**3.00**
Sub- Total (8.1-8.8)								**31.98**	**30.83**	**14.93**	**77.74**
9	**Publicity and extension**										
9.1	Workshop/seminar	No.	1	-	1	2	4.00000	4.00	-	4.00	8.00

Year Wise Physical and Financial Phasing

(Rs. in Lakhs)

Sl. No.	Component/ Activity	Unit	PHYSICAL				Unit cost (Lakhs)	FINANCIAL			
			Yr-1	Yr-2	Yr-3	Total		Yr-1	Yr-2	Yr-3	Total Cost
9.2	Printing passbook/pamphlets	LS	NA					2.00	1.00	-	3.00
9.3	*Krishi mela*		1	1	2	4	0.50000	0.50	0.50	1.00	2.00
Sub-total								**6.50**	**1.50**	**5.00**	**13.00**
10	**Disease monitoring**	LS	NA					**5.00**	**5.00**	**-**	**10.00**
11	**Design Development & Diversification**	LS	NA					**2.00**	**3.00**	**-**	**5.00**
12	**Documentation and evaluation**	LS	NA					**2.00**	**5.00**	**3.00**	**10.00**
13	**Consultancy & Advocacy**	LS	NA					5.00	10.00	5.00	**20.00**
14	**Technology Extension and Business Development support**	LS	NA					10.01	9.39	5.67	**25.07**
15	**Project administrative expenses**	LS	NA					10.01	9.39	5.67	**25.07**
16	**Project Monitoring cost**	LS	NA					3.00	2.82	1.66	**7.48**
Sub- Total (9-16)								**43.515**	**46.106**	**25.996**	**115.617**
GRAND TOTAL								**222.841**	**209.288**	**123.870**	**555.999**
Percentage to total financial outlay								**40.079**	**37.642**	**22.279**	**100.000**

MKSP Component Analysis	Total Budget (Lakh Rs)	Rs/ Family
Cost of Total project cost per family	556.00	20,949.48
Cost of Contribution (Self contribution & Credit) cost per Family	77.97	2,937.70
Cost of Total grant support per Family	478.03	18,011.78
Cost of Program cost per Family	284.68	10,726.28
Cost of Human resource Development per Family	77.74	2,929.15
Cost of Programme support Implementation cost per Family	58.00	2,185.38
Cost of Project administrative expenses per Family	25.07	944.50
Cost of Technology Extension and Business Development support per Family	25.07	944.50
Cost of Project Monitoring cost per Family	7.48	281.96

Annexure-6

Year wise Phasing of Financial outlay and Sharing pattern

(Rs. in Lakhs)

Sl. No.	Component/ Activity	Unit	Unit cost (Lakhs)	FINANCIAL				SHARING PATTERN				Project Grant
				Yr-1	Yr-2	Yr-3	Total Cost	Credit	Benefi-ciary	MORD	CSB	
1	**Raising of Block plantation**											
1.1	Raising Tasar host plantation	Hac.	0.44742	17.90	17.90	-	35.79	-	7.12	9.48	19.20	28.68
1.2	Maintenance of host plant - 1st Year	Hac.	0.07016	-	2.81	2.81	5.61	-	0.80	4.81	-	4.81
1.3	Maintenance of host plant - 2nd Year	Hac.	0.09386	-	-	7.51	7.51	-	1.14	6.37	-	6.37
Sub-total				**17.90**	**20.70**	**10.32**	**48.92**	**-**	**9.05**	**20.66**	**19.20**	**39.86**
2	**Assistance to Nucleus Seed Rearer's**											
2.1	Supply of rearing equipments	No.	0.06100	-	2.44	-	2.44	-	0.24	0.98	1.22	2.20
2.2	Supply of inputs for maintenance of block plantation	Hac.	0.09450	-	2.65	2.65	5.29	-	0.37	2.28	2.65	4.92
2.3	Assistance for Tasar silkworm rearing	No.	0.02388	-	0.96	0.96	1.91	0.96	0.18	0.27	0.50	0.77
2.4	Crop insurance	Dfls	0.00002	-	0.16	0.16	0.33	-	-	0.16	0.16	0.33
2.5	Rearer's insurance	No.	0.00031	-	0.01	0.01	0.02	-	-	0.01	0.01	0.02
Sub-total				**-**	**6.22**	**3.78**	**9.99**	**0.96**	**0.79**	**3.71**	**4.54**	**8.25**
3	**Assistance to Basic Seed Rearer's**											
3.1	Supply of rearing equipments	No.	0.06100	3.72	3.66	1.95	9.33	-	0.92	3.75	4.67	8.42
3.2	Supply of inputs for maintenance of block plantation	Hac	0.09450	4.04	8.00	7.01	19.05	-	1.33	8.20	9.53	17.72
3.3	Assistance for Tasar silkworm rearing	No.	0.02388	1.46	2.89	2.96	7.31	3.67	0.67	1.05	1.91	2.96
3.4	Crop insurance	Dfls	0.00002	0.23	0.46	0.47	1.16	-	-	0.58	0.58	1.16
3.5	Rearer's insurance	No.	0.00031	0.02	0.04	0.04	0.09	-	-	0.05	0.05	0.09
Sub-total				**9.46**	**15.05**	**12.43**	**36.94**	**3.67**	**2.92**	**13.62**	**16.73**	**30.35**
4	**Assistance to Commercial Rearer's**											
4.1	Supply of rearing equipment	No.	0.06100	30.50	30.50	16.12	77.12	-	7.59	37.93	31.61	69.54
4.2	Assistance for Tasar silkworm rearing	No.	0.02003	10.01	20.03	20.60	50.63	30.34	13.91	6.38	-	6.38

Year wise Phasing of Financial outlay and Sharing pattern

(Rs. in Lakhs)

Sl. No.	Component/ Activity	Unit	Unit cost (Lakhs)	FINANCIAL				SHARING PATTERN				Project Grant
				Yr-1	Yr-2	Yr-3	Total Cost	Credit	Benefi-ciary	MORD	CSB	
4.3	Crop insurance	Dfls	0.00002	2.04	4.08	4.19	10.31	-	-	5.15	5.15	10.31
4.4	Rearer's insurance	No.	0.00031	0.16	0.31	0.32	0.78	-	-	0.39	0.39	0.78
Sub-total				**42.71**	**54.91**	**41.23**	**138.85**	**30.34**	**21.49**	**49.86**	**37.15**	**87.01**
5	**Assistance to Private Graineurs**											
5.1	Construction of grainage building	No.	1.00000	15.03	15.03	7.94	38.00	-	1.90	15.20	20.90	36.10
5.2	Supply of grainage equipment	No.	0.42000	6.31	6.31	3.34	15.96	-	-	7.98	7.98	15.96
5.3	Working capital	No.	0.35000	5.26	5.26	2.78	13.30	3.80	2.28	0.57	6.65	7.22
5.4	Grainage consumables	No.	0.03000	0.45	0.90	0.93	2.28	0.38	0.38	0.76	0.76	1.52
Sub-total				**27.05**	**27.50**	**14.99**	**69.54**	**4.18**	**4.56**	**24.51**	**36.29**	**60.80**
6	**Assistance to Basic Seed Production Units**											
6.1	Construction of grainage building	No.	36.34250	36.34	-	-	36.34	-	-	33.83	2.51	36.34
6.2	Supply of grainage equipment	No.	2.94400	2.94	-	-	2.94	-	-	2.94	-	2.94
6.3	Working capital	No.	2.97500	2.98	-	-	2.98	-	-	2.98	-	2.98
6.4	Grainage consumables	No.	0.10000	0.10	0.10	0.20	0.40	-	-	0.38	0.02	0.40
Sub-total				**42.36**	**0.10**	**0.20**	**42.66**	**-**	**-**	**40.13**	**2.53**	**42.66**
7	**Assistance to Rearer's Collectives**											
7.1	Cocoon storage facilities	No.	7.50000	7.50	7.50	-	15.00	-	-	12.00	3.00	15.00
7.2	Common facilities	No.	0.37300	0.37	0.37	-	0.75	-	-	0.75	-	0.75
Sub-total				**7.87**	**7.87**	**-**	**15.75**	**-**	**-**	**12.75**	**3.00**	**15.75**
Sub- Total (1-7)				**147.35**	**132.35**	**82.94**	**362.64**	**39.15**	**38.81**	**165.23**	**119.45**	**284.68**
8	**Human Resource Development**											
8.1.	Technical training of project personnel	No.	0.10000	**0.30**	**0.20**	**-**	**0.50**	**-**	**-**	**0.50**	**-**	**0.50**
8.2.	**Technical training for Project Families for implementation of sericulture activities**											
8.2.1	Nursery farmers	No.	0.00978	0.15	0.15	-	0.29	-	-	0.29	-	0.29
8.2.2	Nucleus Seed Rearer's	No.	0.01139	-	0.46	-	0.46	-	-	0.46	-	0.46
8.2.3	Basic Seed Rearer's	No.	0.00949	0.58	0.57	0.30	1.45	-	-	1.45	-	1.45
8.2.4	Private Graineurs	No.	0.12506	1.88	1.88	0.99	4.75	-	-	4.75	-	4.75
8.2.5	Commercial Rearer's	No.	0.00690	3.45	3.45	1.82	8.72	-	-	8.72	-	8.72
8.2.6	Study tour/ Exposure visit	No.	0.00943	1.39	1.49	0.72	3.60	-	-	3.60	-	3.60

Year wise Phasing of Financial outlay and Sharing pattern

(Rs. in Lakhs)

Sl. No.	Component/ Activity	Unit	Unit cost (Lakhs)	FINANCIAL				SHARING PATTERN				Project Grant
				Yr-1	Yr-2	Yr-3	Total Cost	Credit	Benefi-ciary	MORD	CSB	
Sub-total				**7.45**	**7.99**	**3.84**	**19.27**	**-**	**-**	**19.27**	**-**	**19.27**
8.3.	**Technical training for sectoral activities**											
8.3.1	Improved Agriculture	No.	0.00328	1.89	2.02	1.00	4.90	-	-	4.90	-	4.90
8.3.2	vegetable cultivation	No.	0.00219	0.25	0.27	0.13	0.65	-	-	0.65	-	0.65
8.3.3	Exposure of Project families to improved practices	No.	0.00345	0.50	0.53	0.26	1.29	-	-	1.29	-	1.29
Sub-total				**2.64**	**2.81**	**1.39**	**6.84**	**-**	**-**	**6.84**	**-**	**6.84**
8.4.	**Training of Community Resource Persons (CRPs) for extension of activities**											
8.4.1	Orientation and training on Tasar	No.	0.25530	3.68	3.92	1.94	9.54	-	-	9.54	-	9.54
8.4.2	Exposure to improved practices	No.	0.01553	0.11	0.12	0.06	0.29	-	-	0.29	-	0.29
8.4.3	Technical and Refresher Training	No.	0.01277	0.18	0.20	0.10	0.48	-	-	0.48	-	0.48
Sub-total				**3.98**	**4.24**	**2.10**	**10.31**	**-**	**-**	**10.31**	**-**	**10.31**
8.5.	**On-field training / handholding provided by CRPs to the Project Families**											
8.5.1	Tasar Silkworm Rearing	No.	0.00719	4.03	4.31	2.13	10.47	-	-	10.47	-	10.47
8.5.2	Tasar Seed Production	No.	0.00863	0.13	0.13	0.07	0.33	-	-	0.33	-	0.33
8.5.3	Est. of Community Arjuna Nursery	No.	0.01438	0.22	0.22	-	0.43	-	-	0.43	-	0.43
8.5.4	Improved agriculture	No.	0.00431	2.48	2.65	1.31	6.45	-	-	6.45	-	6.45
8.5.5	Vegetable cultivation	No.	0.00207	0.24	0.25	0.13	0.62	-	-	0.62	-	0.62
Sub-total				**7.10**	**7.56**	**3.64**	**18.30**	**-**	**-**	**18.30**	**-**	**18.30**
8.6.	**Institution building of Producer Collectives**											
8.6.1	Membership training	No.	0.00690	3.97	4.24	2.10	10.32	-	-	10.32	-	10.32
8.6.2	Leadership/ Governance Training	No.	0.02588	0.75	0.80	0.39	1.93	-	-	1.93	-	1.93
8.6.3	Exposure of Board members & staff	No.	0.05175	0.33	0.36	0.18	0.87	-	-	0.87	-	0.87
Sub-total				**5.05**	**5.40**	**2.67**	**13.12**	**-**	**-**	**13.12**	**-**	**13.12**
8.7.	**Nurturing of New Self-Help-Groups (SHGs)**											
8.7.1	Membership training (25%)	No.	0.00460	0.66	0.71	0.35	1.72	-	-	1.72	-	1.72
8.7.2	Leadership Training (20%)	No.	0.00700	0.81	0.86	0.43	2.09	-	-	2.09	-	2.09
8.7.3	Book keeping Training	No.	0.00840	0.36	0.39	0.19	0.94	-	-	0.94	-	0.94
8.7.4	Exposure of Cluster & Federation Members	No.	0.00640	0.08	0.09	0.04	0.22	-	-	0.22	-	0.22

Year wise Phasing of Financial outlay and Sharing pattern

(Rs. in Lakhs)

Sl. No.	Component/ Activity	Unit	Unit cost (Lakhs)	FINANCIAL				SHARING PATTERN				Project Grant
				Yr-1	Yr-2	Yr-3	Total Cost	Credit	Benefi-ciary	MORD	CSB	
8.7.5	Livelihood Visioning (50%)	No.	0.00190	0.55	0.58	0.29	1.42	-	-	1.42	-	1.42
Sub-total				**2.46**	**2.63**	**1.30**	**6.39**	**-**	**-**	**6.39**	**-**	**6.39**
8.8.	**Trainers Training programme**	LS	3.00000	**3.00**	**-**	**-**	**3.00**	**-**	**-**	**3.00**	**-**	**3.00**
Sub- Total (8.1-8.8)				**31.98**	**30.83**	**14.93**	**77.74**	**-**	**-**	**77.74**	**-**	**77.74**
9	**Publicity and extension**											
9.1	Workshop/seminar	No.	4.00000	4.00	-	4.00	8.00	-	-	8.00	-	8.00
9.2	Printing passbook/pamphlets	LS		2.00	1.00	-	3.00	-	-	3.00	-	3.00
9.3	*Krishi mela*		0.50000	0.50	0.50	1.00	2.00	-	-	2.00	-	2.00
Sub-total				**6.50**	**1.50**	**5.00**	**13.00**	**-**	**-**	**13.00**	**-**	**13.00**
10	**Disease monitoring**	LS		**5.00**	**5.00**	**-**	**10.00**	**-**	**-**	**10.00**	**-**	**10.00**
11	**Design Development & Diversification**	LS		**2.00**	**3.00**	**-**	**5.00**	**-**	**-**	**5.00**	**-**	**5.00**
12	**Documentation and evaluation**	LS		**2.00**	**5.00**	**3.00**	**10.00**	**-**	**-**	**10.00**	**-**	**10.00**
13	**Consultancy & Advocacy**	LS		5.00	10.00	5.00	**20.00**	**-**	**-**	**20.00**	**-**	**20.00**
14	**Technology Extension and Business Development support**	LS		10.01	9.39	5.67	**25.07**	**-**	**-**	**25.07**	**-**	**25.07**
15	**Project administrative expenses**	LS		10.01	9.39	5.67	**25.07**	**-**	**-**	**25.07**	**-**	**25.07**
16	**Project Monitoring cost**	LS		3.00	2.82	1.66	**7.48**	**-**	**-**	**7.48**	**-**	**7.48**
Sub- Total (9-16)				**43.515**	**46.106**	**25.996**	**115.617**	**-**	**-**	**115.617**	**-**	**115.62**
GRAND TOTAL				**222.841**	**209.288**	**123.870**	**555.999**	**39.15**	**38.812**	**358.586**	**119.447**	**478.03**
Percentage to total financial outlay				**40.079**	**37.642**	**22.279**	**100.000**	**7.042**	**6.981**	**64.494**	**21.483**	**85.98**
Percentage to the Project assistance										**75.0**	**25.0**	**100.00**

MKSP Component Analysis	Total Budget (Lakh Rs)	Rs/ Family
Cost of Total project cost per family	556.00	20,949.48
Cost of Contribution (Self contribution & Credit) cost per Family	77.97	2,937.70
Cost of Total grant support per Family	478.03	18,011.78
Cost of Program cost per Family	284.68	10,726.28
Cost of Human resource Development per Family	77.74	2,929.15
Cost of Programme support Implementation cost per Family	58.00	2,185.38
Cost of Project administrative expenses per Family	25.07	944.50
Cost of Technology Extension and Business Development support per Family	25.07	944.50
Cost of Project Monitoring cost per Family	7.48	281.96

Annexure-7

First Year Physical and Financial phasing

(Rs. in Lakhs)

Sl. No.	Component/ Activity	Unit	PHYSICAL	Unit cost (Lakhs)	FINANCIAL	SHARING PATTERN Yr-1				Project Grant
			Yr-1		Yr-1	Credit	Benefi-ciary	MORD	CSB	
1	**Raising of Block plantation**									
1.1	Raising Tasar host plantation	Hac.	40	0.44742	17.90	-	3.56	4.74	9.60	14.34
1.2	Maintenance of host plant - 1st Year	Hac.	-	0.07016	-	-	-	-	-	-
1.3	Maintenance of host plant - 2nd Year	Hac.	-	0.09386	-	-	-	-	-	-
Sub-total					**17.90**	**-**	**3.56**	**4.74**	**9.60**	**14.34**
2	**Assistance to Nucleus Seed Rearer's**									
2.1	Supply of rearing equipments	No.	-	0.06100	-	-	-	-	-	-
2.2	Supply of inputs for maintenance of block plantation	Hac.	-	0.09450	-	-	-	-	-	-
2.3	Assistance for Tasar silkworm rearing	No.	-	0.02388	-	-	-	-	-	-
2.4	Crop insurance	Dfls	-	0.00002	-	-	-	-	-	-
2.5	Rearer's insurance	No.	-	0.00031	-	-	-	-	-	-
Sub-total					**-**	**-**	**-**	**-**	**-**	**-**
3	**Assistance to Basic Seed Rearer's**									
3.1	Supply of rearing equipments	No.	61	0.06100	3.72	-	0.37	1.49	1.86	3.36
3.2	Supply of inputs for maintenance of block plantation	Hac	43	0.09450	4.04	-	0.28	1.74	2.02	3.75
3.3	Assistance for Tasar silkworm rearing	No.	61	0.02388	1.46	0.73	0.13	0.21	0.38	0.59
3.4	Crop insurance	Dfls	12,200	0.00002	0.23	-	-	0.12	0.12	0.23
3.5	Rearer's insurance	No.	61	0.00031	0.02	-	-	0.01	0.01	0.02
Sub-total					**9.46**	**0.73**	**0.78**	**3.56**	**4.38**	**7.95**
4	**Assistance to Commercial Rearer's**									
4.1	Supply of rearing equipment	No.	500	0.06100	30.50	-	3.00	15.00	12.50	27.50
4.2	Assistance for Tasar silkworm rearing	No.	500	0.02003	10.01	6.00	2.75	1.26	-	1.26
4.3	Crop insurance	Dfls	100,000	0.00002	2.04	-	-	1.02	1.02	2.04
4.4	Rearer's insurance	No.	500	0.00031	0.16	-	-	0.08	0.08	0.16
Sub-total					**42.71**	**6.00**	**5.75**	**17.36**	**13.60**	**30.96**
5	**Assistance to Private Graineurs**									
5.1	Construction of grainage building	No.	15	1.00000	15.03	-	0.75	6.01	8.27	14.28

First Year Physical and Financial phasing

(Rs. in Lakhs)

Sl. No.	Component/ Activity	Unit	PHYSICAL	Unit cost (Lakhs)	FINANCIAL	SHARING PATTERN Yr-1				Project Grant
			Yr-1		Yr-1	Credit	Benefi-ciary	MORD	CSB	
5.2	Supply of grainage equipment	No.	15	0.42000	6.31	-	-	3.16	3.16	6.31
5.3	Working capital	No.	15	0.35000	5.26	1.50	0.90	0.23	2.63	2.86
5.4	Grainage consumables	No.	15	0.03000	0.45	0.08	0.08	0.15	0.15	0.30
Sub-total					**27.05**	**1.58**	**1.73**	**9.54**	**14.20**	**23.74**
6	**Assistance to Basic Seed Production Units**									
6.1	Construction of grainage building	No.	1	36.34250	36.34	-	-	33.83	2.51	36.34
6.2	Supply of grainage equipment	No.	1	2.94400	2.94	-	-	2.94	-	2.94
6.3	Working capital	No.	1	2.97500	2.98	-	-	2.98	-	2.98
6.4	Grainage consumables	No.	1	0.10000	0.10	-	-	0.09	0.01	0.10
Sub-total					**42.36**	**-**	**-**	**39.85**	**2.52**	**42.36**
7	**Assistance to Rearer's Collectives**									
7.1	Cocoon storage facilities	No.	1	7.50000	7.50	-	-	6.00	1.50	7.50
7.2	Common facilities	No.	1	0.37300	0.37	-	-	0.37	-	0.37
Sub-total					**7.87**	**-**	**-**	**6.37**	**1.50**	**7.87**
Sub- Total (1-7)					**147.35**	**8.31**	**11.82**	**81.42**	**45.80**	**127.22**
8	**Human Resource Development**									
8.1.	Technical training of project personnel	No.	3	0.10000	**0.30**	-	-	0.30	-	**0.30**
8.2.	**Technical training for Project Families for implementation of sericulture activities**									
8.2.1	Nursery farmers	No.	15	0.00978	0.15	-	-	0.15	-	0.15
8.2.2	Nucleus Seed Rearer's	No.	-	0.01139	-	-	-	-	-	-
8.2.3	Basic Seed Rearer's	No.	61	0.00949	0.58	-	-	0.58	-	0.58
8.2.4	Private Graineurs	No.	15	0.12506	1.88	-	-	1.88	-	1.88
8.2.5	Commercial Rearer’s	No.	500	0.00690	3.45	-	-	3.45	-	3.45
8.2.6	Study tour/ Exposure visit	No.	148	0.00943	1.39	-	-	1.39	-	1.39
Sub-total					**7.45**	-	-	7.45	-	**7.45**
8.3.	**Technical training for sectoral activities**									
8.3.1	Improved Agriculture	No.	576	0.00328	1.89	-	-	1.89	-	1.89
8.3.2	vegetable cultivation	No.	115	0.00219	0.25	-	-	0.25	-	0.25
8.3.3	Exposure of Project families to improved practices	No.	144	0.00345	0.50	-	-	0.50	-	0.50
Sub-total					**2.64**	**-**	**-**	**2.64**	**-**	**2.64**

First Year Physical and Financial phasing

(Rs. in Lakhs)

Sl. No.	Component/ Activity	Unit	PHYSICAL	Unit cost (Lakhs)	FINANCIAL	SHARING PATTERN Yr-1				Project Grant
			Yr-1		Yr-1	Credit	Benefi-ciary	MORD	CSB	
8.4.	**Training of Community Resource Persons (CRPs) for extension of activities**									
8.4.1	Orientation and training on Tasar	No.	14	0.25530	3.68	-	-	3.68	-	3.68
8.4.2	Exposure to improved practices	No.	7	0.01553	0.11	-	-	0.11	-	0.11
8.4.3	Technical and Refresher Training	No.	14	0.01277	0.18	-	-	0.18	-	0.18
Sub-total					**3.98**	**-**	**-**	**3.98**	**-**	**3.98**
8.5.	**On-field training / handholding provided by CRPs to the Project Families**									
8.5.1	Tasar Silkworm Rearing	No.	561	0.00719	4.03	-	-	4.03	-	4.03
8.5.2	Tasar Seed Production	No.	15	0.00863	0.13	-	-	0.13	-	0.13
8.5.3	Est. of Community Arjuna Nursery	No.	15	0.01438	0.22	-	-	0.22	-	0.22
8.5.4	Improved agriculture	No.	576	0.00431	2.48	-	-	2.48	-	2.48
8.5.5	Vegetable cultivation	No.	115	0.00207	0.24	-	-	0.24	-	0.24
Sub-total					**7.10**	**-**	**-**	**7.10**	**-**	**7.10**
8.6.	**Institution building of Producer Collectives**									
8.6.1	Membership training	No.	576	0.00690	3.97	-	-	3.97	-	3.97
8.6.2	Leadership/ Governance Training	No.	29	0.02588	0.75	-	-	0.75	-	0.75
8.6.3	Exposure of Board members & staff	No.	6	0.05175	0.33	-	-	0.33	-	0.33
Sub-total					**5.05**	**-**	**-**	**5.05**	**-**	**5.05**
8.7.	**Nurturing of New Self-Help-Groups (SHGs)**									
8.7.1	Membership training (25%)	No.	144	0.00460	0.66	-	-	0.66	-	0.66
8.7.2	Leadership Training (20%)	No.	115	0.00700	0.81	-	-	0.81	-	0.81
8.7.3	Book keeping Training	No.	43	0.00840	0.36	-	-	0.36	-	0.36
8.7.4	Exposure of Cluster & Federation Members	No.	13	0.00640	0.08	-	-	0.08	-	0.08
8.7.5	Livelihood Visioning (50%)	No.	288	0.00190	0.55	-	-	0.55	-	0.55
Sub-total					**2.46**	**-**	**-**	**2.462**	**-**	2.46
8.8.	**Trainers Training programme**	LS	1	3.00000	**3.00**	**-**	**-**	**3.00**	**-**	3.00
Sub- Total (8.1-8.8)					**31.98**	**-**	**-**	**31.98**	**-**	**31.98**
9	**Publicity and extension**									-
9.1	Workshop/seminar	No.	1	4.00000	4.00	-	-	4.00	-	4.00
9.2	Printing passbook/pamphlets	LS	NA		2.00	-	-	2.00	-	2.00
9.3	*Krishi mela*		1	0.50000	0.50	-	-	0.50	-	0.50

First Year Physical and Financial phasing

(Rs. in Lakhs)

Sl. No.	Component/ Activity	Unit	PHYSICAL	Unit cost (Lakhs)	FINANCIAL	SHARING PATTERN Yr-1				Project Grant
			Yr-1		Yr-1	Credit	Benefi-ciary	MORD	CSB	
Sub-total					**6.50**	**-**	**-**	**6.50**	**-**	6.50
10	**Disease monitoring**	LS	NA		**5.00**	-	-	5.00	-	5.00
11	**Design Development & Diversification**	LS	NA		**2.00**	-	-	2.00	-	2.00
12	**Documentation and evaluation**	LS	NA		**2.00**	-	-	2.00	-	2.00
13	**Consultancy & Advocacy**	LS	NA		5.00	-	-	5.00	-	5.00
14	**Technology Extension and Business Development support**	LS	NA		10.01	-	-	10.01	-	10.01
15	**Project administrative expenses**	LS	NA		10.01	-	-	10.01	-	10.01
16	**Project Monitoring cost**	LS	NA		3.00	-	-	3.00	-	3.00
Sub- Total (9-16)					**43.515**	**-**	**-**	**43.515**	**-**	**43.51**
GRAND TOTAL					**222.841**	**8.310**	**11.818**	**156.915**	**45.798**	**202.71**
Percentage to total financial outlay					**40.079**	**3.729**	**5.303**	**70.416**	**20.552**	**90.97**

Annexure-8

Second Year Physical and Financial phasing

(Rs. in Lakhs)

Sl. No.	Component/ Activity	Unit	PHYSICAL	Unit cost (Lakhs)	FINANCIAL	SHARING PATTERN Yr-2				Project Grant
			Yr-2		Yr-2	Credit	Benefi-ciary	MORD	CSB	
1	**Raising of Block plantation**									
1.1	Raising Tasar host plantation	Hac.	40	0.44742	17.90	-	3.56	4.74	9.60	14.34
1.2	Maintenance of host plant - 1st Year	Hac.	40	0.07016	2.81	-	0.40	2.41	-	2.41
1.3	Maintenance of host plant - 2nd Year	Hac.	-	0.09386	-	-	-	-	-	-
Sub-total					**20.70**	**-**	**3.96**	**7.15**	**9.60**	**16.75**
2	**Assistance to Nucleus Seed Rearer's**									
2.1	Supply of rearing equipments	No.	40	0.06100	2.44	-	0.24	0.98	1.22	2.20
2.2	Supply of inputs for maintenance of block plantation	Hac.	28	0.09450	2.65	-	0.18	1.14	1.32	2.46
2.3	Assistance for Tasar silkworm rearing	No.	40	0.02388	0.96	0.48	0.09	0.14	0.25	0.39
2.4	Crop insurance	Dfls	8,000	0.00002	0.16	-	-	0.08	0.08	0.16
2.5	Rearer's insurance	No.	40	0.00031	0.01	-	-	0.01	0.01	0.01
Sub-total					**6.22**	**0.48**	**0.51**	**2.34**	**2.88**	**5.22**
3	**Assistance to Basic Seed Rearer's**									
3.1	Supply of rearing equipments	No.	60	0.06100	3.66	-	0.36	1.47	1.83	3.30
3.2	Supply of inputs for maintenance of block plantation	Hac	85	0.09450	8.00	-	0.56	3.44	4.00	7.45
3.3	Assistance for Tasar silkworm rearing	No.	121	0.02388	2.89	1.45	0.27	0.41	0.76	1.17
3.4	Crop insurance	Dfls	24,200	0.00002	0.46	-	-	0.23	0.23	0.46
3.5	Rearer's insurance	No.	121	0.00031	0.04	-	-	0.02	0.02	0.04
Sub-total					**15.05**	**1.45**	**1.19**	**5.57**	**6.84**	**12.41**
4	**Assistance to Commercial Rearer's**									
4.1	Supply of rearing equipment	No.	500	0.06100	30.50	-	3.00	15.00	12.50	27.50
4.2	Assistance for Tasar silkworm rearing	No.	1,000	0.02003	20.03	12.00	5.50	2.53	-	2.53
4.3	Crop insurance	Dfls	200,000	0.00002	4.08	-	-	2.04	2.04	4.08
4.4	Rearer's insurance	No.	1,000	0.00031	0.31	-	-	0.16	0.16	0.31
Sub-total					**54.91**	**12.00**	**8.50**	**19.72**	**14.69**	**34.41**
5	**Assistance to Private Graineurs**									
5.1	Construction of grainage building	No.	15	1.00000	15.03	-	0.75	6.01	8.27	14.28

Second Year Physical and Financial phasing

(Rs. in Lakhs)

Sl. No.	Component/ Activity	Unit	PHYSICAL	Unit cost (Lakhs)	FINANCIAL	SHARING PATTERN Yr-2				Project Grant
			Yr-2		Yr-2	Credit	Benefi-ciary	MORD	CSB	
5.2	Supply of grainage equipment	No.	15	0.42000	6.31	-	-	3.16	3.16	6.31
5.3	Working capital	No.	15	0.35000	5.26	1.50	0.90	0.23	2.63	2.86
5.4	Grainage consumables	No.	30	0.03000	0.90	0.15	0.15	0.30	0.30	0.60
Sub-total					**27.50**	**1.65**	**1.80**	**9.69**	**14.35**	**24.04**
6	**Assistance to Basic Seed Production Units**									
6.1	Construction of grainage building	No.	-	36.34250	-	-	-	-	-	-
6.2	Supply of grainage equipment	No.	-	2.94400	-	-	-	-	-	-
6.3	Working capital	No.	-	2.97500	-	-	-	-	-	-
6.4	Grainage consumables	No.	1	0.10000	0.10	-	-	0.09	0.01	0.10
Sub-total					**0.10**	**-**	**-**	**0.09**	**0.01**	**0.10**
7	**Assistance to Rearer's Collectives**									
7.1	Cocoon storage facilities	No.	1	7.50000	7.50	-	-	6.00	1.50	7.50
7.2	Common facilities	No.	1	0.37300	0.37	-	-	0.37	-	0.37
Sub-total					**7.87**	**-**	**-**	**6.37**	**1.50**	**7.87**
Sub- Total (1-7)					**132.35**	**15.59**	**15.96**	**50.94**	**49.87**	**100.81**
8	**Human Resource Development**									
8.1.	Technical training of project personnel	No.	2	0.10000	**0.20**	-	-	0.20	-	**0.20**
8.2.	**Technical training for Project Families for implementation of sericulture activities**									
8.2.1	Nursery farmers	No.	15	0.00978	0.15	-	-	0.15	-	0.15
8.2.2	Nucleus Seed Rearer's	No.	40	0.01139	0.46	-	-	0.46	-	0.46
8.2.3	Basic Seed Rearer's	No.	60	0.00949	0.57	-	-	0.57	-	0.57
8.2.4	Private Graineurs	No.	15	0.12506	1.88	-	-	1.88	-	1.88
8.2.5	Commercial Rearer's	No.	500	0.00690	3.45	-	-	3.45	-	3.45
8.2.6	Study tour/ Exposure visit	No.	158	0.00943	1.49	-	-	1.49	-	1.49
Sub-total					**7.99**	-	-	7.99	-	**7.99**
8.3.	**Technical training for sectoral activities**									
8.3.1	Improved Agriculture	No.	615	0.00328	2.02	-	-	2.02	-	2.02
8.3.2	vegetable cultivation	No.	123	0.00219	0.27	-	-	0.27	-	0.27
8.3.3	Exposure of Project families to improved practices	No.	154	0.00345	0.53	-	-	0.53	-	0.53
Sub-total					**2.81**	**-**	**-**	**2.81**	**-**	**2.81**

Second Year Physical and Financial phasing

(Rs. in Lakhs)

Sl. No.	Component/ Activity	Unit	PHYSICAL	Unit cost (Lakhs)	FINANCIAL	SHARING PATTERN Yr-2				Project Grant
			Yr-2		Yr-2	Credit	Benefi-ciary	MORD	CSB	
8.4.	**Training of Community Resource Persons (CRPs) for extension of activities**									
8.4.1	Orientation and training on Tasar	No.	15	0.25530	3.92	-	-	3.92	-	3.92
8.4.2	Exposure to improved practices	No.	8	0.01553	0.12	-	-	0.12	-	0.12
8.4.3	Technical and Refresher Training	No.	15	0.01277	0.20	-	-	0.20	-	0.20
Sub-total					**4.24**	**-**	**-**	**4.24**	**-**	**4.24**
8.5.	**On-field training / handholding provided by CRPs to the Project Families**									
8.5.1	Tasar Silkworm Rearing	No.	600	0.00719	4.31	-	-	4.31	-	4.31
8.5.2	Tasar Seed Production	No.	15	0.00863	0.13	-	-	0.13	-	0.13
8.5.3	Est. of Community Arjuna Nursery	No.	15	0.01438	0.22	-	-	0.22	-	0.22
8.5.4	Improved agriculture	No.	615	0.00431	2.65	-	-	2.65	-	2.65
8.5.5	Vegetable cultivation	No.	123	0.00207	0.25	-	-	0.25	-	0.25
Sub-total					**7.56**	**-**	**-**	**7.56**	**-**	**7.56**
8.6.	**Institution building of Producer Collectives**									
8.6.1	Membership training	No.	615	0.00690	4.24	-	-	4.24	-	4.24
8.6.2	Leadership/ Governance Training	No.	31	0.02588	0.80	-	-	0.80	-	0.80
8.6.3	Exposure of Board members & staff	No.	7	0.05175	0.36	-	-	0.36	-	0.36
Sub-total					**5.40**	**-**	**-**	**5.40**	**-**	**5.40**
8.7.	**Nurturing of New Self-Help-Groups (SHGs)**									
8.7.1	Membership training (25%)	No.	154	0.00460	0.71	-	-	0.71	-	0.71
8.7.2	Leadership Training (20%)	No.	123	0.00700	0.86	-	-	0.86	-	0.86
8.7.3	Book keeping Training	No.	46	0.00840	0.39	-	-	0.39	-	0.39
8.7.4	Exposure of Cluster & Federation Members	No.	14	0.00640	0.09	-	-	0.09	-	0.09
8.7.5	Livelihood Visioning (50%)	No.	308	0.00190	0.58	-	-	0.58	-	0.58
Sub-total					**2.63**	**-**	**-**	**2.629**	**-**	2.63
8.8.	**Trainers Training programme**	LS	-	3.00000	**-**	**-**	**-**	**-**	**-**	-
Sub- Total (8.1-8.8)					**30.83**	**-**	**-**	**30.83**	**-**	**30.83**
9	**Publicity and extension**									-
9.1	Workshop/seminar	No.	-	4.00000	-	-	-	-	-	-
9.2	Printing passbook/pamphlets	LS	NA		1.00	-	-	1.00	-	1.00
9.3	*Krishi mela*		1	0.50000	0.50	-	-	0.50	-	0.50

Second Year Physical and Financial phasing

(Rs. in Lakhs)

Sl. No.	Component/ Activity	Unit	PHYSICAL	Unit cost (Lakhs)	FINANCIAL	SHARING PATTERN Yr-2				Project Grant
			Yr-2		Yr-2	Credit	Benefi-ciary	MORD	CSB	
Sub-total					**1.50**	**-**	**-**	**1.50**	**-**	1.50
10	**Disease monitoring**	LS	NA		**5.00**	-	-	5.00	-	5.00
11	**Design Development & Diversification**	LS	NA		**3.00**	-	-	3.00	-	3.00
12	**Documentation and evaluation**	LS	NA		**5.00**	-	-	5.00	-	5.00
13	**Consultancy & Advocacy**	LS	NA		10.00	-	-	10.00	-	10.00
14	**Technology Extension and Business Development support**	LS	NA		9.39	-	-	9.39	-	9.39
15	**Project administrative expenses**	LS	NA		9.39	-	-	9.39	-	9.39
16	**Project Monitoring cost**	LS	NA		2.82	-	-	2.82	-	2.82
Sub- Total (9-16)					**46.106**	**-**	**-**	**46.106**	**-**	**46.11**
GRAND TOTAL					**209.288**	**15.585**	**15.959**	**127.877**	**49.867**	**177.74**
Percentage to total financial outlay					**37.642**	**7.447**	**7.625**	**61.101**	**23.827**	**84.93**

Annexure-9

Third Year Physical and Financial phasing

(Rs. in Lakhs)

Sl. No.	Component/ Activity	Unit	PHYSICAL	Unit cost (Lakhs)	FINANCIAL	SHARING PATTERN Yr-3				Project Grant
			Yr-3		Yr-3	Credit	Benefi-ciary	MORD	CSB	
1	**Raising of Block plantation**									
1.1	Raising Tasar host plantation	Hac.	-	0.44742	-	-	-	-	-	-
1.2	Maintenance of host plant - 1st Year	Hac.	40	0.07016	2.81	-	0.40	2.41	-	2.41
1.3	Maintenance of host plant - 2nd Year	Hac.	80	0.09386	7.51	-	1.14	6.37	-	6.37
Sub-total					**10.32**	**-**	**1.54**	**8.78**	**-**	**8.78**
2	**Assistance to Nucleus Seed Rearer's**									
2.1	Supply of rearing equipments	No.	-	0.06100	-	-	-	-	-	-
2.2	Supply of inputs for maintenance of block plantation	Hac.	28	0.09450	2.65	-	0.18	1.14	1.32	2.46
2.3	Assistance for Tasar silkworm rearing	No.	40	0.02388	0.96	0.48	0.09	0.14	0.25	0.39
2.4	Crop insurance	Dfls	8,000	0.00002	0.16	-	-	0.08	0.08	0.16
2.5	Rearer's insurance	No.	40	0.00031	0.01	-	-	0.01	0.01	0.01
Sub-total					**3.78**	**0.48**	**0.27**	**1.36**	**1.66**	**3.02**
3	**Assistance to Basic Seed Rearer's**									
3.1	Supply of rearing equipments	No.	32	0.06100	1.95	-	0.19	0.78	0.98	1.76
3.2	Supply of inputs for maintenance of block plantation	Hac	74	0.09450	7.01	-	0.49	3.02	3.51	6.52
3.3	Assistance for Tasar silkworm rearing	No.	124	0.02388	2.96	1.49	0.27	0.42	0.78	1.20
3.4	Crop insurance	Dfls	24,800	0.00002	0.47	-	-	0.23	0.23	0.47
3.5	Rearer's insurance	No.	124	0.00031	0.04	-	-	0.02	0.02	0.04
Sub-total					**12.43**	**1.49**	**0.95**	**4.48**	**5.51**	**9.99**
4	**Assistance to Commercial Rearer's**									
4.1	Supply of rearing equipment	No.	264	0.06100	16.12	-	1.59	7.93	6.61	14.54
4.2	Assistance for Tasar silkworm rearing	No.	1,029	0.02003	20.60	12.34	5.66	2.60	-	2.60
4.3	Crop insurance	Dfls	205,714	0.00002	4.19	-	-	2.10	2.10	4.19
4.4	Rearer's insurance	No.	1,029	0.00031	0.32	-	-	0.16	0.16	0.32
Sub-total					**41.23**	**12.34**	**7.24**	**12.78**	**8.86**	**21.64**
5	**Assistance to Private Graineurs**									
5.1	Construction of grainage building	No.	8	1.00000	7.94	-	0.40	3.18	4.37	7.55

Third Year Physical and Financial phasing

(Rs. in Lakhs)

Sl. No.	Component/ Activity	Unit	PHYSICAL	Unit cost (Lakhs)	FINANCIAL	SHARING PATTERN Yr-3				Project Grant
			Yr-3		Yr-3	Credit	Benefi-ciary	MORD	CSB	
5.2	Supply of grainage equipment	No.	8	0.42000	3.34	-	-	1.67	1.67	3.34
5.3	Working capital	No.	8	0.35000	2.78	0.79	0.48	0.12	1.39	1.51
5.4	Grainage consumables	No.	31	0.03000	0.93	0.15	0.15	0.31	0.31	0.62
Sub-total					**14.99**	**0.95**	**1.03**	**5.27**	**7.74**	**13.01**
6	**Assistance to Basic Seed Production Units**									
6.1	Construction of grainage building	No.	-	36.34250	-	-	-	-	-	-
6.2	Supply of grainage equipment	No.	-	2.94400	-	-	-	-	-	-
6.3	Working capital	No.	-	2.97500	-	-	-	-	-	-
6.4	Grainage consumables	No.	2	0.10000	0.20	-	-	0.19	0.01	0.20
Sub-total					**0.20**	**-**	**-**	**0.19**	**0.01**	**0.20**
7	**Assistance to Rearer's Collectives**									
7.1	Cocoon storage facilities	No.	-	7.50000	-	-	-	-	-	-
7.2	Common facilities	No.	-	0.37300	-	-	-	-	-	-
Sub-total					**-**	**-**	**-**	**-**	**-**	**-**
Sub- Total (1-7)					**82.94**	**15.26**	**11.03**	**32.86**	**23.78**	**56.65**
8	**Human Resource Development**									
8.1.	Technical training of project personnel	No.	-	0.10000	**-**	-	-	-	-	**-**
8.2.	**Technical training for Project Families for implementation of sericulture activities**									
8.2.1	Nursery farmers	No.	-	0.00978	-	-	-	-	-	-
8.2.2	Nucleus Seed Rearer's	No.	-	0.01139	-	-	-	-	-	-
8.2.3	Basic Seed Rearer's	No.	32	0.00949	0.30	-	-	0.30	-	0.30
8.2.4	Private Graineurs	No.	8	0.12506	0.99	-	-	0.99	-	0.99
8.2.5	Commercial Rearer’s	No.	264	0.00690	1.82	-	-	1.82	-	1.82
8.2.6	Study tour/ Exposure visit	No.	76	0.00943	0.72	-	-	0.72	-	0.72
Sub-total					**3.84**	-	-	3.84	-	**3.84**
8.3.	**Technical training for sectoral activities**									
8.3.1	Improved Agriculture	No.	304	0.00328	1.00	-	-	1.00	-	1.00
8.3.2	vegetable cultivation	No.	61	0.00219	0.13	-	-	0.13	-	0.13
8.3.3	Exposure of Project families to improved practices	No.	76	0.00345	0.26	-	-	0.26	-	0.26
Sub-total					**1.39**	**-**	**-**	**1.39**	**-**	**1.39**

Third Year Physical and Financial phasing

(Rs. in Lakhs)

Sl. No.	Component/ Activity	Unit	PHYSICAL	Unit cost (Lakhs)	FINANCIAL	SHARING PATTERN Yr-3				Project Grant
			Yr-3		Yr-3	Credit	Benefi-ciary	MORD	CSB	
8.4.	**Training of Community Resource Persons (CRPs) for extension of activities**									
8.4.1	Orientation and training on Tasar	No.	8	0.25530	1.94	-	-	1.94	-	1.94
8.4.2	Exposure to improved practices	No.	4	0.01553	0.06	-	-	0.06	-	0.06
8.4.3	Technical and Refresher Training	No.	8	0.01277	0.10	-	-	0.10	-	0.10
Sub-total					**2.10**	**-**	**-**	**2.10**	**-**	**2.10**
8.5.	**On-field training / handholding provided by CRPs to the Project Families**									
8.5.1	Tasar Silkworm Rearing	No.	296	0.00719	2.13	-	-	2.13	-	2.13
8.5.2	Tasar Seed Production	No.	8	0.00863	0.07	-	-	0.07	-	0.07
8.5.3	Est. of Community Arjuna Nursery	No.	-	0.01438	-	-	-	-	-	-
8.5.4	Improved agriculture	No.	304	0.00431	1.31	-	-	1.31	-	1.31
8.5.5	Vegetable cultivation	No.	61	0.00207	0.13	-	-	0.13	-	0.13
Sub-total					**3.64**	**-**	**-**	**3.64**	**-**	**3.64**
8.6.	**Institution building of Producer Collectives**									
8.6.1	Membership training	No.	304	0.00690	2.10	-	-	2.10	-	2.10
8.6.2	Leadership/ Governance Training	No.	15	0.02588	0.39	-	-	0.39	-	0.39
8.6.3	Exposure of Board members & staff	No.	3	0.05175	0.18	-	-	0.18	-	0.18
Sub-total					**2.67**	**-**	**-**	**2.67**	**-**	**2.67**
8.7.	**Nurturing of New Self-Help-Groups (SHGs)**									
8.7.1	Membership training (25%)	No.	76	0.00460	0.35	-	-	0.35	-	0.35
8.7.2	Leadership Training (20%)	No.	61	0.00700	0.43	-	-	0.43	-	0.43
8.7.3	Book keeping Training	No.	23	0.00840	0.19	-	-	0.19	-	0.19
8.7.4	Exposure of Cluster & Federation Members	No.	7	0.00640	0.04	-	-	0.04	-	0.04
8.7.5	Livelihood Visioning (50%)	No.	152	0.00190	0.29	-	-	0.29	-	0.29
Sub-total					**1.30**	**-**	**-**	**1.300**	**-**	1.30
8.8.	**Trainers Training programme**	LS	-	3.00000	**-**	**-**	**-**	**-**	**-**	-
Sub- Total (8.1-8.8)					**14.93**	**-**	**-**	**14.93**	**-**	**14.93**
9	**Publicity and extension**									-
9.1	Workshop/seminar	No.	1	4.00000	4.00	-	-	4.00	-	4.00
9.2	Printing passbook/pamphlets	LS	NA		-	-	-	-	-	-
9.3	*Krishi mela*		2	0.50000	1.00	-	-	1.00	-	1.00

Third Year Physical and Financial phasing

(Rs. in Lakhs)

Sl. No.	Component/ Activity	Unit	PHYSICAL	Unit cost (Lakhs)	FINANCIAL	SHARING PATTERN Yr-3				Project Grant
			Yr-3		Yr-3	Credit	Benefi-ciary	MORD	CSB	
Sub-total					**5.00**	**-**	**-**	**5.00**	**-**	5.00
10	**Disease monitoring**	LS	NA		**-**	-	-	-	-	-
11	**Design Development & Diversification**	LS	NA		**-**	-	-	-	-	-
12	**Documentation and evaluation**	LS	NA		**3.00**	-	-	3.00	-	3.00
13	**Consultancy & Advocacy**	LS	NA		5.00	-	-	5.00	-	5.00
14	**Technology Extension and Business Development support**	LS	NA		5.67	-	-	5.67	-	5.67
15	**Project administrative expenses**	LS	NA		5.67	-	-	5.67	-	5.67
16	**Project Monitoring cost**	LS	NA		1.66	-	-	1.66	-	1.66
Sub- Total (9-16)					**25.996**	**-**	**-**	**25.996**	**-**	**26.00**
GRAND TOTAL					**123.870**	**15.260**	**11.035**	**73.793**	**23.782**	**97.58**
Percentage to total financial outlay					**22.279**	**12.319**	**8.908**	**59.573**	**19.199**	**78.77**

Annexure-10

Unit Cost for Raising Block Plantation

(Unit: 1 Hac with Plant Spacing of 10ft x 6 ft.)							
A	**Unit Cost Estimate of Raising 1 Hac of Tasar Plantations**						
Sl	**Particulars**	**Unit**	**Number**	**Rs/unit**	**Total (Rs)**	**Contribution (Rs)**	**Grant (Rs)**
1	Cost Asan and Arjuna of seedlings including 10% mortality	No.	2,173	3.00	6,519	0	6,519
2	Soil conservation						
a	Staggered trench (6ft x2ft x 2ft)	No.	279	33.60	9,374	2,344	7,031
b	Cattle proof trench	cft	7,500	1.40	10,500	2,625	7,875
3	Pit digging (1.5ftx1.5ftx1ft)	No.	1,975	3.15	6,222	1,556	4,667
4	Cost of vermin-composts @ 400/ plant	Kg	790	5.00	3,951	0	3,951
5	Anti-termite treatment		LS		250	0	250
6	Transplantation of seedling	No.	1,975	1.50	2,963	1,185	1,778
7	Basin formation and weeding	No.	1,975	1.50	2,963	1,185	1,778
8	Intercropping	LS			2,000	0	2,000
	Total				**44,742**	**8,895**	**35,847**
B.1	**Unit Cost Estimate for the Maintenance of 1 Hac of Tasar Plantations in the 2nd. year**						
Sl	**Particulars**	**Unit**	**Number**	**Rs/unit**	**Total**	**Contribution (Rs)**	**Grant**
1	1st. Hoeing and basin formation in the 2nd. Year	No.	1,975	1.50	2,963	1,185	1,778
2	Spraying of neem based insecticide	LS			300	0	300
3	Cost of mixed fertilizer (N -12:P- 32:K -16)	KG	98.77	18	1,778	0	1,778
4	2nd. Hoeing in the 2nd. Year	No.	1975	1.00	1,975	790	1,185
	Sub-Total				**7,016**	**1,975**	**5,041**
B.2	**Unit Cost Estimate for the Maintenance of 1 Hac of Tasar Plantations in the 3rd. year**						
Sl	**Particulars**		**Input**	**Rs/unit**	**Total**		**Grant**
1	1st. Hoeing in the 3rd Year	No.	1975	1.60	3,160	1,264	1,896
2	Spraying of neem based insecticide	LS			300	0	300
3	Cost of mixed fertilizer (N -12:P- 32:K -16)	Kg	197.53	18	3,556	0	3,556
4	2nd. Hoeing in the 2nd. Year	No.	1975	1.20	2,370	948	1,422
Sub-Total					**9,386**	**2,212**	**7,174**
Maintenance total					**16,402**	**4,188**	**12,215**
Total of raising and maintenance					**61,144**	**13,082**	**48,062**
Percentage sharing						*21*	*79*

SHARING	Credit	Benef.	MORD	CSB	Total
Raising of Tasar host plants	0	8,895	11,847	24,000	44,742
Percentage	*0.0*	*19.9*	*26.5*	*53.6*	*100.00*
Maintenance in the 2nd year	0	1,000	6,016	0	7,016
Percentage	*0.0*	*14.3*	*85.7*	*0.0*	*100.00*
Maintenance in the 3rd year	0	1,420	7,966	0	9,386
Percentage	*0.0*	*15.1*	*84.9*	*0.0*	*100.00*
Total	**0**	**11,315**	**25,830**	**24,000**	**61,144**
	0.0	***18.5***	***42.2***	***39.3***	***100.0***

CDP unit cost - 40000 (60% CSB share)

Annexure-11

Unit Cost for Nucleus Seed Rearer's (NSRs)

(Capacity: 200 dfls)

Sl. No.	Particulars	Unit	Input	Labour	Rate (Rs.)	Amount (Rs)
A	**Rearing Equipment**					
1	Secateurs/ Looping Shear	No.	2		500	1,000
2	Low volume sprayer (one for 10 rearer's)	No.	1		500	500
3	Nylon net (40'x30'x10')	No.	1		4,000	4,000
4	Bamboos	No.	12		50	600
	Sub-total					***6,100***
B	**Maintenance of Tasar host plants (0.7 Hac)**					
5	Cost of fertilizers NPK mixture for 2100 plants @200gm/plant	Kg	420		18	7,560
6	Cost of insecticides for foliar spray	LS				240
7	Cultural operations	LS				1,650
	Sub-total					***9,450***
C	**Tasar Silkworm Rearing**					
8	Cost of Tasar silkworm dfls	No.	200		6	1,200
9	Slaked Lime	kg	50		8.00	400
10	Bleaching Powder	kg	5		35.00	175
11	Sodium Hypo chloride	kg	0.5		125.00	63
12	Spraying of Sodium Hypo chloride	LS				550
	Sub-total					***2,388***
	TOTAL					**17,938**

SHARING	Credit	Benef.	MORD	CSB	Total
Rearing Equipment	0	600	2,450	3,050	6,100
Percentage	*0.0*	*9.8*	*40.2*	*50.0*	*100.0*
Maintenance of host plants	0	660	4,065	4,725	9,450
Percentage	*0.0*	*7.0*	*43.0*	*50.0*	*100.0*
Tasar Silkworm Rearing	1,200	220	343	625	2,388
Percentage	*50.3*	*9.2*	*14.3*	*26.2*	*100.0*
Total	**1,200**	**1,480**	**6,858**	**8,400**	**17,938**
Percentage	***6.7***	***8.3***	***38.2***	***46.8***	***100.0***

CDP unit cost- 16,800/- (50% csb share)

Annexure-12

Unit Cost for Basic Seed Rearer's (BSRs)

(Capacity: 200 dfls)

Sl. No.	Particulars	Unit	Input	Labour	Rate (Rs.)	Amount (Rs)
A	**Rearing Equipment**					
1	Secateurs/ Looping Shear	No.	2		500	1,000
2	Low volume sprayer (one for 10 rearer's)	No.	1		500	500
3	Nylon net (40'x30'x10')	No.	1		4,000	4,000
4	Bamboos	No.	12		50	600
	Sub-total					***6,100***
B	**Maintenance of Tasar host plants (0.7 Hac)**					
5	Cost of fertilizers NPK mixture for 2100 plants @200gm/plant	Kg	420		18	7,560
6	Cost of insecticides for foliar spray	LS				240
7	Cultural operations	LS				1,650
	Sub-total					***9,450***
C	**Tasar Silkworm Rearing**					
8	Cost of Tasar silkworm dfls	No.	200		6	1,200
9	Slaked Lime	kg	50		8.00	400
10	Bleaching Powder	kg	5		35.00	175
11	Sodium Hypo chloride	kg	0.5		125.00	63
12	Spraying of Sodium Hypo chloride	LS				550
	Sub-total					***2,388***
	TOTAL					**17,938**

SHARING	Credit	Benef.	MORD	CSB	Total
Rearing Equipment	0	600	2,450	3,050	6,100
Percentage	*0.0*	*9.8*	*40.2*	*50.0*	*100.0*
Maintenance of host plants	0	660	4,065	4,725	9,450
Percentage	*0.0*	*7.0*	*43.0*	*50.0*	*100.0*
Tasar Silkworm Rearing	1,200	220	343	625	2,388
Percentage	*50.3*	*9.2*	*14.3*	*26.2*	*100.0*
Total	**1,200**	**1,480**	**6,858**	**8,400**	**17,938**
Percentage	***6.7***	***8.3***	***38.2***	***46.8***	***100.0***

CDP unit cost- 16,800/- (50% csb share)

Annexure-13

Unit Cost for Rearing Equipment and Silkworm rearing for Commercial rearer's

(Capacity: 200 dfls)

Sl. No.	Particulars	Unit	Input	Rate (Rs.)	Amount (Rs)
A	**Rearing Equipment**				
1	Secateurs/ Looping Shear	No.	2	500	1,000
2	Low volume sprayer (one for 10 rearer's)	No.	1	500	500
3	Nylon net (40'x30'x10')	No.	1	4,000	4,000
4	Bamboos	No.	12	50	600
	Sub-total				***6,100***
B	**Tasar Silkworm Rearing**				
5	Cost of Tasar silkworm dfls	No.	200	6	1,200
6	Bleaching Powder & Lime (1:9)	kg	20	6.00	120
7	Bleaching Powder	kg	2	35.00	70
8	Sodium Hypo chloride	kg	0.5	125.00	63
9	Spraying of Sodium Hypo chloride	LS			550
	Sub-total				***2,003***
	TOTAL				**8,103**

SHARING	Credit	Benef.	MORD	CSB	Total
Rearing Equipment	0	600	3,000	2,500	6,100
Percentage	*0*	*9.836*	*49.2*	*41.0*	*100.00*
Tasar Silkworm Rearing	1,200	550	253	0	2,003
Percentage	*59.93*	*27.47*	*12.6*	*0.0*	*100.00*
Total	**1,200**	**1,150**	**3,253**	**2,500**	**8,103**
Percentage	***14.8***	***14.2***	***40.1***	***30.9***	***100.0***

CDP unit cost- 10,800/- (25% csb share)

Annexure-14

Unit Cost for Tasar Private Graineurs (Capacity: 25000 cocoons)

Sl.No	Particulars	Unit	Input	Rate (Rs.)	Amount (Rs.)
A.	**Construction of grainage building (25'x12' with verandah)**	**No.**	**1**	**100,000**	**100,000**
B.	**Grainage Equipments**				
1	Microscope with light arrangement	No.	2	5,000	10,000
2	Egg laying boxes/ Nylon net bags	No.	3,000	4	12,000
3	Egg laying cabinet	No.	1	6,500	6,500
4	Wooden Moth Testing Table (5ft x 1.5ft)	No.	1	4,000	4,000
5	Stools	No.	2	750	1,500
6	Plastic drum (60 liters)	No.	1	1,100	1,100
7	Plastic bucket	No.	5	200	1,000
8	Plastic tub (small)	No.	5	150	750
9	Plastic tub (20 liters)	No.	5	300	1,500
10	Plastic mug	No.	5	50	250
11	Mortar & Pestle	No.	5	320	1,600
12	Measuring Cylinder (Plastic)	No.	1	300	300
13	Weighing balance	No.	1	1,500	1,500
	Sub-total				***42,000***
C.	**Consumables & Working Capital**				
1	Cost of seed cocoons	LS			35,000
2	Consumables	LS			3,000
	Sub-total				***38,000***
	TOTAL				**180,000**

SHARING	Credit	Benef.	MORD	CSB	Total
Grainage building	0	5,000	40,000	55,000	100,000
Percentage	*0*	*5.0*	*40.0*	*55.0*	*100.00*
Grainage equipment	0	0	21,000	21,000	42,000
Percentage	*0*	*0.0*	*50.0*	*50.0*	*100.00*
Working capital	10,000	6,000	1,500	17,500	35,000
Percentage	*28.6*	*17.1*	*4.3*	*50.0*	*100.00*
Consumables	500	500	1,000	1,000	3,000
Percentage	*16.7*	*16.7*	*33.3*	*33.3*	*100.00*
Total	**10,500**	**11,500**	**63,500**	**94,500**	**180,000**
Percentage	***5.8***	***6.4***	***35.3***	***52.5***	***100.0***

CDP unit cost- 230000/- (50% csb share)

Annexure-15

Unit Cost for Basic Seed Production Unit (Capacity: 1,50,000 cocoons)

Sl.No	Particulars	Unit	Input	Rate (Rs.)	Amount (Rs.)
A.	Construction of grainage building: ground floor - 2433 sq. ft with all-round verandah and 1st floor - 1335 sq. ft along with septic tank, generator room	**1**		**3,434,250**	**3,434,250**
B.	**Boundary wall**	**LS**		**200,000**	**200,000**
C.	**Grainage Equipments**				
1	Microscope with light arrangement	No.	10	4,000	40,000
2	Egg laying boxes	No.	15,000	4	52,500
3	Egg laying cabinet	No.	2	6,500	13,000
4	Wooden Moth Testing Table	No.	5	2,500	12,500
5	Wooden chair (with arms)	No.	10	1,000	10,000
6	Gator sprayer	No.	1	5,000	5,000
7	Plastic drum	No.	4	850	3,400
8	Plastic bucket	No.	10	200	2,000
9	Plastic tub (small)	No.	10	100	1,000
10	Plastic tub (big)	No.	20	250	5,000
11	Mortar & Pestle	No.	100	320	32,000
12	Measuring Cylinder (Plastic)	No.	2	200	400
13	Dry - Wet Thermometer	No.	2	800	1,600
14	Electronic Weighing balance	No.	1	14,000	14,000
15	Humidifier	No.	1	6,000	6,000
16	Egg drying chamber	No.	1	6,000	6,000
17	Centrifuge	No.	1	25,000	25,000
18	Generator	No.	1	55,000	55,000
19	Miscellaneous (office furniture)	LS			10,000
	Sub-total				***294,400***
D	**Consumables & Working Capital**				
1	Cost of seed cocoons	No.	150,000	1.65	247,500
2	Operational cost	LS			50,000
3	Consumables	LS			10,000
	Sub-total				***307,500***
	TOTAL				**4,236,150**

SHARING	Credit	Benef.	MORD	CSB	Total
Construction and boundary wall	0	0	3,484,250	150,000	3,634,250
Percentage	*0.0*	*0*	*95.9*	*4.1*	*100.00*
Grainage equipment	0	0	294,400	0	294,400
Percentage	*0.0*	*0*	*100.0*	*0.0*	*100.00*
Consumable & working capital	0	0	307,500	0	307,500
Percentage	*0.0*	*0*	*100.0*	*0.0*	*100.00*
Total	**0**	**0**	**4,086,150**	**150,000**	**4,236,150**
Percentage	***0.0***	***0.0***	***96.5***	***3.5***	***100.0***

CDP unit cost- 384,000/- (70% csb share) - provision is for state PPC strengthening 269,290

Annexure-16

Unit Cost for Rearer's' Collective

Particulars	Unit	Input	Rate	Amount
1. Construction of Cocoon Storage & Office room	1		750,000	750,000
Sub-total				**750,000**
2. Equipments				
Electrical wiring and lightning arrester	1		10,000	10,000
Almirah	No.	1	6,000	6,000
Wooden table	No.	1	1,500	1,500
Chairs	No.	5	400	2,000
Wooden bench	No.	1	1,500	1,500
White Board	No.	1	2,500	2,500
Dari for meeting & training	No.	2	2,400	4,800
Utensils for training purpose	LS			3,000
Insurance & Miscellaneous	LS			6,000
Sub-total				***37,300***
TOTAL				**787,300**

SHARING	Credit	Benef.	MORD	CSB	Total
Storage & office room	0	0	600,000	150,000	750,000
Percentage	*0*	*0.0*	*80.0*	*20.0*	*100.00*
Equipments	0	0	37,300	0	37,300
Percentage	*0*	*0.0*	*100.0*	*0.0*	*100.00*
Total	**0**	**0**	**637,300**	**150,000**	**787,300**
Percentage	***0.0***	***0.0***	***80.9***	***19.1***	***100.0***

CDP unit cost- 225,000/- (60% csb share)

Annexure-17

Project Out Put (Within Project Period)

Sl.No.	Output	Physical			
		Year-1	Year-2	Year-3	Total
1	Commercial dfls produced (lakhs)	0.75	1.50	1.90	4.15
2	Total raw silk production (kg)	4,078	8,219	9,462	21,759
3	Total Tasar spun silk production (kg)	1,312	2,816	3,280	7,408

Sl.No.	Output	Financial (Rs. in lakhs)			
		Year-1	Year-2	Year-3	Total
1	Commercial dfls (lakhs)	4.51	9.02	11.40	24.93
2	Raw Silk	114.19	230.13	264.94	609.26
3	Tasar Spun silk (MT)	15.75	33.79	39.36	88.89
TOTAL		134.44	272.93	315.70	723.07

Annexure-18

Cost Economics of Raising Kisan Nursery (Group Activity)

Period- 4 Months

Salient Features of the activity - Raising of Seedlings of Tasar host plants		
1	Capacity per Kisan nursery (No. of seeds)	70,000
2	Number of cycles per year	1
3	Extent of block plantations of Tasar host plants/ Rearer	25
4	Number of seedlings survived/ nursery (No.)	55,000
5	Quantity of arjuna seeds required (Kg.)	200
Profit and Loss Account		
1	Cost of arjuna seed (Rs.)	800
2	Cost of Labour for raising nursery (Rs.)	28,485
3	Input costs and incidental expenditure (Rs.)	36,965
4	Knapsack Sprayer (Rs.)	5,000
5	Shade net (Rs.)	17,500
6	Interest on working capital loan @ 12% for 4 months	3,975
Total Expenditure (Rs.)		**92,725**
Income (Rs.)		
1	Sale of seedlings @ Rs.3/-	165,000
Total Income (Rs.)		**165,000**
Gross Profit (Rs.)		**72,275**

Annexure-19

Cost Economics of Commercial Rearing by individual Rearer

Salient features of Silkworm rearing		
1	Host plant availability	Forest plantation
2	DFLs required by an individual for full capacity utilization	200
3	Number of rearing cycle per year	1
4	Reel able cocoon productivity per DFL	50
6	Duration of rearing cycle in the commercial crop (days)	60 - 65
7	Price of 1 unit of DFL (Rs.)	6.00
8	Average price of 1 piece of whole cocoon (Rs.)	2.00
9	Capital Investment (Rs.):	
10	Equipments and accessories	
	Cost of 1 nylon nets @ Rs.3500/net	3,500
	Sprayer & secateurs	800
	Total Capital Investment (Rs.)	**4,300**
11	Depreciation on Assets (Rs.):	
	Equipments and accessories @ 10% of the value/ annum	430
	Total Depreciation (Rs.)	**430**
Profit and Loss Account of 1 cycle of Silkworm Rearing		
Expenditure (Rs.)		
Cost of DFLs (Rs.)		1,200
Cost of prophylactic measures		250
Plant maintenance		500
Total Expenditure (Rs.)		**1,950**
Income (Rs.)		
Sale of 10,000 Cocoons (200 DFLs *50 cocoon per DFL)		20,000
Total Income (Rs.)		**20,000**
Gross Profit (Rs.)		**18,050**
Profit after depreciation of assets (Rs.)		**17,620**

Note: Based on Bivoltine commercial crop

Annexure-20

Cost Economics of a private grainage

Salient features of a private grainage		
1	Capacity to preserve seed cocoons (pieces)	25,000
2	Number of grainage cycle per year	1
3	Expected production of DFLs per cycle	5,556
4	Number of rearer's to be served	30
5	Duration of grainage cycle (days)	20-25
6	Cost of 1 piece of seed cocoon (Rs.)	1.2
7	Price of 1 unit of DFL (Rs.)	6.00
8	Price of 1 Piece of pierced cocoon (Rs.)	0.9
9	Capital Investment (Rs.):	
Grainage building		100,000
Equipments and furniture		42,000
Total Capital Investment (Rs.)		**142,000**
10	Depreciation on Assets (Rs.):	
Grainage building @ 5% of the value / annum		5,000
Equipments and furniture @ 10% of the value/ annum		4,200
Total Depreciation (Rs.)		**9,200**
Profit and Loss Account of 1 cycle of grainage operation		
Expenditure (Rs.)		
Cost of Seed cocoons (Rs.)		30,000
Cost of consumables (LS)		1,000
Cost of Hired microscopist (for 10 days)		1,000
Interest on working capital loan @ 12% for 3 months		960
Total Expenditure (Rs.)		**32,960**
Income (Rs.)		
Sale of DFLs		33,333
Sale of Pierced cocoons		22,500
Total Income (Rs.)		**55,833**
Gross Profit (Rs.)		**22,873**
Profit after depreciation of assets (Rs.)		**13,673**

Note: Based on Bivoltine commercial crop

Annexure-21

Income and Expenditure account of Basic Seed Preservation and DFL Production

Period: 200 to 210 days

Sl No.	Particulars	Data
1	Capacity to preserve seed cocoons (pieces)	150,000
2	Number of grainage cycle per year	1
3	Expected production of DFLs per cycle	30,000
4	Number of grainage to be served	60
5	Duration of preservation cycle (days)	210
6	Duration of grainage cycle	24
7	Cost of 1 piece of seed cocoon including sorting & transportation	1.5
8	Monthly wage rate of laborer for preservation of cocoons in village (Rs.)	1,500
9	Number of months the laborer would be hired	7
10	Daily wage rate of microscopists in the village (Rs.)	125
11	Number of days the microscopists would be engaged	20
12	Daily wage rate of unskilled laborers in the villages (Rs.)	127
13	Number of days the unskilled laborers would get engaged	20
14	Cost of consumable for 1 cycle of grainage (Rs.)	3,000
15	Yearly maintenance & disinfection of building	3,000
16	Base price of 1 unit of DFL (Rs.)	6.00
17	Price of 1 piece of pierced cocoon	1.00

Profit and Loss Account of 1 cycle of basic grainage operation

A Expenditure

Sl.	Particulars	Amount (Rs.)
1	Cost of Seed cocoons (Rs.)	225,000
2	Cost of hiring 1 labor for 8 months	10,500
3	Cost of grainage consumables	3,000
4	Cost of Hiring 8 microscopists	25,000
5	Cost of hiring 8 laborers for 30 days	25,400
6	Yearly maintenance and disinfection of grainage	3,000
	Total Expenditure:	**291,900**

B Income

Sl.	Particulars	Amount (Rs.)
1	Sale of DFLs	180,000
2	Sale of Pierced cocoons	150,000
	Total Income:	**330,000**

C	**Gross profit: (Total Income- Total Expenditure)**	**38,800**

Note: Based on Bivoltine crop for one grainage cycle
Infrastructure can be used for the commercial grainage also

Annexure-22

A brief of different activities taken up in different project location along with tentative net return and periodicity

Activity	Stakeholder	Unit Of Production		Tentative Investment (Rs)	Period	Individual/ Group activity	Gross Profit/ Cycle (Rs) (Total income- Total Expenditure)	Net Profit/ Cycle (Gross Profit- Depreciation) (Rs)
		Quantity	Unit					
Tasar Sericulture								
Raising of seedlings	Kisan Nursery Entrepreneur	55,000	Seedlings	92,725	4 months	Individual/ Group	72,275	72,275
Plantation farmer/ Silkworm rearing								
Seed Rearing	Seed Rearer	200	DFL	1,950	40-45 Days	Individual	16,050	15,620
Nucleus Seed Rearing	Adopted Seed Rearer	200	DFL	1,950	60-65 Days	Individual	20,050	19,620
Commercial Rearing	Commercial Rearer	200	DFL	1,950	60-65 Days	Individual	18,050	17,620
Silkworm Seed Production and processing								
Basic Seed	Tasar Vikas Samity/ Society	150,000	Cocoon	291,200	200-220	Group	38,800	38,800
Grainage	Graineurs	25,000	Cocoon	32,960	20-25 days	Individual/ Group	22,873	13,673
Agriculture								
Paddy (SRI & Improved)	Family	0.50	Acre	750	4-5 months	Individual	7,875	6,000
Vegetables	Family	0.10	Acre	1,500	3 months	Individual	12,875	10,500
NTFP Processing								
Mahua collection	Family	480	Kg	0	20-30 Days	Individual	6,640	5,000
Siali Leaf Plate Making (machine)	Family	200	plates/ Day/ person	500	120-180 days	Individual	4,950	4,450

Notes

- These are the basket of activities and it is assumed that, a family must took up 2-3 activities
- The activities may vary location to location
- These basket of activities will also considered as a climate resilient strategy
- Net Return per cycle does not include the depreciation loss
- In net return per cycle, each cycle is based on period mentioned
- In case of vegetables the economics may vary from crop to crop, calculations are based on Tomato & brinjal
- Tentative Investments are in cash and are not calculating labour
- The units may vary from area to area and family to family

Annexure-23

Gantt Chart to show the periodicity of different activities from which some of them will be taken up by the Project Families

ACTIVITIES / Month→	M1 (Nov)	M2 (Dec)	M3 (Jan)	M4 (Feb)	M5 (Mar)	M6 (Apr)	M7 (May)	M8 (Jun)	M9 (July)	M 10 (Aug)	M 11 (Sep)	M 12 (Oct)
Tasar Sericulture												
Raising of Seedlings					■	■	■	■	■	■		
Plantation farmer/ Silkworm rearing												
Seed Rearing								■	■	■		
Nucleus Seed Rearing										■	■	■
Commercial Rearing	■	■									■	■
Silkworm Seed Production and processing												
Basic Seed	■	■	■	■	■	■	■	■	■			
Grainage	■									■	■	■
Agriculture												
Paddy (SRI & Improved)	■	■						■	■	■	■	■
Vegetables								■	■	■	■	■
NTFP Processing												
Mahua collection					■	■	■					
Siali Leaf Plate Making (machine)	■	■	■	■	■	■	■	■	■			

Annexure-24

Year-Wise Physical plan Outputs and Returns

#	Output	Physical										TOTAL
		Project Period			Beyond Project Period							
		Yr-1	Yr-2	Yr-3	Yr-1	Yr-2	Yr-3	Yr-4	Yr-5	Yr-6	Yr-7	
1	Natural Host Flora (Ha.)	372	744	940	940	940	940	940	940	940	940	**8,636.00**
2	Block Plantation (Ha.)	40	80	80	80	80	80	80	80	80	80	**760.00**
3	Reeling cocoons (Lakh Nos.)	50.976	102.736	129.648	129.648	129.648	129.648	129.648	129.648	129.648	129.648	**1,190.90**
4	Pierced Cocoons (Lakh Nos.)	3.904	10.144	12.192	12.192	12.192	12.192	12.192	12.192	12.192	12.192	**111.58**
5	Raw silk production (MT)	4.078	8.219	10.372	10.372	10.372	10.372	10.372	10.372	10.372	10.372	**95.27**
6	Tasar spun silk production (MT)	1.312	2.816	3.507	3.507	3.507	3.507	3.507	3.507	3.507	3.507	**32.19**
7	Fire wood (MT)	372	744	2820	2820	2820	2820	2820	2820	2820	2820	**23,676.00**

	Output	Financial (Rs. in Lakhs)										TOTAL
		Project Period			Beyond Project Period							
		Yr-1	Yr-2	Yr-3	Yr-1	Yr-2	Yr-3	Yr-4	Yr-5	Yr-6	Yr-7	
1	Revenue from Reeling cocoons	81.562	164.378	207.437	217.809	228.699	240.134	252.141	264.748	277.985	291.884	**2,226.776**
2	Revenue from Pierced Cocoons	4.294	11.158	13.411	14.082	14.786	15.525	16.301	17.116	17.972	18.871	**143.518**
3	Revenue from Tasar Raw silk	22.837	46.026	58.082	60.986	64.036	67.238	70.599	74.129	77.836	81.728	**623.497**
4	Revenue from Tasar Spun Silk	18.372	39.417	49.103	51.558	54.136	56.843	59.685	62.669	65.803	69.093	**526.680**
5	Revenue from Fire wood	1.488	2.976	11.280	11.844	12.436	13.058	13.711	14.396	15.116	15.872	**112.178**
6	Revenue from intercropping	1.200	2.400	2.400	1.500	0.000	0.000	0.000	0.000	0.000	0.000	**7.500**
7	Revenue from vegetable cultivation	5.760	6.150	3.040	3.192	3.352	3.519	3.695	3.880	4.074	4.278	**40.939**
9	Revenue from Agriculture	17.280	18.450	9.120	9.576	10.055	10.558	11.085	11.640	12.222	12.833	**122.818**
TOTAL		**152.79**	**290.96**	**353.87**	**370.55**	**387.50**	**406.87**	**427.22**	**448.58**	**471.01**	**494.56**	**3,803.91**

Note: 1. All the outputs are as per assumptions and physical phasing indicated in the project proposal
2. About 20% of the total reeling cocoons & 50% spinning cocoons will be converted in the project area.
3. Incremental income would be Rs. 3,000/- from paddy, Rs.5000/- from vegetable and Rs 3,000/- from intercropping
4. Firewood at Rs.400/- per MT. and intercropping would be possible in the initial four years of plantation.
5. An additional revenue of 5% every year is expected after the project period.

Annexure-25

Economic Analysis of the Project

I. Internal Rate of Return

Year	Total Project Cost	Total Project Grant	Total Returns	Net Returns	D.F. 10%	NPV at 10% D.F.	D.F. 15%	NPV at 15%
1	222.84	202.71	152.79	-70.05	0.909	-63.67	0.87	-60.91
2	209.29	177.74	290.96	81.67	0.826	67.46	0.76	61.75
3	123.87	97.58	353.87	230.00	0.751	172.73	0.66	151.23
4	166.80	0.00	370.55	203.75	0.683	139.16	0.57	116.50
5	175.14	0.00	387.50	212.36	0.621	131.88	0.50	105.59
6	183.90	0.00	406.87	222.98	0.565	125.87	0.43	96.39
7	193.09	0.00	427.22	234.13	0.513	120.15	0.38	88.01
8	202.75	0.00	448.58	245.83	0.467	114.68	0.33	80.36
9	212.88	0.00	471.01	258.12	0.424	109.47	0.28	73.38
10	223.53	0.00	494.56	271.03	0.386	104.62	0.25	66.94
Total	**1914.08**	**478.03**	**3803.91**	**1889.82**		**1022.35**		**779.24**
			IRR =	**186.73%**				

ii. Benefit-Cost Ratio

Year	Total Project Cost	Total Project Grant	Total Returns	D.F. 10%	NPV of Cost	NPV of Return	D.F. 15%	NPV of Cost	NPV of Return
1	222.84	202.71	152.79	0.909	202.56	138.89	0.870	193.78	132.87
2	209.29	177.74	290.96	0.826	172.87	240.33	0.756	158.24	219.99
3	123.87	97.58	353.87	0.751	93.03	265.76	0.658	81.44	232.67
4	166.80	0.00	370.55	0.683	113.92	253.08	0.572	95.38	211.88
5	175.14	0.00	387.50	0.621	108.76	240.64	0.497	87.08	192.66
6	183.90	0.00	406.87	0.565	103.81	229.68	0.432	79.50	175.89
7	193.09	0.00	427.22	0.513	99.09	219.25	0.376	72.58	160.59
8	202.75	0.00	448.58	0.467	94.58	209.26	0.327	66.28	146.64
9	212.88	0.00	471.01	0.424	90.28	199.75	0.284	60.52	133.91
10	223.53	0.00	494.56	0.386	86.28	190.90	0.247	55.21	122.16
Total	**1914.08**	**478.03**	**3803.91**		**1165.20**	**2187.54**		**950.02**	**1729.26**
BCR =						***1.88***			***1.82***

Note:Project cost from year-4 onwards refers to the estimated labour and input cost invested by beneficiaries, which is 30% of the total project cost.

Annexure-26

Institution architecture:

All the beneficiaries selected under the project would be either from existing SHGs in the proposed area or in places where there is no SHGs, groups will be formed in association with SRLM. These beneficiaries will be organized in to activity groups at the hamlet levels that would be federated to producers' collective at block / district.

Large-scale development of sub-sectors would require strong institutions, which would spearhead and sustain initiatives for the development of the sub-sector in the long run. Appropriate policy formulation, raising financial resources for investments, vigorous promotion of products, protecting the entitlements of the producers and widening stakeholder base are some of the important areas in Tasar Sericulture, which would require strong initiatives. Creation of appropriate organizations, designed to enhance the stake and control of the producers, would be a major challenge in the context of Tasar as majority of the producers come from the tribal and backward communities and are financially very poor. PRADAN would envisage creating relevant institutions with the involvement of the producers and enabling them to exert their control in the long run. This is also relevant in the context of the present plan; as the success of the plan would depend upon the efficiency of technology extension, establishing linkages between different producer groups and facilitating their access to carry out Tasar rearing in the forestlands. Given the time bound nature of the proposed expansion plan, and necessity of large scale mobilization of investment, PRADAN proposes to create different organizations as described below:

Primary level organization: The producers would be organized in to informal groups at village level. The village level organization will comprise of common rearer's and grainage owners who already exist in the village / hamlet. The primary level organization will comprise of 15-40 number of producers, depending on the size of the village / hamlet. Keeping such a small group will help members of the organization to interact with each other effectively. Primary level organization's (called "Tasar Vikas Samity") main concern will be selection of rearer's, selection of proper rearing site, maintenance of host plants, promotion of new plantations, monitoring of quality standard of DFLs and helping rearer's to access services for rearing and marketing of cocoons.

Secondary Level Organization: The secondary level organization will be formed at district/block level as an aggregation of village level organization (TVS) and will be organized into a "Tasar Rearer's' Collective". Here, all the members of village level organization will be an independent member of producers' collective. The district level collective will either be registered or will be linked with relevant state model in the respective state. The major role of the collective would be as following:

- Quality and price regulation for DFLs,
- Seed cocoon preservation and basic seed production,
- Promoting improved Silkworm rearing practices,
- Surplus and deficit management of DFLs,
- Accessing distant markets for cocoon sales,
- Establishing linkages with resource and research institutions for facilitating innovations,
- Mobilizing finance from financial institutions,
- Collaborating with Forest Department to improve the Tasar host stock.

It is proposed that the formation, grooming and nurturing of Producers' collective, who will be formed for every 500-1000 families based on the geographical spread. The Board Member and CEO of the Institution would get various training in all the relevant fields and exposure on the institution building in a well established Producers' Institution outside the project area, with the help of an expert resource person. Membership building of the institution is also an important part for its effective functioning on long run. The process would continue till the end of the project so that the institution would function on a sustainable basis even after the project period without any financial support.

Annexure-27

Plans for Post-project Sustainability and Scaling-up strategies

Tasar culture is an age old practice in the project area of the rural poor specially the Scheduled Tribes. The assured availability of quality commercial seed, improved technologies and the means for its adoption provided under the project, increase in the food plant population by maintaining Tasar host flora in natural forests/ private waste lands and chawkie garden leads not only to the increased production and productivity but also to sustain the project beyond the project period.

Organization of beneficiaries and different stakeholders into manageable groups, SHGs, TVS, and integrating them into Producers Organizations would strengthen the development of the industry. Establishment of required infrastructure within the project area, capacity building through training programmes and study tours, establishment of credit linkages with financial institutions helps in sustainability of the project. The increased earning capacity of the beneficiaries with increased productivity and quality, development of viable rural enterprises such as Private Grainage, Seed rearing, reeling, spinning, etc would take the project beyond simple sustenance to a viable commercial activity.

The project empowers rural poor in general and the women in particular economically with the introduction of the activities through technologies, which are women friendly, child unfriendly, hygienic and superior in terms of both quality and quantity production. This would along with introduction of improved machinery and technologies, establishment of backward and forward linkages between various groups would definitely result in self-sustainability of different activities.

The present Project is formulated based on the experience and lessons learnt during the earlier developmental Projects with an emphasis on formation of groups and producers' collective with establishment of effective forward and backward linkages. The biodiversity conservation is another important issue that is being effectively addressed through raising of plantations and scientific utilization of the forest trees. These measures on adoption by the existing Tasar rearer's as well as by those who take up the new rural micro enterprises like the private grainage by the middle level educated unemployed, contributes to the sustainability of the project beyond the project period. The economics of various activities like private graineurs, seed and commercial rearing besides yarn production activities indicates that the Project components rightly contributes towards poverty reduction, gender equity and has all the potentialities of a sustainable rural model for socio-economic development. Project output would be compared with the following indicators.

- The entire requirement of dfls in the commercial crop would be met through village based private Grainage to be established under this project.
- Gestation period for newly raised plantations would be limited to 3 years by adopting recommended technologies.
- By the end of third year, the producer's institution would attain self-reliance to sustain targeted standards of production.
- Producers' collective will be self sustainable in operation.

Annexure-28

Marketing Arrangement:

In the past three decades, the demand for Silk in the domestic market has increased at the rate of 5% per year on real terms. However, the production of Tasar silk during the same period has increased significantly in the last five years, gone up from 428 MT in 2007-08 to 1585 MT in 2011-12 (source Annual Report, CSB). The overall demand for Tasar silk far exceeds its supply from within India. Hence India has to import nearly 6,000 MT (the raw silk import of 2010-11 is 5,820 MT) of raw silk from China and Korea to meet its demand. The total value of Tasar fabric trade in India is estimated to be nearly Rs.450 crore. The domestic market accounts for nearly 60% of the total trade and the export market contributes the remaining.

As sericulture is a state subject under the Constitution of India, respective State Governments have the responsibility to take steps to formulate and implement schemes for sericulture development. However, allocations for the development of the industry are made on the basis of annual plans approved by the Planning Commission. Central Silk Board (CSB), under the Union Ministry of Textiles is the nodal agency of the Central Government that co-ordinates the development of the sericulture industry in various states and advises the Central Government on all matters relating to the development of sericulture. Besides the Central and State Government sericulture establishments, there are other important actors who contribute to the overall growth and development of the sericulture industry. These actors do take care of the marketing system by different means, some of the key actors and their role in marketing is as follows.

Central Silk Board (CSB)

The CSB has its headquarters in Bangalore. As the apex sericulture promotion institution in the country, the CSB is directly responsible for organizing sericulture research, training, basic seed production and also in sustaining a fair price mechanism for Tasar cocoons through its subsidiary organizations called RMB (Raw Material Bank):

Raw Material Bank (RMB)

The RMB offers support prices for Tasar cocoons. They buy cocoons directly from rearer's through cocoon *haats* (markets). The RMB support price is fixed by a designated Price Fixation Committee, which is composed of representatives from rearer's, weavers, NGOs, *khadi* institutions, State Sericulture establishments and nominated CSB officials. The RMB is headquartered in Chaibasa, Jharkhand.

State Sericulture Departments (DoS)

The Departments of Sericulture (DoS) in states such as Chhattisgarh and Andhra Pradesh offers market supports for Tasar cocoons by operating cocoon banks. Odisha on the other hand has been the only State where the Government had made systematic efforts to promote Tasar Producers' Cooperative as a means to strengthen the livelihoods of producers across the value chain. This initiative was undertaken in the late '70s and early '80s with a focus to bring all the producers within the folds of collectives. The Cooperatives took responsibilities of organizing DFL supply, offered extension services and bought bulk of the cocoons from the rearer's at fair prices.

In the state producers are organized in to an existing Tasar rearer's co-operative societies run by the Department of sericulture. Under the project PRADAN will organize the rearer's in to TVS at village level and based on the geographical spread these TVSs will be aggregated in to producers collective. These collective will be linked with the existing rearer's co-operative societies to get the benefits that are not under the MKSP project. The existing co-operative has also a mandate to procure all the cocoons from the producers, thus the producers collective would sell their producer to the societies at the pre-negotiated price with the societies. No parallel cocoon procumbent agency will be promoted under the project.

The Producer collectives/ TVS would be the building blocks of the state promoted structure like cooperatives. At the level of the Cooperative, PRADAN would facilitate active participation of the members in making the cooperatives more responsive to the needs of members.