

DETAILED PROJECT REPORT

PROMOTION OF LARGE SCALE TASAR BASED LIVELIHOODS IN WEST BENGAL



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 West Bengal		
2	Project area	Bankura and West Medinipore		
3	Coordinating Agency	Central Silk Board, Min.of Textiles, Govt. of India		
4	Project Implementing Agency	PRADAN		
5	Total Project Cost (Rs. In Lakhs)	617.260		
6	Funding Pattern (Rs. in lakhs)	CREDIT & BENEFICIARY	MORD	CSB
		83.260	400.400	133.600
	<i>Sharing pattern (%)</i>	<i>13.5</i>	<i>64.9</i>	<i>21.6</i>
	<i>Investment per beneficiary</i>	<i>20120.6</i>	<i>%</i>	
	<i>Cost of capacity building/ beneficiary</i>	<i>2929.2</i>	<i>14.7</i>	
	<i>Cost of infrastructure per beneficiary</i>	<i>6986.9</i>	<i>17.1</i>	
	<i>Cost of equipment per beneficiary</i>	<i>7070.1</i>	<i>17.3</i>	
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	155		
	Commercial rearer's	1236		
	Private Graineurs	39		
	Community Resource Persons	37		
	BSPU members (15 per unit)	15		
	Improved agriculture	1495		
	Vegetable cultivation	299		
	Women SHG members	748		
	Indirect beneficiaries	381		
	Total Project Beneficiaries	2654		
	9	Infrastructure to be created		
a	Block plantation (Forest/ private/ revenue lands) (ha.)	130		
b	Regeneration of block plantation (ha.)	946		
c	Basic Seed Production Units (No.)	1		
d	Rearer's' Collective (No.)	4		
10	Project Output (during the Project period):			
	Tasar basic seed (Lakh dfls)	0.5		
	Tasar commercial seed (Lakh dfls)	5.1		
	Tasar Reeling Cocoons (Lakh Nos.)	290.1		
11	Value of the Project output (Lakh Rs.)	756.00		

Abbreviations

ASR	Adopted Seed Rearer's
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
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
ISTP	Inter State Tasar Project
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
NTFP	Non Timber Forest produces

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
UNDP	United Nations Development Programme
VLC	Village Level Committee
WB	West Bengal

Summary of the proposal

A	Title of the Project	Promotion of Large Scale Tasar Sericulture Based Livelihoods in West Bengal
B	Project Duration	Duration: 3 years (2013-16)
C	Total Budget (Approved)	<ul style="list-style-type: none"> • Rs. Crore 6.173 – Total Budget • Rs. Crore 4.004 – Govt. of India, MoRD • Rs. Crore 1.336 – Central Silk Board • Rs. Crore 0.833 – Community and Other Sources
D	Name of the Executing 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	<p>The project areas have been carefully chosen to include selected BRGF / IAP districts of the State of West Bengal to reach out to a large number of marginalized families who have for generations, suffered from isolation and social exclusion.</p> <ul style="list-style-type: none"> • No. of Districts: 2 • No. of Blocks: 7 • Direct Beneficiaries: 1525 • Women SHG members: 748 • Indirect beneficiaries: 381 • Total project beneficiaries: 2654
G	Infrastructure to be created	<ul style="list-style-type: none"> • Block plantation (Forest/ private/ revenue lands) (ha.)-130 • Regeneration of block plantation (ha.)- 946 • Basic Seed Production Units (No.)- 1 • Rearer's' Collective (No.)- 2
H	Key Outputs of the Project	<p>Enhanced family incomes by Rs.10,000-18700 for 60% of participant women through Tasar Sericulture by</p> <ul style="list-style-type: none"> • 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.)	756

Chapter 1: Project background, context and rationale

The state of West Bengal with a population of 82 million as per the census 2001 is the fourth most populous state in the country, with the highest population density of 904 persons per square kilometre (nearly 3 times the national average). About 72 per cent of the people live in rural areas. The percentages of scheduled caste and scheduled tribe populations are 28.6 and 5.8 respectively in the rural areas. The state has grown rapidly after independence from food deficit state post independence to a food surplus state after early 1980's. The state of West Bengal presently is considered to be a major vegetable producing state in the country and the service sector in the State has expanded faster than the national average. The reduction in poverty ratio from 53.6% in 1983 to 25.67% in 2004-05 with even more drastic decline in rural poverty from 61.56% in 1983 to 28.49% in 2004-05. Presently West Bengal Stands 14th In the MPI (Multi Dimensional Poverty Index) ranking above of all other states of Eastern India.

But the situation is not similar across the state and the picture presents an error of average. The western parts of the state include some of the most backward areas with lowest per capita income in the state and poor HDI (Human Development Index) rankings. Inadequacy of transport and communication networks and lack of basic amenities and services are further compounded by the fact that this region comprises of all the LWE (Left Wing Extremists) districts of the state. The districts of West Medinipore and Bankura largely constitute this region. Maoist violence being a serious hurdle in the districts, has kept on bringing the core issue of human development in forefront. The region can be divided into two distinct parts; the western part characterized by high concentration of tribal population, high forest cover, affected by Maoist violence and low in indices of the HDI. Whereas the eastern part has multi caste communities, low forest cover, good agriculture and the HDI is relatively higher.

Context of the Area: The Western part consists of 12 blocks (4 blocks of Bankura and 8 blocks of West Medinipore districts). These blocks are dominated by Schedule Tribe communities. The total population of the 12 blocks consists of 1.85% of the total population of the State, but these blocks host almost 10% of the total tribal population of the State. The area also consists of 11% of the total forest cover of West Bengal. The area in context of poverty indicators within the districts also shows a contrasting deficit. The 12 blocks together consists 39% of the tribal population of the districts, 22% of the BPL (Below Poverty Line) families and 47% of the total forest cover of the districts total. The area has almost become isolated from the mainstream in the last three years because of the LWE activities. While, discussing with the community it has been felt that people are still in shock and just trying to recover from the trouble torn past.

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. There are around 10,000 families engaged in the sector. 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.

An estimated 50% of the producers in the sector have lost their livelihoods from Tasar in the past three decades. This resulted into rapid deforestation in areas with Tasar host tree stock. Low production of cocoons resulted in rapid fall in yarn production and weaving. A nexus of moneylender- traders controls the

markets at the level of the producers. As per state sericulture departmental data the production of cocoon has fallen from 2.72 crore pieces in 1997-98 to 2.52 crores in 2004-05.¹

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 for nearly two decades in West Bengal 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 around 2654 sustainable livelihoods for the marginalized households, specially seeking involvement of Scheduled tribe communities and women in Bankura and West Medinipore district of West Bengal, 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 West Bengal 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 Layings (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%

¹ All the data are based on WBHDR, economical Review 2011-12 of West Bengal and Census data 2001 & 2011

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,

1.1 Demographic Profile of the area

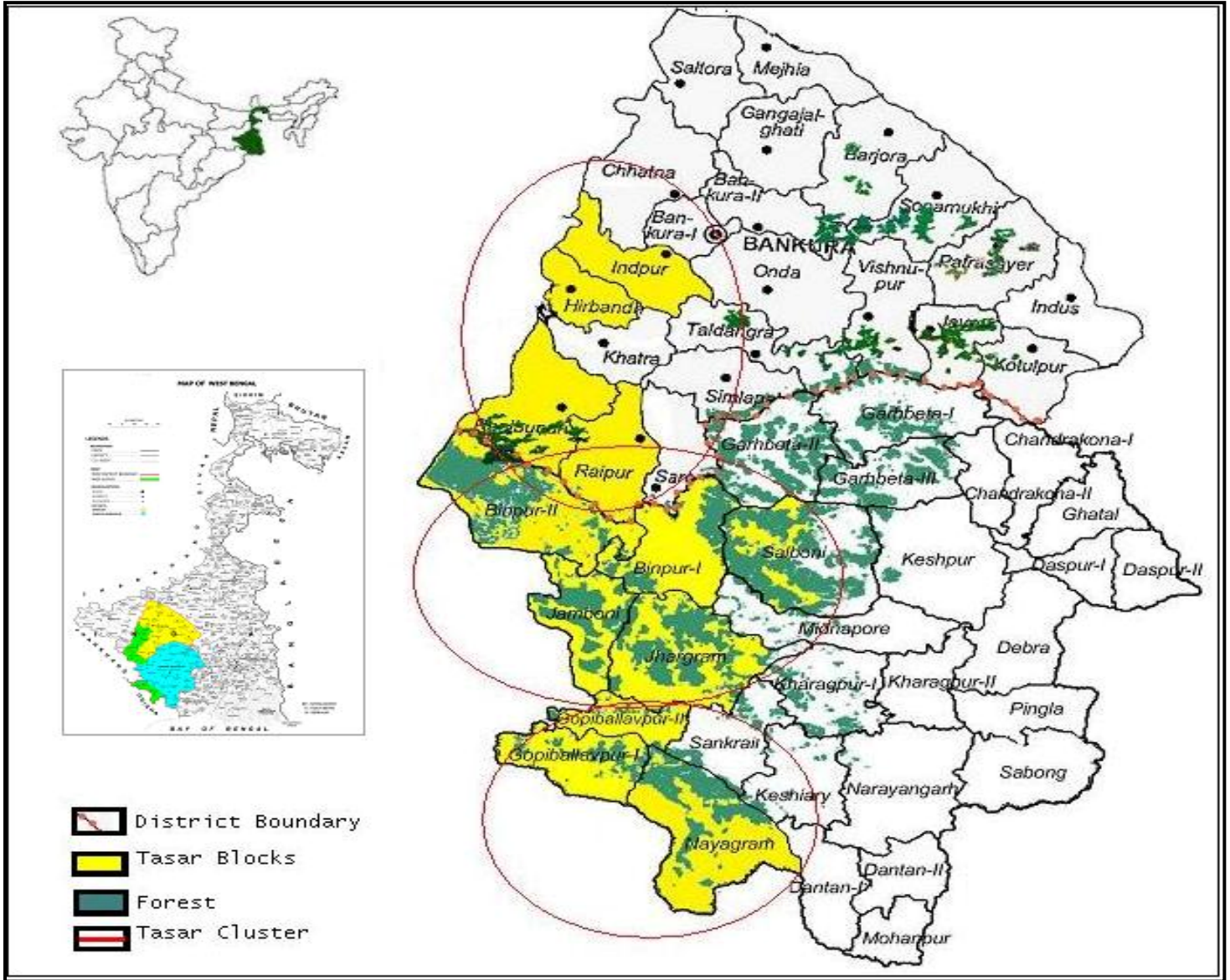
The Project is being implemented in the districts of West Medinipore and Bankura of West Bengal. Even in these districts focus is on seven blocks namely Binpur-2, Gopibhallabhpur-1 and Nayagram of West Medinipore and Hirbandh, Indpur, Ranibandh and Khatra of Bankura Districts respectively. The demographic profile of the area is shown in the following table:

Demographic indicators→	Rural Populn (%)*	Minority (%)*	S.C %*	S.T% *	Literacy %*	BPL %*	Forest %**	Sex Ratio *	Density of Population ***
West Bengal	72.03	25.25	23.02	5.50	68.64	27.02	13.52	934	903
West Medinipore	88.10	15.23	18.05	14.87	70.41	44.00	14.36	961	531
• Binpur-2	100	39.42	14.65	42.11	62.05	68.59	35.12	983	250
• Gopibhallabhpur-1	100	9.91	22.06	34.67	56.45	47.72	19.89	942	344
• Nayagram	100	19.33	18.36	39.85	55.6	69.26	26.89	979	247
Bankura	92.63	15.37	31.24	10.36	63.8	42.48	21.53	953	464
• Hirbandh	100	18.43	24.56	28.54	58.2	49.95	22.00	944	336
• Indpur	100	9.15	38.17	9.80	61.9	48.19	22.00	941	459
• Ranibandh	100	44.17	11.24	47.28	61.7	49.75	42.00	962	244
• Khatra	96.42	20.20	24.74	22.24	63.9	46.87	13.00	951	441

Source : *Census 2001, ** HDR and ***Wbagrimarketingboard

The area is characterized by high tribal population, low population density and high forest cover. 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 seven blocks is rural other than some urban presence in Khatra block of Bankura 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:

Human development in West Bengal presents a mixed picture, and this picture is further complicated by the variations across districts in the state. West Bengal with 904 persons per square kilometres is the most densely populated state in the country. Having a population density thrice of the national average, the pressure on basic infrastructure and other provisions are immense. The state has 72% of its population rural, having scheduled caste 28.6% and scheduled tribe 5.8% respectively in the rural areas. Among the minorities, Muslims are the dominant section, accounting for 33.3% of the urban and 11.8% of the rural population. SC, ST and Minority groups together account for more than half the population of the state, and are also the poorest groups in rural West Bengal. According to the Planning Commission, the proportion of population below the poverty line in 1999-2000 in West Bengal was 31.85%.

The project area consisting of West Medinipore and Bankura are parts of the western part of the state. The western parts of the state include some of the most backward areas from the point of view of infrastructure and material development, with the lowest levels of per capita income, left wing extremism prone and also relatively poor HDI rankings. The relative inadequacy of transport and communication networks and the inadequate physical provision of basic public goods and services are compounded by the fact that this region is relatively speaking the driest in the state. West Medinipore and Bankura, the second and fourth largest district of West Bengal respectively is popularly known as 'Rarh' region. The districts are poverty prone and having more than one-third of the population of these districts is below poverty line (42-44%). Whereas in the 7 project blocks the scenario of poverty is more prevalent (47-69%), the poor people lack opportunities to have access to public infrastructure and income earning. A majority of them earn their livelihood through unskilled, casual manual labour and harnessing the natural resource base. Almost half of total population of these districts either belongs to scheduled caste or scheduled tribe and majority of them are below poverty line. The primary cause of poverty of this section is that little amount of land or no land is owned by each family.

The districts are having a high percentage of families living below poverty line and particularly in the project blocks. The material and infrastructural inadequacies resulting in high school dropouts in primary education (6 out of 7 project blocks except Binpur-2 are educationally backward blocks), high incidences of malnourishment, low per capita income and resulting migration. The situation around the mentioned parameters are more striking in the project blocks and in majority of the parameters almost two times of the state's overall.

Demographic indicators→	Rural Population (%)*	BPL %*	Work Participation Rate (%)*	Rural Monthly per capita consumption at 2000-2001 Prices (Rs)*	Malnourished children (0-6 yrs) per 1000 children weighted (%)*	dropout (%) in primary education**	Total families migrating (%)*
West Bengal	72.03	27.02	34.80	783.00	23	15.78	27
W. Medinipore	88.10	44.00	41.00	490.20	38	18.00	32
Binpur-2	100	68.59	49.00		43		47
Gopibhallabhpur -1	100	47.72	43.00		64		54
Nayagram	100	69.26	59.00		52		58
Bankura	92.63	42.48	32.00		353.28		58
Hirbandh	100	49.95	37.00	62		57	
Indpur	100	48.19	35.00	61		85	
Ranibandh	100	49.75	45.00	55		72	
Khatra	96.42	46.87	36.00	60		54	

Source : * Human Development Report, ** SSA

b. Vulnerabilities:

a. Household level vulnerabilities

The context of household is very different in West Bengal across state and within district itself. The state is having 4.55 persons per household, whereas the district averages are 4.50 but in case of the project blocks the average persons per household is 4.02 as per Census 2011 data and Human Development Reports of West Bengal. 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 80% and above are having land less than 1 hectare. Land in the western part is undulating, lateritic, water holding capacity is less. 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. The situation of women in the households is more critical, as per National family health survey-2 (2001), the mean BMI (Body Mass Index) of tribal women aged 15-49 in West Bengal is 18.2 and the nutritional condition is considered to be super critical. The situation is worse in tribal women as a socio economic category, consisting of 64.2% women below the Mean BMI of 18.5.

The combination of an undulating and hilly terrain and high rainfall produces high micro-level variability in the region. One encounters diverse conditions with regard to soils, slope, water availability, soil depths, et al within the boundaries of even the smallest village. Though there are variations across upper-, middle- and lower watersheds, the overall pattern repeats itself in micro-watershed after micro-watershed, village after village – dry uplands with shallow soils, dry midlands with deeper soils and wet lowlands with deep soils. This is combined with absence of a strong agrarian tradition, poor connectivity, weak public services, poorly developed markets and lack of market orientation. The area has a sub-humid climate with average annual rainfall of 1,300 mm. However, due to high variability of monsoon rains, low moisture holding capacity of soils, absence of developed aquifers due to the hard rock substrate and high run-off due to the undulating terrain, agriculture is fraught with high risks. The average landholdings are 0.5 to 1 hectare with very little irrigation facilities, thus a majority of the landed population can be categorized as small or marginal farmers.

A typical farmer would have his land distributed in small parcels across the catchments, thus each piece of land would have its different challenges and assurances. Moreover, the land holding is also declining due to rapid population growth with many families being on the verge of being landless. Following table shows the growing trends of landlessness:

Years	Landlessness %
1987-88	39.6
1993-94	41.6
1999-2000	49.8

Source: DHDR Report 2007

In agriculture, paddy accounts for almost 60 percent (about 75 percent of kharif) of crop coverage even though less than 10% of the net sown area is irrigated (some of it defunct, and none used during kharif) and no more than one-fourth to one-third of the net sown area is in the valleys where water control may be feasible during kharif once the monsoon settles down. Productivity of all the crops is in the range of one-third to one-fifth the national average and often as low as one-tenth the potential. Following table shows the land use pattern where we can see the net crop sown area is low:

District	Reporting area ('000 ha)	Area under forest	Current fallows (%)	Net sown area (%)
Bankura	688	21.65	5.45	50.20
West Medinipore	928.58	18.52	2.02	60.17

Source: DHDR Report 2007

Even in years of “normal monsoons” with overall rainfall around the long-term average, farmers are often faced with the specter of total crop failure due to long dry spells at critical junctures in the crop cycle during the wet season when almost 90% of the crops are cultivated. Most of these families are not able to produce enough food from their own land, due to issues such as lack of knowledge or skills, low quality of land and water resources, lack of access to capital and other inputs, or their inability to plan systematically due to the uncertainties. They mostly have food security (number of months in a year where they are sure they will get at least two meals a day food) ranging from 6 months to 9 months. Thus farm related livelihood which is supplemented by agricultural wage-labour is the Primary livelihood source of our clientele. For families with less than an acre of holding, the primary source is agriculture related wage labour supplemented with seasonal migration to nearby districts and livestock rearing which mainly serves as a buffer.

District	Average person days created per house hold (2007-08) ²
Bankura	41
West Medinipore	24

Crop and resource husbandry practices continue to be poor due to low returns and high risk. It is not unusual for farmers owning a few acres of land in these regions to migrate to the plains as agricultural laborers' during the peak kharif season even as their own fields languish. The downward spiral of low productivity leading to poor husbandry, which further reduces productivity results in widespread resource

² Ref: MDG-Based Poverty Reduction Strategy for West Bengal by Achin Chakraborty & Subrata Mukherjee

degradation and impoverishment of the people. If we glance through the employment opportunity of the people under NREGS, that is also not very encouraging for them. The following table gives a glimpse of it.

A cross-sectional study was conducted named “Enduring starvation in silent population: a study on prevalence and factors contributing to household food security in the tribal population” by Mr. D.K. Mukhophaday done among 267 tribal households in Bankura-I CD Block selected through cluster random sampling. Household food security was assessed using a validated Bengali version of Household Food Security Scale-Short Form along with the collection of information regarding the monthly per capita expenditure (MPCE), total to earning member ratio, BPL card holding, utilization of the public distribution system (PDS) and receipt of any social assistance through a house-to-house survey. The results found were overall, 47.2% of study households were food secure whereas 29.6% and 23.2% were low and very low. Out of them, 6.2% households have pucca houses, 14.7% have mixed kutchcha-pucca houses, and the rest lived in kutchcha houses. The average family size was 6.0 (± 0.15) and almost three-fourth households (75.7%) had under-5 children. Only 27.3% households had nuclear families. A total of 12.6% households had any member with 10 years or more years of formal education. The MPCE (Monthly Per Capita Expenditure) was 342.3 (± 10.3) and the average total to earning member ratio was 4.3 (± 0.1). BPL card holding was reported by 69.3% households and 18% received benefits from any of the social assistance programs sponsored by the government.

As evident, 47.2% households had high or marginal food security whereas 29.6% and 23.2%, respectively, had low and very low food security. The prevalence of low and very low food security was higher among households having under-5 children (31.2% and 24.3%) compared to other households (24.6% and 20.0%).

The proportion of households which utilized PDS regularly was 56.9% (152 out of 267) and food security was found to be higher among households regularly utilizing the facility of PDS (59.2% vs. 31.3%) as well as among those who were the beneficiaries of any social assistance program (56.3% vs. 45.2%). Low food security was higher among BPL card holders (31.9%) compared to the households who did not have a BPL card (24.4%) but the very low food security was similar (23.2% in both cases) in households with BPL cards.

Overall, the district we work in are lowest ranked in GDI & HDI. Gender differences are very apparent in terms of literacy, access to schooling, health, nutritional indicators. Economic exclusion remains one of the significant problems which tend to have spill-over effects in other aspects of life in the state itself, and hence the backward districts are worst off. Though it is reported that women's participation in panchayats has been greater and more substantive than in many other states, but in reality mostly it is a myth. The actual decision making space is not available to them. There is next to no representation in the Gram Sabhas by the women.

Malnutrition, poor sanitary conditions and scarcity of safe drinking water have also aggravated their situation. Most villages lack safe drinking water sources like tube-wells due to the lack of accessibility for the boring vehicles and many more have become defunct over the years. Even many villages do not have wells and thus have to depend on open water collection pits in the nearby streams and rivulets. During the summer months the water crisis is acute. Anaemia, irregular vaginal bleeding, swelling of feet, malaria and premature delivery are the common health problems among the women who face difficulties in discussing their health problems with doctors, most of whom are men. As a result, even minor health problems, which could be easily treated in the initial stages, assume chronic and serious proportions. For instance, untreated

gynaecological problems in adolescent girls often lead to abortions and complications or even deaths during deliveries. The fact that the IMR in these districts are higher than 50%³ is in itself a data about the condition. The average age of women at 1st childbirth is recorded as 19 years, but the practical experience is of lower than that, as the age of marriage as seen is average 16 years. The poor health status of the women is aggravated by this. The literacy status is not very encouraging even. According to the NSS, in 1999-2000, 27% households in rural areas did not have any literate adult and the proportion of households without any female adult literate was substantially higher, at 51% in rural areas⁴.

Overall, the level of vulnerability of households is very high with respect to income, health, education (6 out of 7 project blocks are considered to educationally backward blocks except Binpur-2) and food security. Multiple factors contribute to this, and these are compounded by infrastructural deficits and lack of sufficient cash-based income sources. The coping mechanisms with respect to credit, the level and quality of access PDS and entitlements, and lack of incomes to address vulnerabilities is extremely limited. Multiple interventions focussing on these vulnerabilities are necessary to bring in a lasting change.

b. District/state level vulnerabilities

West Medinipore and Bankura both having experiences of drought and flood are common. The project area is more affected by drought and is about 335248 ha comes under the drought prone zone as per DHDR reports. The project areas have an undulating topography and lateritic soil, which is unsuitable for large-scale cultivation. Drought affects the population here frequently and causes damage to the limited agriculture in the area, affecting food security of the people living here. Though the districts does not have a coastline, it is affected frequently by the cyclones during the months of October and November and untimely rains during April and May as per the DHDR reports. Although the districts benefits from and depends on extensive natural assets, they are at enormous risk. The reason is that natural assets such as forests, fisheries, and water tend to be common property goods for which markets cannot provide basic coordinating functions—revealing true values, balancing interests over time, and providing efficient outcomes. As a result natural assets are difficult to manage sustainably, leading to the loss of forests, degradation of soils, overexploitation of agriculture and deterioration of surface water and groundwater. Two functions of natural assets are especially crucial to the health and livelihoods of poor people of the districts—particularly in rural areas, where 90% of the region's people live. The first is a timely and even rainfall and the second is access to health and proper education. These two functions are interlinked and decide the fate of the rural folk.

Risks are two types in nature:

- Natural hazards like draught, flood, crop failure soil erosion, etc.
- Social hazards like displacement, health, terrorism and indebtedness.

Key points to hazard analysis

- Poverty in the project areas is exacerbated by precarious livelihoods with the rural poor suffering the most.
- The project areas have a higher disease burden than any other region, with 30% of the burden due to environment-related diseases such as malaria, diarrhea, and respiratory infections.
- Land degradation is a major source of household food insecurity, income risk and vulnerability.

³ Ref.-Pg 123, West Bengal Human Development Report 2004

⁴ Ref. Pg 148, West Bengal Human Development Report 2004

- More than 90% of project area's soils are lateritic and low in nutrients.
- It is highly susceptible to the effects of climate change like droughts & cyclones.
- It has distinct characters across the project area, lateritic soil with undulation of land. Agricultural production is highly dependent on monsoon which results in low yield and sometime crop failure. As irrigation facility is poor most of these parts is single crop.
- Migration of rural work force is common in this part which leads to poor index in terms of education, health and socio-economic parameters.
- A large section of the population in the region migrates to Maharashtra and Gujarat for earning livelihood. Contamination of HIV virus and other STDs are often observed.
- Human trafficking and related issues poses threat to social balance here.
- Nearly 80% of population is dependent on agricultural activities which are mostly dependent on downpour during monsoon.
- Insurgencies in the part, adjoining the State of Jharkhand and Orissa have disrupted normal life.

Human Vulnerability due to Natural Hazards

Human vulnerability is defined as the lack of key assets, exposing societies to increased risk of poverty. The fewer assets a society has, the more vulnerable it is. Thus degradation of natural assets can exacerbate poverty and increase vulnerability. In rural areas of the districts seasonal fluctuations in food and water supplies are one of the main causes of vulnerability. In addition, many poor people live in environmentally fragile areas such as lateritic or forest lands with low soil fertility. Lacking other options, growing numbers of poor people have also moved to places in search of livelihood. These fragile sites are increasingly caught in a downward spiral of poverty and resource degradation.

Crop Failure Leads to Food Insecurity:

Vulnerability occurs when people or societies lack key assets and is exposed to greater risk of poverty. Poor people tend to have not only low incomes, but also low and unstable natural resource bases. As a result poor people's livelihoods are more likely to be disrupted by prolonged drought, major crop failures, or devastating livestock diseases. Thus agro climatic conditions and geographic factors, such as rainfall and soil type, are critical in determining vulnerability and poverty. Large differences in living standards between areas in the same districts are correlated with unequal distributions of natural assets, differences in agro-climatic conditions, or differences in geographic conditions, such as remoteness from markets and transport routes. These findings are intuitive because households in remote areas, living on fragile lands, would be expected to have fewer opportunities and face greater risks and vulnerability than households in better-endowed areas. The findings are also consistent with the fact that poverty is more severe in rural than in urban areas. Analytical underpinnings make it possible to develop a strategy for sustainable development based on sustaining natural assets and reducing human vulnerability. The following examples show the clear relationship between poverty and agro-climatic conditions in various West Medinipore areas. Income fluctuations are a significant cause of transitory and persistent poverty. In western part of West Medinipore (All art of project blocks) harvest failure—largely due to drought,—has been a major shock for most rural households. The rural poor tend to be more vulnerable because of their limited ability to substitute assets to mitigate shocks. Some farmers may understate crop production in an effort to secure food aid or other benefits. But it is more likely that most rural farmers are malnourished and suffer from illnesses, resulting in insufficient crop production and persistent food insecurity and poverty. The crop failure caused extensive income losses and so increased poverty. But the crop failure was not the only reason the income distribution changed: Other changes resulted from individual and household characteristics. Western West Medinipore is

facing a regional food security crisis due to adverse climate conditions. Erratic rainfall in the year 2009- 10 slashed the agricultural production in the blocks like Binpur I, Binpur II, Jamboni, Nayagram and Jhargram. Thus significant shortfalls in agricultural production of West Medinipore are affecting food security among rural households of the western part of the district.

Soil erosion erodes people of their fortune

Many blocks like Binpur I, Binpur II, Jamboni, Nayagram and Jhargram in West Medinipore and Ranibudh, Indpur, Hirbundh blocks of Bankura are moderately or severely degraded. Land degradation is linked to poverty and population pressures, people's attitudes and values, weak land management, and drought—which result in overgrazing, unsustainable agricultural activities, overexploitation of land (such as trees used for fuel wood), and deforestation. About 50% of land degradation is caused by erosion of top soil, 24% by crop production, and 14% by clearance of vegetation for agriculture, and 13% by overexploitation. Degradation has decreased land productivity, and caused losses of arable land. Degraded land produces less food, reduces the availability of biomass fuel, makes ecosystems less resilient, and increases malnourishment and susceptibility to disease in local populations. Nearly 30% of the population of project area lives on fragile lands. Poverty also makes rural people dependent on fuel wood for energy.

Across The project area, rainfall averages 1600 millimeters a year. It is an alarming fact that only 0.13% of the annual rainfall is stored in tanks, ponds, irrigation channels.

Human Vulnerability due to Social Hazards

Apart from risk due to natural calamities, every society has some of its chronic and intrinsic problem, such as, low level of education, health and nutritional characteristics, poor quality of house, less number of livestock, very limited access to money etc always are posing threat to human life of that society. In rural and urban societies of districts, three such social factors are being observed grossly and mostly.

- a) Indebtedness that leads to poverty, starvation and even death sometimes.
- b) Internal displacement causing due to indebtedness, landlessness etc.
- c) Health related a hazard that is also making life more miserable.

There is an inter-linkage between all these three factors and these factors or internal dimensions of vulnerability coexist with natural factors or external dimensions such as food, draught or soil erosion etc. The linkage between these three factors has formed a conspicuous circle surrounding the common man totally. Now, let us discuss, those three factors to identify the nature of this linkage so that it can be addressed with a proper manner which would have a people centered approach.

Indebtedness

Very limited access to money is the major and most serious risk throughout the people of jungle mahal. Per capita income as well as purchasing power is very low. People are more willing to stay in their traditional occupations like, collection of Kendu leaves, making of rope from babui grass or traditional mode of cultivation. This practice pushes them towards continuous economic crisis. Furthermore, traditional ceremonies, local crop failure, also compel to borrow loan from moneylender with high rate of interest. Thus the poor household falls prey to continuous debt. Even local polities in their territories sometimes create a barrier to appropriate distribution of money and resources. So, most of the time, it even becomes difficult to

manage meager livelihood causing starvation and poverty. So, it is highly required to provide relief to the poor man from the vicious cycle of interest imposed by the money lenders.

Internal displacement

Internal displacement is nothing but forced migration. It happens due to political conflict in an area and thus makes the people especially poor tribal dying alive. Most of the internally displaced people (IDP) live in animal like condition with very low per capita income. Many of them survive by begging, or collecting firewood, whereas most of the womenfolk sale country liqueur or do odd jobs to generate additional income. The recent situation in the districts has pushed many lives under threat of such displacement and even has displaced. Displacement also occurs through trafficking. Children and women are being trafficked to the bordering states generally for domestic workers or sexual worker or child marriage. The social economic situation of the family adds to vulnerability while both boys and girls are victim of trafficking, girls become vulnerable more. Indebtedness is again major cause of such trafficking. Relatives even parents' sale their children to overcome the huge load of debt or to avoid starvation. Sometimes, they are being trafficked by luring them. However, poverty, joblessness, acute shortage of money are the driving factor of such displacement or trafficking.

Health related problem

Joblessness, landlessness, homelessness, marginalization, food insecurity, increased morbidity enhance the chance of vulnerability directly and indirectly by affecting the health of the people. Malnutrition enhances the risk of prenatal or postnatal mortality. The rate of death at the time of child birth is high especially in tribal areas. Lack of education and some social customs compel the society to experience female feticide or less acceptances of immunization programme or improper contraception method causing population burst.

Alcoholism is another social threat. It has always been an acute problem especially in the tribal community. Alcoholism leads to indebtedness or joblessness as well. People addicted to such practice usually posses the apathy for struggle in day to day life and to accumulate livelihood, they often depend or borrowing and thus fall into the trap of moneylenders. Such addiction diminishes the quality of life and makes life vulnerable.

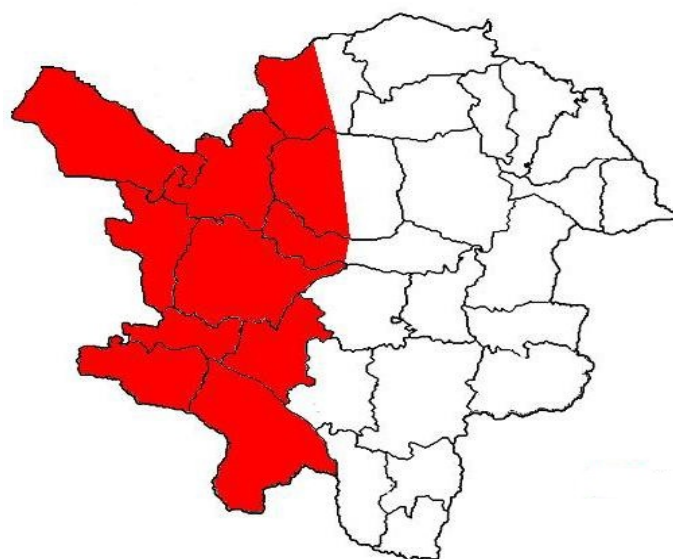
LWE Violence

Left Wing Extremism (LWE) in last few years has brought the area particularly West Medinipore in national radar. Other than Dantewada and Bijapur in Chattisgarh, West Medinipore has seen one of the worst instances of LWE violence in the last couple of years, leaving more than five hundred dead and a similar number missing. Out of the 29 blocks of the district, 11 blocks in the western part of the district have remained in the grip of LWE violence.

Loss of Human Life and Property in West Medinipore

Incident	Nov. 2008 – Oct. 2009 (12 months)	Nov. 2009 – Aug. 2010 (10 Months)
No. of person killed	62	313 (including victims of Gyneswary Exp.)
No. of person injured	42	156
No. of trucks burnt	4	59
Destruction of private vehicles	2	52
No. of Govt. property destroyed	1	20

Source: DHDR West Medinipore-2011



**CLUSTERS AFFECTED WITH LEFT WING
EXTREMISM, HIGHLY AFFECTED IN WEST
MEDINIPORE**

1.3 Context of Social Inclusion and Social Mobilization

As said earlier, one of the key constraints for development of the State is its traditional feudal social relations which have long defined what role a person or family would be assigned to in the economic system. However, the tribal communities have largely remained aloof of this vice though they do have their own traditional divisions of people based on what they do.

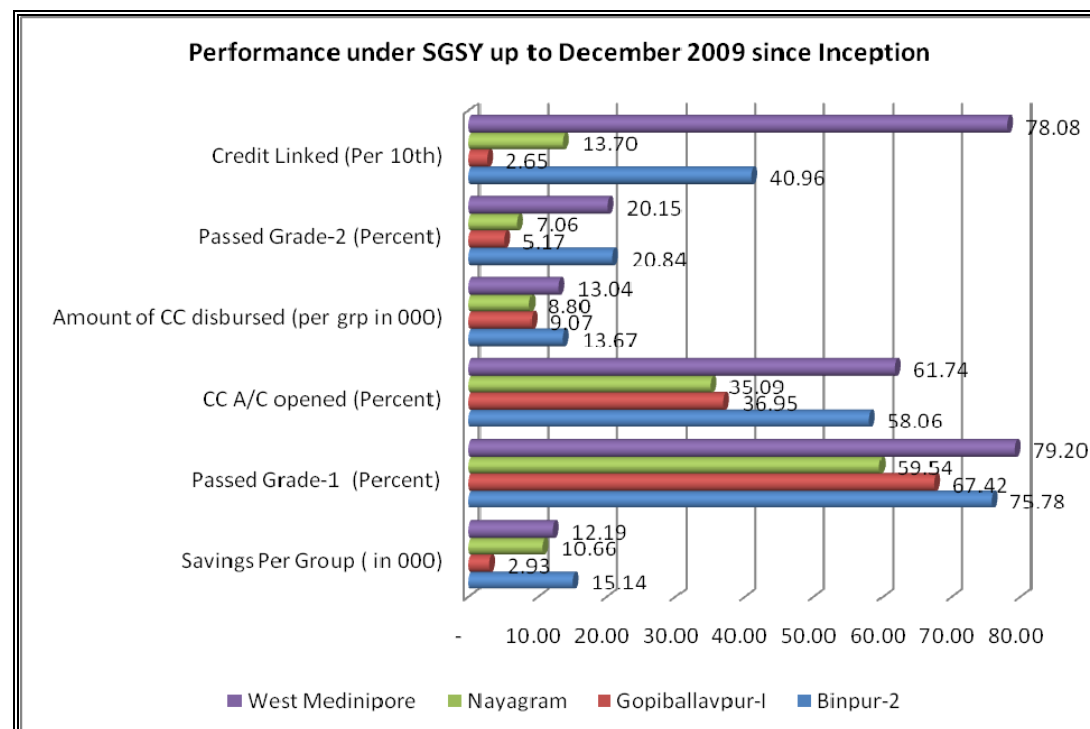
SHG Movement in West Bengal started late but gained momentum significantly later. It is estimated that there are more than three and a half lakh SHGs in the State, out of which little more than 1.5 lakh SHGs have been formed under the Swarnajayanti Gram Swarajgar Yojana (SGSY) alone. West Medinipore district has a rich heritage of SHG movement. There are 28,000 SGSY groups and 20,000 NABARD groups in the district. The district has a strange combination of social-political inclusion and exclusion. On one hand there are development initiatives, supported by local political institutions, which have emerged as

pathways out of poverty for the chronic poor households. Such is the power of the initiative that some chronic poor households have come together, formed Self-Help Groups (SHG's) and are slowly and steadily working towards strengthening their livelihoods-related opportunities. In this context there are important lessons to be learnt in managing local institutional mechanisms for removing chronic poverty. However, such a momentum is limited only to a few blocks of the district – especially blocks Garbeta 1 and Garbeta 2 and Keshpur. The Self-help group movement in the Bankura district is comparatively lesser. Various agencies are involved in formation and nurturing of self-help groups (SHG). Under the Swarnajayanti Gram Swarojgar Yojana (SGSY), the District Rural Development Cell (DRDC) of Bankura Zilla Parishad is involved in the promotion of SGSY groups. Till the end of financial year 2009-10, 17743 groups have been formed. The Self Help Groups (SHGs), which are formed around savings and credit, have been one of the effective ways to overcome the hindering factors. The quality of these SHGs may differential. The focus has been on promoting SHGs but little organized effort has been on promoting secondary/tertiary level people's institutions that could have lent strength to SHGs and provide sustenance to the needs of primary groups.

Performance under SGSY up to December 2009 since Inception in West Medinipore

Block/District	No. of SHGs formed	No. of Women SHGs formed	Total Savings (Rs in Lakh)	Passed Grade-1 (in Number)	CC A/C opened (in Number)	Amount of CC disbursed (in Lakh)	Passed Grade-2 (in Number)	Credit Linked (in Number)
Binpur-2	1123	1012	170	851	652	153.54	234	46
Gopiballavpur-I	755	663	22.1	509	279	68.5	39	2
Nayagram	949	706	101.2	565	333	83.49	67	13
West Medinipore	26205	21743	3195.32	20754	16179	3417.343	5281	2046

Source: DHDR West Medinipore-2011



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.

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 KCCs could not pick up as many families did not have land title and those who had never came back to the PACs as there was no intention/incentive of repaying the first loan.

The situation of financial inclusion is much vulnerable at district level. Per capita advance of commercial banks in the district of West Medinipore (Rs. 2184 in 2006) was far lower than that of West Bengal (Rs. 8371) accounting for only 26.09 percent of the state figures. There is a great dearth of institutional credit mechanisms to reach the people across the district. Amount of outstanding credit advanced by scheduled commercial banks to agriculture sector in per capita basis in West Medinipore District in 2007 was Rs.16.46 - direct finance being Rs.14.72 and indirect finance Rs.1.74.

A study was conducted by RBI in the state to find out the situation of financial inclusion. The study was conducted based on three parameters of penetration, availability and usage and on the basis of that the states of india as well as districts of West Bengal are rated. The zests of the study in terms of India as well as West Bengal are captured in the tables mentioned below.

State-wise Index of Financial Inclusion					
State	D1 (Penetration)	D2 (Availability)	D3	IFI	IFI Rank
			(Usage)		
<u>High Financial Inclusion (0.5-1)</u>					
Kerala	0.7	0.81	0.28	0.54	1
<u>Medium Financial Inclusion (0.3-0.5)</u>					
Tamil Nadu	0.7	0.43	0.38	0.48	4
<u>Low Financial Inclusion (<0.3)</u>					
West Bengal	0.24	0.38	0.23	0.28	11
Manipur	0	0.01	0.01	0.01	24

Index of Financial Inclusion – using three dimensions of financial inclusion					
(Four-year Average)					
Districts	D ₁	D ₂	D ₃	IFI	IFI Rank
	(Penetration)	(Availability)	(Usage)		
<u>High Financial Inclusion (0.5-1)</u>					
Kolkata	1	1	1	1	1
<u>Low Financial Inclusion (< 0.3)</u>					
Bankura	0.12	0.04	0.02	0.06	7
Midnapore	0.09	0.04	0.02	0.05	10
South 24- Parganas	0.02	0	0.01	0.01	18

Source: *Financial Inclusion in India: A case-study of West Bengal*, Date: 01 Aug 2011 By S.K. Chattopadhyay

1.5 Livelihood Context

The area is surrounded by dense forest and thus many adjoining villages, 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 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

In West Bengal, NTFPs are collected from about 154 wild plant species for the use of food, fuel-wood, fodder, medicine, cottage industries (handicrafts), construction, industrial materials and different ritual purposes. The average per household income from NTFPs was around \$87 per annum in 1991-92 (Poffenberger *et al.*, 1996). Around 189 types of NTFPs are found in the dry-deciduous forests of south-western West Bengal alone of which 113 are from plants and 76 from animals. Forest dwellers use different parts of the same plant as NTFPs for different household as well as commercial purposes (Malhotra, 1993). The collection of NTFPs by forest people has been neglected in West Bengal until the 1990s. The World Bank Implementation Completion Report (1998a) shows that there is no well constructed project report to clarify the objectives or ideas regarding the collection, storage, marketing and management of NTFPs for the socio-economic enhancement of forest dwellers. Due to a lack of infrastructure forest dwellers cannot store their collected products, so agents or middlemen collect these products from the actual collectors for a nominal price. The largest amount of unclassed state forests (total 626 km²), in the State is also located in the western and south-western part, including the districts of Midnapur (535 km²) and Bankura (91 km²). People living in or around the unclassed state forest areas can also collect NTFPs for their daily household purposes without any government permission (Department of Forest, 2005). Therefore, the NTFPs, collected from protected forests and unclassed state forests of Bankura, West Midnapur districts of West Bengal, have a very significant role on the livelihoods of forest dwellers in these areas.

Due to the lack of arable-land and limitations on agricultural activities, the forest people of these two districts (Bankura and West Medinipore) usually go to the districts of Bardhaman, Birbhum, Nadia and Hooghly as agricultural wage labourers during the monsoon (June – August) and late autumn (October – November) seasons when the collection of NTFPs is less widely practiced. For the rest of the year, their main occupation is the collection of NTFPs from the local forest. The drought prone areas of the districts of Bankura and West Medinipore are quite famous for their unique tropical dry-deciduous forest, which covers only 0.430 million hectares in India as a whole (Department of Forest, 2005). The typical forest type and the long-standing forest-people relationships of this area is an interesting topic to natural as well as social scientists (Mahapatra and Tewari, 2005). The lateritic zone, popularly known as the '*Rarh Bhumi*', covers Purulia, Bankura and West Medinipore districts and parts of Birbhum district of West Bengal. The hot moist sub-humid to very hot dry sub-humid climate, the nature of the soil (mainly red lateritic soil) and the physiographic landscape are the main reasons why this special type of forest is concentrated in these two districts. The main tree species found in this forest area are Sal (*Shorea robusta*), Kendu (*Diospyros melanoxylon*), Karaya (*Anogeissus latifolia*), Salai (*Boswellia serrata*), Asan (*Terminalia tomentosa*) and Bahera (*Terminalia belerica*) (Department of Forest, 2004). Some other minor forest products including medicinal herbs and decorative items are also collected in these three districts (WBTDCC, 2005b). These products also come under the category of NTFPs. However, no definite government record is available regarding the types, NTFPs in West Bengal: Knowledge, Livelihoods & Policy Geo-physical background of the research area, amount of collection, storage and marketing of these products. These decorative products as well as medicinal herbs have a very good market demand in the metropolitan cities of India as well as in the western world. Each year, a significant amount of these NTFPs are exported from West Bengal to other states or even other countries through middlemen, agents and local businessmen (Chowdhuri *et al.*, 1992).

NTFPs in the project areas can be identified according to nature of production, use, market demand and local importance. The plant species, from which NTFPs are collected, in these two districts can be divided into four different categories such as: (a) Sal, (b) Sal associate miscellaneous species, (c) other miscellaneous species and (d) herbs and shrubs. The NTFPs are used as food, fodder, medicine, industrial raw materials and other domestic and commercial purposes. Plant parts used include leaves, flowers, fruits, seeds, bark, roots, rhizomes, tuber and gum. The highest numbers of NTFPs are collected in Bankura district. The total numbers of NTFPs collected in Ranibandh range of Bankura South Forest Division are 57. About 5 types of bark, 6 types of flowers, 20 types of fruits, 12 types of leaves, 5 types of roots and seeds are collected regularly from the local forests. However, the number and quantity of collection varies from one village to another. People living within the forests have better knowledge about the uses of different types of NTFPs than those who live on the edge of forest areas. The communities living within forest areas in Bankura and West Medinipore districts mainly collect NTFPs for their household uses, whereas, those who are living in the fringe areas collect NTFPs mainly for sale at the local market. Thus, they have less knowledge about the types and uses of other NTFPs. It is also true that mainly tribal people live in the forest interior, whereas, scheduled caste and other socio-economically deprived people live in the forest fringe villages and they tend to have less intimacy with the forest.







A study on the 'Potential of Minor Forest Produce based Industries in the State of West Bengal' was conducted in 2007 by the West Bengal Consultancy Organization Limited (WEBCON), Kolkata following the order of the Department of Science and Industrial Research (DSIR), Government of India and the Department of Forest, Government of West Bengal. The study aimed to identify those NTFPs that are commercially important. Thus, the research was designed in view of the commercial importance of NTFPs in West Bengal. According to the report, about 328 types of MFPs (Minor Forest Products) are available in the State of which about 60 items are commercially traded (WEBCON, 2007, p. 1). The study also features Identified Major NTFPs harvested in West Medinipore forest division. It has been estimated that the from the mentioned NTFP's the average annual income per family is around Rs. 780 in 1995 around Rs 3,385 on today's value.

Range wise production of major NTFP in West Medinipore Divisions (As on 31.10.95)												
Sl. No	NTFP Item	Unit	Banspahari	Belpahari	Gidni	Jambani	Jhargram	Manik Para	Gopiballavpur	Chandabila	Nayagram	Total
1	Medicinal herbs	Th.MT	16.25	6.39	3.07	4.01	2.00	1.02	2.09	14.9	17.25	67.00
2	Kendu leaf	Th.MT	11.00	12.00	3.90	3.98	4.00	1.70	5.89	5.00	0.46	47.93
3	Sal leaf	Th.MT	1.83	2.07	21.40	10.89	2.73	2.05	2.04	3.07	4.11	50.19
4	Oil Seeds (Sal Mahua)	Th.MT	11.18	10.59	3.11	4.17	3.78	2.35	13.76	6.52	3.39	58.85
5	Myrobalans	Th.MT	7.52	3.02	0.51	1.21	1.18	0.98	1.82	3.03	1.28	20.55
6	Edible Seeds (Peal,Bhela etc)	Th.MT	1.28	0.82	0.18	0.23	0.08	0.02	0.55	0.68	0.28	4.12
7	Fruits (Amm, Kantha, Tamrind, Peal, Bil, Kendete)	Th.MT	18.22	9.00	1.00	1.83	0.41	0.23	7.51	10.06	11.48	59.74
8	Mashroom (Kanthal Tam)	Th.MT	0.53	0.51	0.18	0.23	0.25	0.29	0.41	0.32	0.65	3.37
9	Gums& Resins	Th.MT	0.68	0.22	0.07	0.32	0.21	0.04	0.24	0.29	0.30	2.37
10	Mahua (Flower)	Th.MT	2.85	2.20	1.11	1.62	0.77	0.73	2.03	2.40	2.88	16.59
11	Tasar Cocoons.	Lakh No	29.00	9.00	1.00	1.80	3.00	3.00	30.00	8.85	6.75	92.40

Source: West Medinipore Forest Division Office, 1995, p. 16

b. Agriculture and allied activities (horticulture)

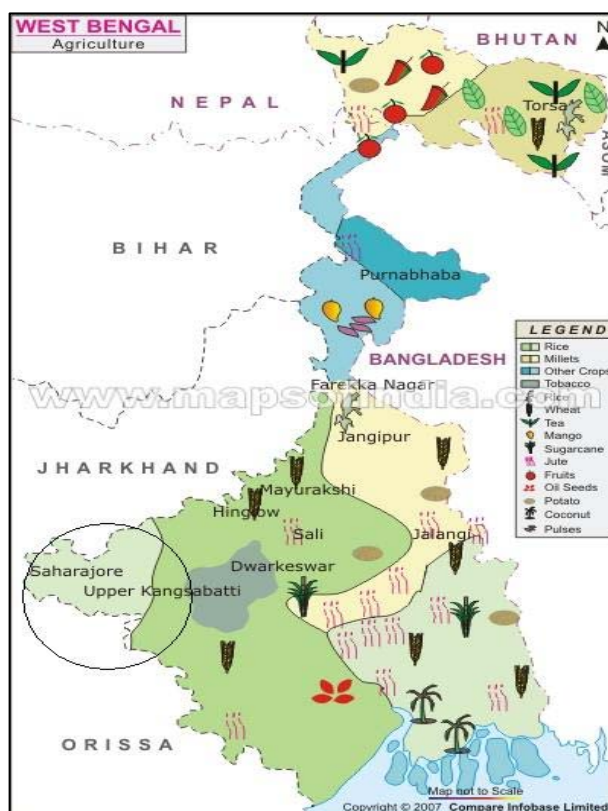
In West Bengal, productivity growth in agriculture, particularly in food grain production, contributed significantly to overall economic growth of the state since the early 1980s. Agricultural growth has a significant impact on poverty reduction (Ravallion and Datt, 1996). After a long period of stagnation, agricultural growth in West Bengal was initiated in the early 1980s with the expansion of cultivation by using high yielding seeds (HYVs) and chemicals-based technology within the frame of more equitable distribution of land through agrarian reforms. The tenancy reforms in the shape of Operation Barga, as implemented in the state after the late 1970s, have granted the right to register tenancies and also the legal entitlement to higher crop shares in favour of the tenants through legislation.

 Geographical Area	88752 sq. Km.
 Nos. of Agricultural Districts	18
 Nos. of Agricultural Blocks	335
 Nos. of Gram Panchayets	3354
 Nos. of Mouza / Village	40782
 Population (2011 Census)	9,15,94,000

Population Density(2011 Census)	1029 / Sq. Km.
Agro-Climatic Zones	6 Nos.
Gross Cropped Area(2011-12)	9352952 ha
Cultivable Area (2011-12)	5700848 ha
Net Area Sown(2011-12)	5198146 ha
Irrigated Area	62% of Net Cropped Area
Total Nos. of Agricultural holdings	7123000 Nos
Size of average Land Holding	0.77 ha / Holding

Source: National Conference on Agriculture for Rabi Campaign – 2013, GOV, WB

There has been a growing concern in recent years about the deceleration of agricultural output in most of the agricultural states in India since the early 1990s. The positive impulse of the fast growing yield rate to output growth of the major crops as observed in the 1980s have been petered out in the phase of neo-liberal reforms in India. In the context of agricultural growth in India, Gulati and Bathla (2001) documented that a significant fall in public sector capital formation in agriculture was a major constraint on productivity growth in agriculture. Declining trend in the supply of institutional credit in the postreform period in India has also been responsible for near stagnation in yield levels (Vyas, 2001). Adoption of HYVs technology without considering the soil and moisture conditions, inadequate rural infrastructure, and weak network of agricultural marketing, sharply skewed land distribution



Cropping Intensity (2011-12)	179.93
Total Food Grains Production (2011-12)	160.09 Lakh MT
Estimated Total Food Grains Production (2012-2013, 4 th Advance Estimate)	165.11 Lakh MT
Target of Total Food Grains Production (2013-2014)	172.30 Lakh MT
Summer Rice Productivity (2011-12)	3174 Kg / ha
Estimated Summer Rice Productivity (2012-13)	3372 Kg / ha

Source: National Conference on Agriculture for Rabi Campaign – 2013, GOV, WB

In context of the project areas, total area of Bankura district is 6, 88,200 hectares out of which forest area is 1, 47,700 hectares, while the high land and medium land are 1, 76,915 and 1, 50,611 hectares

respectively. The huge land area may be put to productive use by undertaking plantation and other activities, which may generate gainful employment. The population density is 464 per sq. km. (almost half of the state average!) and per capita land availability is more. Again highland covers an area of 1, 76,915 Hec, where traditional cultivation of paddy is not remunerative. There lies scope for integrated land and water development under micro-watershed approach. In fact, on an average Bankura gets a rainfall of 1400 mm. and there is a huge scope for surface water based irrigation system.

A study on distribution of operational holdings according to size class reveals that, average size of holding in the district is 1.02 acre. Out of total of 475605 holding, 318647, i.e. 67 percent belongs to marginal size class. For marginal class, average size of holding is 0.53 acre. Besides, small land holding size class constitutes 21.94 percent. Thus in this district, marginal and small land holding size classes together constitute nearly 90 percent of the total land holding. In other words, size of agricultural holding is less than one Hectare for 67 percent and less than two Hectares for 90 percent holding size. Considering the poor irrigation facilities, low fertility and resultant low productivity, such holding pattern is not able to make much impact on the quality of life of people at large.

Land utilization pattern reveals that only 59.5 percent of total land is under cultivation. The district has a vast area of cultivable wasteland comprising 2 percent of total geographical area. A part of that is acidic alkaline or sand cast. These areas offer scope for further development.

On the other hand, the agro-climatic condition of the district is suitable for plantation/horticulture. Mulberry and arjuna plantation and horticultural crops such as mango, guava, cashew nut, jackfruit, banana, papaya, citrus fruits etc. can be grown in large scale. There is also scope for development of floriculture, medicinal and aromatic plants in the district. Total area under horticultural crops in the district is around 4775 Hectare and that under mulberry and arjuna plantation is 4606 Hectare. Area of cultivable wasteland in the district is 18846 hectare, a major part of which can be utilized for the purpose. There are seven seed farms, one Horticultural Research & Development Centre at Taldangra and about two hundred and fifty seed-dealers in the district. Systematic identification of areas to be covered under plantation/horticulture, getting timely supply of planting materials and other inputs like technical advice, marketing arrangement, market information enabling the farmers to fetch remunerative price are the need of the day. The activity will help marginal and small farmers, to generate employment, improve nutritional standards through development of wasteland and soil conservation by peripheral plantation.

In the West Medinipore district gross cropped area recorded 2.94 per cent growth during 2001 to 2007-08 and net cropped area and food grains area recorded growth around 1 per cent. Food grains production experienced above 3 per cent growth, and oilseeds area and production recorded above 10 per cent growth per annum and fruits area about 40 per cent. Per capita food grains production growth in the district has been above 3 per cent. Potato area and production has recorded a growth of 7.13 per cent and 5.77 respectively during this period.

Growth of agricultural production and productivity in West Medinipore is attributed to institutional and technological factors. Land ownership is expected to be closely linked to agricultural production, including both crop and livestock production. Land reforms measures undertaken since the late 1970s and extension of irrigation, particularly minor irrigation have led to significant rise in gross cropped area and area under food grains, oilseeds and fruits, and agricultural productivity has substantially increased, which are also attributed to greater use of fertilizers and other modern agricultural techniques. All these have significant impact on the living conditions of the rural mass in the district.

Irrespective of facts in the state as well as in the districts, the scenarios in the project blocks are alarming. Some of the key issues are the fall in investment in agriculture, particularly public investment, is one of the most important issues of agricultural development in recent times. The growth in food grain yields is almost negligible over the years and still below 2 Mt per hectare. In case of tribal the situation is a more growing concern because of percentage of increase in agriculture laborers to cultivator's ratio. Presently more than 60 percent work force of tribal families are considered to be as agriculture laborers' and less than 20% considered as cultivators, which shows increasing trend of landlessness among tribal.

c. livestock

The project area is primarily agriculture based and livestock is as integral part of farming system as well as a coping mechanism during distress situation. Majority of farmers' families rear the cattle as livestock. The primary purpose of cattle rearing is draft power and other farm activities. Rearing these for milk purposes is negligible. All the varieties are - indigenous. A few non-tribal and better off households have started keeping improved species, as well as willing to improve local breeds to cross breed. Like cattle, buffalos also are reared for farm purposes. The data showing that, a few families hold this type of species. Only the farmers having the land 0.75 ha or more are keeping this type of livestock. Rearing practice of this species is gradually decreasing as well as increasing the challenges on availability of fodder.

Livestock details of Hirbandh Block		
Type of Livestock	NO	Percentage
Buffalo	1,427	2.3
Cattle	34,378	55.4
Sheep	6,618	10.7
Goat	19,614	31.6
Total	62,037	100
Total no of Large Ruminants(LR)	35,805	57.7
Total no of Small Ruminants (SR)	26,232	42.3
Fowl	29,309	77.34
Duck	8,585	22.66
Total	37,894	100
Grand Total	101,151	

* Data source- Agriculture dept, Hirbandh block, Bankura West Bengal 2012-13

Among Small ruminants, goat in particular is important sources of livelihoods. Though the average herd size in the block is showing 1.5 per house hold but the observed figure varies between 3-10 no. in a herd of goat or sheep as it is primarily, a livelihood activity to the small and marginal farmers. About 60-70% of total household rear this ruminant. Black Bengal is the popular variety of goat in the area. Based on field observations, the tribal & Bauri (SC) communities are the rearers of Sheep & Goat. Pig is reared only by the tribal community and the average number of pig per ST family is less than one.

Showing the Per Household Livestock Population					
Particulars	Cattle	Buffalo	Goat & Sheep	Pig	Fowl & Duck
Total Number	34378	1427	26232	1220	37894
Number per Household	2	0.08	1.5	0.2/ ST Family	2.2

Among the domestic birds, chicken has the major population. Duck reared by some families having the access to water bodies. Breeds are indigenous. Almost 80 % families have this kind of livestock and primary purpose is to cope with crisis for cash income. Villagers consume it only on some special occasion / festivals. Meat purpose is primary, the egg consumption is limited. Scavenging and use of residues from farm product and family foods are the primary source of feeding. Fodder cultivation for livestock is not in practice in the community. Only free grazing and paddy residue are the means of fodder and feed. Families are less interested and aware towards health care. The total livestock population is also decreasing.

Issues Identified: Major issues in livestock scenario of the area are as follows:

1. The livelihood of the area is dependent on Agriculture farming system but per family livestock is very less.
2. The entire livestock production system is dependent on grazing & paddy residue. No fodder cultivated for the livestock
3. Poor health condition due to the lack of proper health care and poor living condition
4. The community is not aware about the preventive health care, and the existing system and facilities available in Government department.
5. Higher than normal mortality due to contagious seasonal diseases
6. Poor availability of vaccines on time
7. Poor staffing /service delivery in the government institutions
8. Non-availability of curative medicines – have to go long distance to procure medicine
9. Absence of emergency services

1.6 Performance of NREGA in the State

Poverty and unemployment have been the bane of India for long, their reduction has been one of the major goals of India's development planning from the very beginning of the planning era in 1951-52 and the planning process has been sensitive to the needs of the poor. Actually, economic growth, promotion of human development and targeted programmes of poverty alleviation have comprised the three-pronged strategy of Government of India to empower people to address the multi-dimensional nature of poverty.

The composition of the poor has been changing and rural poverty is getting concentrated in agricultural labor and artisanal households and urban poverty in casual labor households. The total number of agricultural workers in India has been estimated at 259 million as of 2004-05. They form 57 per cent of the workers in the total workforce. About 249 million of them are in rural areas and that works out to 73 percent of the total rural workforce of 343 million. Their share in total rural unorganized sector employment is 96 per cent while in unorganized agricultural sector it is 98 per cent. The labor force in

year 2006 has grown up to 509.3 million out of which 60% are in agriculture, 12% are employed in industries and the residual 28% are in services.

MGNREGS has been a big game changer since its advent owing to its scale, achievements and possibilities that it provides. The local wage rates have been changed more than two times and so have been the impact on migratory pattern. Many development investments have been made possible like large-scale land development (leveling, bunding), dug wells, water harvesting structures and other such works like watershed. The West Bengal Rural Employment Guarantee Scheme was framed to provide employment as per Section 4(1) of the National Rural employment Guarantee Act, September, 2005. The WBREGS came into force from February, 2006. 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 by the end of the year 2009-10 has been 103, 51,947. This shows that issue of job cards has increased by 7,95,880 in comparison to 95,56,067 job cards issued till 2008-09 indicating that more and more people are attracted towards this programme. The most important outcome of the MGNREGA is the numbers of days the households receive employment on demand during the year 2009-10. During the year total 1551.71 lakh person days were generated by 34.75 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	%	
West Bengal	3,256,114	901,466	7,378,274	11,535,854	4,366,001	37.85	32,475	0.28	2,171,676	18.83	22.44
West Medinipore	188,100	156,940	553,173	898,213	404,819	45.07	1,317	0.15	219,418	24.43	19.95
Binpur-2	4,735	15,760	17,101	37,596	17,363	46.18	63	0.17	10,172	27.06	18.42
Gopibhallabpur-1	9,127	10,138	12,548	31,813	7,299	22.94	54	0.17	4,762	14.97	16.61
Nayagram	3,988	7,474	17,342	28,804	17,178	59.64	65	0.23	7,692	26.70	22.53
Bankura	239,524	72,731	280,036	592,291	215,342	36.36	936	0.16	132,546	22.38	17.68
Hirbandh	4,314	5,075	6,447	15,836	5,257	33.20	16	0.10	2,837	17.91	19.04
Indpur	12,650	2,855	10,356	25,861	5,424	20.97	89	0.34	2,759	10.67	22.95
Ranibandh	2,632	11,012	10,520	24,164	7,419	30.70	115	0.48	3,569	14.77	23.20
Khatra	7,302	5,551	9,608	22,461	9,973	44.40	80	0.36	4,832	21.51	21.72

Source: MGNREGA cell West Bengal FY-2013-14

PRADAN has adopted some broad strategies for addressing poverty in the rain-fed and undulating terrain of the districts 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. They took up a significant role in watershed planning. In all the schemes the SHGs acted as supervisors of the schemes. They were involved in technical supervision of activities like construction of water harvesting structures (WHS), horticulture etc. The SHGs who are acting as supervisors of the programme has been instrumental to maintain liaison with panchayat officials, sort out problems arising at the time of implementation, maintaining muster rolls, labour management of the scheme etc. As a result of this initiative so far these women has been able to brought 190 ha of uplands under orchard cultivation mainly Cashew & Mango benefitting around 472 families, 211 families has been benefitted from water conservation structures. Besides ensuring livelihood of the above-said families, these interventions have also generated 1.86 lakh person days along with an expenditure of Rs. 391.45 lakhs under MGNREGA.

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

The West Bengal Govt. has promoted many special efforts, apart from regular schemes, livelihoods for the rural poor. Rural development programmes adopted in India as centrally sponsored programmes are broadly divided into two categories: one, self employment programmes and second, wage employment programmes. The former being implemented currently in the form of Swarna Jayanti Swarojgar Yojana (SGSY) and the massive wage employment programme in operation, is Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS).

Swarna Jayanti Gram Swarojgar Yojana (SGSY): It was launched from April 1999. This is a holistic programme covering all aspects of self-employment such as organization of the poor into Self Help Groups (SHGs) and providing them training, credit, technology, infrastructure and marketing opportunities. SHGs are voluntary associations of people formed to achieve social and economic goals and they are in the nature of community based organizations. The groups are being formed for augmenting income of their members by taking up micro-enterprises as well as ensuring benefits to their families under various development programmes. Formation of SHGs by members, particularly the women and those from the poorest section of the society has been given priority. The SGSY aims at alleviating rural poverty by facilitating creation of self employment opportunities for the poor. The primary objective of the groups is to mobilize saving of individual members, to ensure availability of need-based financial services to them and increase their capacity to take up income generating activities. When the groups seek to undertake economic activities, SGSY assistance is provided to them in the form of bank credit and subsidy.

The SHGs are also encouraged to participate in various development activities. Individuals living below the poverty line can be assisted under SGSY, but the major thrust of the scheme is on development of the groups. The scheme is implemented in the District Rural Development Cells (DRDC) of the Zilla Parishads. Like other centrally sponsored programmes, SGSY is funded by both the Central and the State Governments in the ratio of 75:25. In West Bengal, self help groups are of late emerging as the building blocks of poverty-focused development. It forms the social capital which facilitates financial linkage of poor households with banks and financial institutions. West Medinipore district recorded up to December 2009, the highest number of SHGs formed (26205) among the districts. Number of SHGs passed Grade-I was 20754, i.e., 79.20 per cent of the SHGs formed. The number of SHGs formed up to 2009 varied widely across blocks.

National Rural Employment Generation Act (MGNREGA): Since agriculture is becoming unremunerative in the state, the livelihood pattern in rural West Bengal is changing now a day. For a substantial percentage of rural workforces, agriculture is no longer the mainstay of living. Between 1991 and 2001, the work participation has in fact increased in rural West Bengal (census, 1991, 2001). The data however indicates that the increase was due to the increase in the percentage of marginal workers across gender. According to the National Sample Survey Organization (NSSO), 61st round, 2004-05, in rural West Bengal 8 percent of the households still remain landless, 84.3 percent of the households possess less than one hectare land per household. Small farmers (land size 1-2 ha) account for 6 percent of rural households in West Bengal and the rest 1.7 percent constitute the families within semi-medium and large holdings. Thus the state of West Bengal is now basically an economy dominated by marginal farmers (92.3 percent) who depend mostly on wage employment with high incidence of marginal workers both among males and females. Given the fact that sizable number of workers in West Bengal finds their livelihoods by offering themselves as wage labourer in the labour market, implementation of National Rural Employment Guarantee Scheme in extending employment guarantee of 100 days per household per financial year is expected to provide a decent livelihood to the people.

Land in the western part is undulating, lateritic, water holding capacity is less. 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. The MGNREGA irrespective of good performance in both the districts shows not up to the mark performance in project blocks which is evident from above mentioned MGNREGA performance table.

But in certain border areas/ hill areas and district affected by Left Wing Extremism (LWE), the normal programmes including flagship programmes face implementation problems as staffs are unwilling to work due to unsatisfactory working/living conditions as per report submitted by planning commission after their visit in 2009-10.

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

PRADAN in West Bengal: PRADAN has been systematically working with women as an important constituency (target clientele) in all its programmes - both SHGs as well as livelihoods in the districts of Purulia, Bankura and West Medinipore. On equity grounds targeting (reaching out to women as a constituency) women is an affirmative action favouring women as the more disadvantaged within a poor household. In these 3 districts PRADAN is currently nurturing around 1,294 SHGs, spread over 12 blocks and the age of the SHGs range from 1 to 15 years. The groups have been groomed to play their day to day responsibility for their proper functioning.

These SHG members with the techno-managerial support from PRADAN have implemented and also currently implementing various Integrated Natural Resource Management (INRM) activities under Special SGSY, GOI project, MGNREGS and provided leadership in watershed planning, site selection, technically supervision of activities like construction of water harvesting structures (WHS), horticulture, animal husbandry to managing funds and disbursing payment to labourers.

The table below gives a glimpse of the present outreach of PRADAN in West Bengal

District	Purulia	Bankura	W. Medinipore	TOTAL
No of Blocks in the district	20	22	29	71
No of Blocks presently working	4	5	3	12
Total No. of Panchayat (in working blocks)	37	13	29	79
No. of Panchayat where PRADAN is present	16	9	5	30
No. of Villages covered by SHGs Program	133	54	87	274
Actual no of SHGs promoted till date	783	225	286	1294
No of Families Covered under SHG	10417	2925	3031	16373
No of Clusters promoted	86	0	15	81
No. of SHGs in Clusters	708	0	155	690
Total Net owned Fund (approx) in Lacs Rs.	264.39	41.97	59.3	365.66
Total Credit generated (internal + external) in Lacs Rs.	281.27	31.19	14.7	327.16
No. of Bank linked SHGs	219	88	65	372
Amount of Total bank credit (in Lacs Rs)	212.5	12.56	30.6	103.28
No. of SHGs in Livelihood Intervention	503	263	161	927
No. of Families covered under Livelihood intervention	4200	3496	1933	9629
Approx. number of potential SHG members(having leadership qualities)	852	51	43	946
No. of CRP in SHG programme	217	36	24	277
No. of CRP in Livelihood programme	75	40	27	142
Net CRP	255	76	35	366

Source: Census 2011

Current Status of Social Mobilization in the project Districts

PRADAN in Bankura district: Inspired by our work at Purulia, the authorities from the neighboring Bankura district invited PRADAN to take up similar work on a larger scale in that district. Bankura is one of the 100 poorest districts in the country allocated funds by the Government of India under Rastriya Sam Vikas Yojana (RSVY), a scheme to help the poorest districts to catch up. The allocation of these funds across different activities was left to the district authorities. The Bankura authorities earmarked a part of these funds to take up integrated natural resource development projects in 15 watersheds in Saltora block of the district and invited PRADAN to implement the projects.

PRADAN began working in Bankura in March 2005. This has given us ample opportunity to understand the scope for collaboration with the district administration to promote livelihoods for rural communities. Apart from allocating resources for 15 micro-watersheds, in all forums related to rural development, the district administration has systematically involved PRADAN and created space so that PRADAN can contribute its best. The administration made efforts to replicate the lessons from PRADAN's fieldwork through different line departments. The departments of agriculture, horticulture, forestry and animal husbandry extended their support whenever required.

To further build on this and in order to stimulate a change in thought process for the Panchayati Raj Institutions (PRIs) and district administration for livelihood security and poverty alleviation, PRADAN Bankura Team implemented a pilot project on 'Integrated Natural Resource Management for Sustainable Livelihoods in the Rain-fed Agro-Ecological Zone VII' with help of Ford Foundation. This project provided

PRADAN huge opportunities. It enabled us to extend outreach to a large number of very poor families and leverage government development resources in their favour on a large scale. More importantly, it gave us an opportunity to develop and test methodologies for integrated natural resource development as a strategy for poverty alleviation across the large and very poor AEZ VII and to develop training material and process details for participatory INRM in the rain-fed regions of the country. It has also enabled PRADAN to demonstrate the scope and processes of Government-Civil Society collaboration as well as Civil Society – Local Self Government collaboration.

In the beginning PRADAN initiated INRM activities under MGNREGS, but the existing SHG members were the intervention point mostly. Few of the achievements there in are:

- Facilitating SHGs/Gram Sansads to select people who would work as Community Resource persons (CRP) to help community in Planning & implementation
- Provided training & exposures to 51 CRPs
- INRM planning done in 31 Mouzas along with CRPs and trained the SHGs to implement the plan.
- Provided technical inputs to GP and block technical persons on proposal preparation and designing.
- Enabled the SHGs to place the plan in the Gram Samsad meeting and get it approved
- Imparted technical training to 57 supervisors for giving layout in the field and preparation of muster rolls for payment to labors.
- Oriented & trained SHGs They are now able to do savings and credit activity properly
- 630 families have been trained in INRM based livelihood planning and have taken up improved agriculture practices like SRI, kharif & Rabi vegetable cultivation, System of Mustard cultivation

With the experience in collaborating with block and GP for MGNREGS work, the team has started focusing on SHG strengthening work to build strong community institutions in collaboration with block & GPs. Already they have collaborated with Saltora block and Hirbandh block for accounts training and streamlining the accounts management. PRADAN in Bankura now has 225 SHGs in these two blocks. The team has strategized to strengthen the Sansad upasanghs and make them functional with capacity building programs and hand holding in the meetings. Dialoguing has already started with block officials on these.

PRADAN in West Medinipore district: Hirbandh has become a ground for exposure for the entire district. Even neighbouring districts are sending their representatives to get exposed to the system and processes followed at Hirbandh. The Principal Secretary, Ministry of Panchayat and Rural development, expressed interest to scale up this experience. District Administration of the adjoining West Medinipore had a meeting on 1st July 2009, to explore possibilities of collaborative work with PRADAN to implement NREGS and set the terms and conditions of such partnership. PRADAN, West Medinipore Team was thus set up and it was given the responsibility of implementing 15 watersheds with an area of 500ha each within a span of 6 years. Accordingly the work was started in 5watersheds of Arrah & Chandrarekha panchayats of Nayagram block & Kendugari panchayats of Gopiballavpur-1 from 1st December'10 onwards.

PRADAN, West Medinipore has started working from December'2009. Then we expanded our operations in Gopiballavpur-1 block after 6 months. The main objective of this initiative was increasing the carrying

capacity of the natural resources especially land & water and strengthening the farming systems which will lead to enhancement of livelihood opportunities for the poor people of the area.

Community mobilization: PRADAN, West Medinipore has been systematically trying to bring the women in the forefront of all these developmental initiatives. The rationale behind this stance is to help the women to come out from the year long deprivation and the disadvantages position in which they are surviving in the patriarchic society. It is an affirmative action favouring women as the more disadvantaged within a poor household. So women have been helped to organize themselves under SHGs. Most of these SHGs have been formed by Panchayat. PRADAN has helped to reinforce the foundation of the group's along with the help of panchayat & block. At present PRADAN has been working with 2768 families organized under 286 SHGs. (Nayagram 141 SHGs, Gopiballavpur-1 with 95 & Binpur-1 50 SHGs)

These groups have been groomed to play their day to day responsibility for their proper functioning. The team has started systematically invests on the SHG and its members, to build their capacity to address development challenges being faced by them and their area related to their lives and livelihoods. The team conducted residential membership training of 3 days to strengthen the functioning of SHGs. These trainings were a huge success. The health of the SHGs started showing improvement, attendance, penalty for late attendance, meeting regularity, participation in credit assessment, showed a remarkable improvement in a small span of time, and this continues. . The groups meet weekly, discuss different issues around livelihood and well being, and engage in savings and credit. Special focus was given for increasing the internal credit mobilization in the group. Maintenance of accounts has been streamlined through rigorous training of accountants from each group. At the same time team is also focusing on auditing of SHG accounts on a regular basis. For this team has a plan to train some accountants to play the role of auditors.

To increase the significance of SHGs and to build solidarity among these poor women PRADAN has been engaged in building / strengthening the second tier institutions of SHGs i.e. sub-cluster at the sansad level. So far 286 SHGs have been brought under 15 sub-clusters. Sub-cluster is meeting on a monthly basis. Sub-cluster forum has been nurtured to perform the role of monitoring & helping the primary groups to function effectively, addressing the issues of livelihoods & other well being. 2 members from each group are attending the sub-cluster meeting. To have a better understanding of the SHG based institutions the sub-cluster members have been given exposure to Karanja district of Orissa. This has resulted in a significant impact among the members. They have understood the strength & potentiality of such SHG based institutions. The other well- being things are coming in the forefront, for example the SHG members themselves taking lead in monitoring the school mid-day meal, regular attendance of teacher in the school, ICDS center functioning, health functionaries' visit etc. They have started raising voices against the improper functioning of govt. schemes like PDS, MGNREGA etc. The dynamism in the group has increased and the confidence of the members has also been enhanced.

Engagement of SHGs on Land & water based activities through MGNREGA for generating sustainable livelihood: 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. They took up a significant role in watershed planning. In all the schemes the SHGs acted as supervisors of the schemes. They were involved in technical supervision of activities like construction of water harvesting structures (WHS), horticulture etc. The SHGs who are acting as supervisors of the programme has been instrumental to maintain liaison with panchayat officials, sort out problems arising at the time of implementation, maintaining muster rolls, labour management of the scheme etc. As a result of this initiative so far these women has been able to brought 190 ha of uplands under orchard cultivation

mainly Cashew & Mango benefitting around 472 families , 211 families has been benefitted from water conservation structures . Besides ensuring livelihood of the above-said families, these interventions have also generated 1.86 lakh person days along with an expenditure of Rs. 391.45 lakhs under MGNREGA.

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* 18 th day of 1983
5	Name of Donors in the past 3 years, if any (give max3)	<ul style="list-style-type: none"> ▪ 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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)	<ul style="list-style-type: none"> • 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	Exp in PRADAN (in Yrs)
1	Arnab Chakraborty	M	Kolkata	Programme Director	M.Sc (Ag)	19.38
2	Avijit Choudhury	M	Kolkata	Integrator (State Unit)	M.A	15.88
3	Kuntalika Kumbhakar	F	Kolkata	Integrator (State Unit)	MSW	15.04
4	Md. Shamshad Alam	M	Deoghar	Integrator (Tasar Theme)	B.Sc (Forestry)	17.40
5	Ashis Chakraborty	M	Deoghar	Integrator (Tasar Theme)	B.Sc (Forestry)	14.10
6	Rajendra Kr. Khandai	M	Deoghar	Integrator (Tasar Theme)	B.Sc (Ag)	8.50
7	Rajesh Mit	M	Bankura	Team Leader	B.Tech	17.13
8	Sukanta Sarkar	M	West Medinipore	Team Leader	M.Sc (Ag)	18.38
9	Sudip Ghosh	M	Bankura	Executive (Projects)	B.Tech	6.04
10	Rajsekhar Bandopadhyay	M	Bankura	Executive (Projects)	B.Tech	6.04
11	Raj Kumar Barman	M	Bankura	Executive (Projects)	M.Sc	5.44
12	Arnab Bose	M	Bankura	Executive (Projects)	B.Tech	5.02
13	Prosenjit Mondal	M	Bankura	Executive (Projects)	M.Sc (IRDM)	4.98
14	Dhiraj Kumar Sharma	M	Bankura	Executive (Projects)	B.Tech	3.02
15	Suman Chattopadhyay	M	Bankura	Executive (Projects)	MA	2.45
16	Rajdip Roy	M	Bankura	Executive (Projects)	B.Tech	2.28
17	Puja Pal	F	Bankura	Executive (Projects)	B.Tech	2.29
18	Arup Pal	M	Bankura	Executive (Projects)	B.Tech	2.20
19	Debashis Biswas	M	Bankura	Executive (Projects)	MSW	1.05
20	Amarendra Nath Chanda	M	West Medinipore	Executive (Projects)	M.Com	5.96
21	Sumanta Adhikari	M	West Medinipore	Executive (Projects)	M.Sc	6.02
22	Subimal Mandal	M	West Medinipore	Executive (Projects)	M.Com	5.27
23	Aniruddha Mukherjee	M	West Medinipore	Executive (Projects)	B.Tech	5.02
24	Biswajyoti Basu	M	West Medinipore	Executive (Projects)	B.Tech	4.45
25	Sourav Maity	M	West Medinipore	Executive (Projects)	B.Tech	2.28
26	Surjyakanta Kar	M	West Medinipore	Executive (Projects)	B.Tech	1.28
27	Suman Mitra	M	Kolkata	Sr. Assistant (FAA)	B.Com	18.52
28	Amit Ghosh	M	West Medinipore	Assistant (FAA)	PGDCA	3.95
29	Arup Kar	M	Bankura	Assistant (FAA)	B.Com	6.85
30	Lakshmikanta Sardar	M	Kolkata	Administrative Assistant	PGDRD	3.00
31	Rajkumar Ghoshal	M	Bankura	Field Assistant	B.com	2.00
32	Tarun K Murmu	M	Bankura	Field Assistant	12th	2.00
33	Debabrata Bhattacharjya	M	Bankura	Field Officer	MSW	2.00
34	Mir Anwar Hossain	M	Bankura	Field Officer	M.sc	2.00
35	Snehasis Das	M	Bankura	Field Officer	DCA	2.00
36	Debasish Ray	M	Bankura	Field Officer	B.A	2.00
37	Ram krishna Das	M	West Medinipore	Field Officer	MSW	2.00
38	Arijit Som	M	West Medinipore	Field Officer	M.A	2.00
39	Saikat Datta	M	West Medinipore	MIS Assistant	M.A	1.00

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 1525 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 22800 to 26777.

c. Thrust area and Key objectives

The proposed project will be implemented by PRADAN in West Medinipore & Bankura districts of West Bengal 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	<ul style="list-style-type: none"> o 1431 families would be involved in silkworm rearer's o Each family will be provided with rearing equipments. o Each family would produce 8,000 to 10,000 commercial grade cocoons. o Number of Rearer's Collectives – 4, would help in storage of cocoons to avoid distress sale o No. of producers' collective formed - 4.
2.	Tasar seed production (Grainage)	<ul style="list-style-type: none"> o Total number of Grainage: 39 o Each Grainage entrepreneur would be provided with Grainage hall and required equipments. o Grainage would be an individual enterprise at village level o Each Grainage entrepreneur would produce 5,000 to 6,000 DFLs in one Grainage cycle o Individual Graineurs would serve the requirement of 25-30 rearer's in each Grainage cycle.
3	Basic seed production unit	<ul style="list-style-type: none"> o Total number of basic seed production unit: 1 o Each basic seed production unit would be provided with one Grainage hall along with processing unit and required Grainage equipment. o Basic seed production unit would be owned by the collective. o Each unit would produce 25,000 to 30, 000 basic seed o Individual basic seed production unit would serve the requirement of 50 -60 Grainage entrepreneurs
4.	Building capacities of all participating families ,	<ul style="list-style-type: none"> o Hamlet level visioning / planning exercises, o Technical training for productivity enhancement, o Handholding support by Community Resource Persons (CRPs), on a day-to-day basis, o Exposures for adopting improved practices, o 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,	<ul style="list-style-type: none"> o Number of producers' collective: 2 o Awareness building around the need to collectivize, o Membership training to build a sense of ownership and to understand the accountability as a member, o Exposure and training of the governing board members, o Training and support to staff to effectively deliver the goods and services mandated by the organization.
6.	Market Support	<ul style="list-style-type: none"> o Design development in Tasar weaving clusters and its promotion o Design competition among weavers o Design competition among design student/ institutes <p>The above would bring in brand image for Indian Tasar and also the required demand pull</p>

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	:130
➤ Total Area (in Ha.) of Natural Forest to be rejuvenated	:946
➤ DFLs to be produced by the end of 3rd Year:	
• Basic Seed DFLs (Lakh Units)	:0.50
• Commercial DFLs (Lakh Units)	:5.10
➤ Total Cocoon Production by the end of 3rd Year	:290,14 Lakh Pieces
➤ Value of the Project output by 3rd Year (Rs. In Lakh)	:756

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, TVS⁵ 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: PRADAN started working in Bankura district from 2006 to implement watershed programme under RSVY (Rastriya Sam Vikas Yojana). PRADAN focus has been organizing women into SHGs/ users' groups and promotion of INRM (Integrated Natural Resource Management) based livelihoods among ST, SC and backward class families in five blocks of the district. Organizing women into SHGs, users' groups and building their capabilities to prepare and to implement livelihoods plan around their natural resources including land, water and vegetation so that year round food sufficiency and additional cash income could be ensured to each family in a sustainable way. PRADAN has systematically been able to influence and orient local PRIs and Govt for mobilizing fund and to replicate the INRM models in a large scale in the district. Whereas, PRADAN, West Medinipore has been systematically trying to bring the women in the forefront of all the developmental initiatives. The rationale behind this stance is to help the women to come out from the year long deprivation and the disadvantages position in which they are surviving in the patriarchic society. It is an affirmative action favoring women as the more disadvantaged within a poor household. So women have been helped to organize themselves under SHGs. Most of these SHGs have been formed by Panchayat. PRADAN has helped to reinforce the foundation of the group's along with the help of panchayat & block. At present PRADAN has been working with 2661 families organized under 249 SHGs. (Nayagram 154 SHGs & Gopiballavpur-1 with 95 SHGs). PRADAN Bankura has promoted 425 SHGs covering 5700 families of which 72.5% are SC & ST category, spread over 5 blocks namely Hirbandh, Ranibandh, Saltora of Bankura district and Kashipur block of Purulia district.

These groups have been groomed to play their day to day responsibility for their proper functioning. The team has started systematically invests on the SHG and its members, to build their capacity to address development challenges being faced by them and their area related to their lives and livelihoods. The age of the SHGs range from 2 to 12 years and 225 SHGs are credit linked with Banks. The groups meet weekly, discuss different issues around livelihood and well being, and engage in savings and credit. They follow a sequence in conducting their meeting, beginning with prayer, cash tally, discussions, penalty, interest principal repayment, savings and credit disbursement, closing with cash tally. Since they have computerized accounting system, the collection of savings & credit repayments takes little time. The discussion on credit

disbursement is done elaborately, assessing the need and repayment plan. These SHG members are implementing INRM activities under MGNREGS and Special SGSY, GOI project, and are actively supervising and monitoring the works like construction of water harvesting structures (WHS), horticulture. They also plan and implement agriculture program. These are important agenda being discussed in the SHG meetings.

PRADAN's present approach has been more towards collaborating with local PRIs and local government to scale up the work in the district. Followings are the interventions PRADAN team is doing in order to orient and enable PRIs and communities.

- ❖ Orienting Gram Panchayat and Panchayat Samity on INRM and SHG through orientation camp and exposure
- ❖ Organizing poor women into savings and credit based Self Help Groups (SHG)
- ❖ Facilitating SHGs/Gram Samsad to select people to work as village level Community Resource persons (CRP)
- ❖ Giving training to CRPs to facilitate villagers to prepare INRM based pro poor Plan and implement it through SHGs
- ❖ Enabling the SHGs to place the plan in the Gram Samsad meeting and get it approved
- ❖ Setting system and processes at Gram Panchayat (GP) and Panchayat samity (PS) level to enable PRIs to implement the plan under different programmes mainly through MGNREGS

Significant events:

- ❖ ON the invitation of Sabhadipati (The Zilla Parishad head) PRADAN helped the District Planning Committee (DPC) in preparing the Comprehensive District Agricultural Plan (CDAP) where the approach of INRM based livelihood interventions have been incorporated which will be implemented by different government departments and PRIs.
- ❖ On the invitation from the Principal Secretary of Panchayat & Rural Development Department, Govt. of west Bengal, PRADAN made presentation on the system and process of INRM based planning and its implementation under MGNREGS to all the BDOs, Block Panchayat Heads (Sabhapati) and the district officials.
- ❖ The District magistrate (DM) made an agreement with PRADAN to facilitate the PRIs and government to implement the same model in other five blocks of the districts. Both the state government and DM office have agreed to provide us 60% of our support cost for installing the process and systems in these five blocks.
- ❖ PRADAN is now facilitating eleven GPs of five blocks in setting system and process for faster and efficient planning and implementation of INRM activities under MGNREGS

The team has imparted leadership trainings to build a pool of leaders in each SHG who provide guidance to their respective SHGs and also strengthen the different level institution like the cluster & the tertiary level collectives of SHGs. This leadership training were followed by membership trainings imparted to most of the SHG members, and thus second line & third line leadership in SHGs are in the process of developing.

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 Singhum 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 15000 Hectares of Tasar host flora in the natural forests. These forests, brought to pristine form, are now being utilized by nearly 5000 families for Tasar silkworm rearing to earn livelihoods.
- ❖ Raising 5450 Hectares of plantations of Tasar host plant *Terminalia arjuna* in the wastelands owned by over 7600 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 (cocoon) 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 kind 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 West Bengal 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 West Bengal 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.

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.

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: 32 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 Grainage, 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 86.5% having individual share of 64.9% & 21.6% respectively, the remaining 13.5% 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-2530 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- 2168 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- 1587 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) - 1567 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. 93 CRPs are expected to be trained within the project period and they are going to impart 3319 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 specialists. 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 7 blocks of Bankura and West Medinipore districts. 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 OUTREACH			
			Yr-1	Yr-2	Yr-3	Total
1	Raising of Block plantation					
1.1	Raising Tasar host plantation	Hac.	80	50	-	130
1.2	Maintenance of host plant - 1st Year	Hac.	-	80	50	130
1.3	Maintenance of host plant - 2nd Year	Hac.	-	-	130	130
Sub-total			80	130	180	390
2	Assistance to Nucleus Seed Rearer's					
2.1	Supply of rearing equipments	No.	40	-	-	40

Sl. No.	Component/ Activity	Unit	PHYSICAL OUTREACH			
			Yr-1	Yr-2	Yr-3	Total
2.2	Supply of inputs for maintenance of block plantation	Hac.	28	28	-	56
2.3	Assistance for Tasar silkworm rearing	No.	40	40	40	120
2.4	Crop insurance	Dfls	8,000	8,000	8,000	24,000
2.5	Rearer's insurance	No.	20	20	80	120
Sub-total			8,128	8,088	8,120	24,336
3	Assistance to Basic Seed Rearer's					
3.1	Supply of rearing equipments	No.	50	80	25	155
3.2	Supply of inputs for maintenance of block plantation	Hac	35	91	66	193
3.3	Assistance for Tasar silkworm rearing	No.	50	130	130	310
3.4	Crop insurance	Dfls	10,033	25,985	25,983	62,000
3.5	Rearer's insurance	No.	50	130	130	310
Sub-total			10,218	26,415	26,334	62,968
4	Assistance to Commercial Rearer's					
4.1	Supply of rearing equipment	No.	400	636	200	1,236
4.2	Assistance for Tasar silkworm rearing	No.	400	1,036	1,035	2,471
4.3	Crop insurance	Dfls	80,000	207,200	207,086	494,286
4.4	Rearer's insurance	No.	400	1,036	1,035	2,471
Sub-total			81,200	209,908	209,356	500,464
5	Assistance to Private Graineurs					
5.1	Construction of Grainage building	No.	13	20	6	39
5.2	Supply of Grainage equipment	No.	13	20	6	39
5.3	Working capital	No.	13	20	6	39
5.4	Grainage consumables	No.	13	33	32	78
Sub-total			52	93	50	195
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
Sub-total			4	1	2	7
7	Assistance to Rearer's' Collectives					
7.1	Cocoon storage facilities	No.	-	2	2	4
7.2	Common facilities	No.	-	2	2	4
Sub-total			-	4	4	8
8	Human Resource Development					
8.1.	Technical training of project personnel	No.	2	2	1	5
8.2	Technical training for Project Families for implementation of sericulture activities					
8.2.1	Nursery farmers	No.	18	12	-	30
8.2.2	Nucleus Seed Rearer's	No.	40	-	-	40
8.2.3	Basic Seed Rearer's	No.	50	80	23	153
8.2.4	Private Graineurs	No.	12	20	6	38
8.2.5	Commercial Rearer's	No.	400	664	200	1,264
8.2.6	Study tour/ Exposure visit	No.	112	195	74	381
Sub-total			632	971	303	1,906

Sl. No.	Component/ Activity	Unit	PHYSICAL OUTREACH			
			Yr-1	Yr-2	Yr-3	Total
8.3	Technical training for sectoral activities					
8.3.1	Improved Agriculture	No.	433	767	295	1,495
8.3.2	vegetable cultivation	No.	87	153	59	299
8.3.3	Exposure of Project families to improved practices	No.	108	192	74	374
Sub-total			628	1,112	428	2,168
8.4	Training of Community Resource Persons (CRPs) for extension of activities					
8.4.1	Orientation and training on Tasar	No.	10	20	7	37
8.4.2	Exposure to improved practices	No.	6	10	3	19
8.4.3	Technical and Refresher Training	No.	10	20	7	37
Sub-total			26	50	17	93
8.5	On-field training / handholding provided by CRPs to the Project Families					
8.5.1	Tasar Silkworm Rearing	No.	490	744	223	1,457
8.5.2	Tasar Seed Production	No.	12	20	6	38
8.5.3	Est. of Community Arjuna Nursery	No.	18	12	-	30
8.5.4	Improved agriculture	No.	433	767	295	1,495
8.5.5	Vegetable cultivation	No.	87	153	59	299
Sub-total			1,040	1,696	583	3,319
8.6	Institution building of Producer Collectives					
8.6.1	Membership training	No.	433	767	295	1,495
8.6.2	Leadership/ Governance Training	No.	22	38	15	75
8.6.3	Exposure of Board members & staff	No.	6	7	4	17
Sub-total			461	812	314	1,587
8.7	Nurturing of New Self-Help-Groups (SHGs)					
8.7.1	Membership training (25%)	No.	108	192	74	374
8.7.2	Leadership Training (20%)	No.	87	153	59	299
8.7.3	Book keeping Training (7.5%)	No.	33	57	22	112
8.7.4	Exposure of Cluster & Federation Members (2.25%)	No.	10	14	10	34
8.7.5	Livelihood Visioning (50%)	No.	218	384	147	749
Sub-total			456	800	312	1,568
8.8	Trainers Training programme	LS	1	-	-	1
9	Publicity and extension					
9.1	Workshop/seminar	No	1	-	1	2
9.2	Printing passbook/pamphlets	LS	NA			
9.3	Krishi mela	No	-	2	2	4
Sub-total			1	2	3	6

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	M	M	M	M	M	M	M	M	M	M	M
	1	2	3	4	5	6	7	8	9	10	11	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									■	■	■	

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									
Assistance to Nucleus Seed Rearer's												
Selection of Nucleus Seed Rearer's (NSR)												
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												

ACTIVITIES	M	M	M	M	M	M	M	M	M	M	M	M
	1	2	3	4	5	6	7	8	9	10	11	12
Month→	(Nov)	(Dec)	(Jan)	(Feb)	(Mar)	(Apr)	(May)	(Jun)	(July)	(Aug)	(Sep)	(Oct)
Year→	2013			2014								
Nursery farmers												
Nucleus Seed Rearer's												
Basic Seed Rearer's												
Private Graineurs												
Commercial Rearer's												
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												

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									
PROJECT ADMINISTRATIVE EXPENSES												
PROJECT MONITORING COST												

Chapter 6: Results Framework

Project: Promotion of Large Scale Tasar Sericulture Based Livelihoods in West Bengal

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. 15,000 per annum per household 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	<ul style="list-style-type: none"> ➤ 1431 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 – 4, would help in storage of cocoons to avoid distress sale ➤ No. of producers' collective formed - 4. ➤ 130 ha of plantation will be raised and 946 Ha of natural forest will be rejuvenated 	<ul style="list-style-type: none"> ➤ Participating families profitably engage in livelihood activities based on Tasar sericulture: Cocoon Productivity: 32 seed cocoons per dfl in the Seed crop and 40 Cocoons per dfl's in the commercial crop. ➤ Plantation raised & rejuvenated ➤ Assistance to nucleus seed graineurs would help produce 29 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)	<ul style="list-style-type: none"> ➤ Total number of Grainage: 39 ➤ 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. 	<ul style="list-style-type: none"> ➤ 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	<ul style="list-style-type: none"> ➤ 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 	<ul style="list-style-type: none"> ➤ 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 ,	<ul style="list-style-type: none"> ➤ Hamlet level visioning / planning exercises, ➤ Technical training for productivity enhancement, ➤ Handholding support by Community Resource 	<ul style="list-style-type: none"> ➤ 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. 15,000 per annum per household 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
	<p>Persons (CRPs), on a day-to-day basis,</p> <ul style="list-style-type: none"> ➤ Exposures for adopting improved practices, ➤ Selection and extensive training of CRPs. <p>Reviewing effectiveness and providing on-field support.</p>	<p>and market linkages</p> <ul style="list-style-type: none"> ➤ 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 1264 trained commercial rearer's ➤ 1495 Households in Improved agriculture and 299 Households in Vegetable cultivation will be trained
<p>Promoting and nurturing Producer Institutions to ensure sustained availability of linkages and services for the participating families,</p>	<ul style="list-style-type: none"> ➤ 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. 	<ul style="list-style-type: none"> ➤ The self sustained District / Block level aggregations of the primary groups enable the producers to sustain their targeted standards of production. ➤ Interdependency
<p>Market Support</p>	<ul style="list-style-type: none"> ➤ Design development in Tasar weaving clusters and its promotion ➤ Design competition among weavers ➤ Design competition among design student/institutes 	<ul style="list-style-type: none"> ➤ 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 analysed 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.

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 West Bengal, 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. 6.17 crore** for a period of three years. Of this, people's own contribution and credit mobilization is Rs. 0.445 crore. A total grant assistance of **Rs. 5.34 crore** is budgeted under the project of which **Rs. 4.00 crore** (75% of the grant component) is being sought as Government of India share under the MKSP and the remaining **Rs. 1.33 Crore** (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 two districts of West Bengal (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.

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.

- III. 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.

- IV. 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.

- V. 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.

- VI. 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.

- VII. Assistance to Reelers' Collectives: The project proposes to convert part of the cocoon production into yarn on pilot scale. These reelers and spinners are proposed to be assisted through establishing collectives. Each collective shall consist of 25 reelers and about 10 spinners and have Reeling, Re-reeling and Spinning machineries along with necessary equipment, accessories and work place for conversion. These collectives would convert a portion of cocoon produced under the project in to value added products such as reeled & twisted Tasar silk yarn, Tasar spun yarn etc. and market them at remunerative prices within and outside the state. This would lead to further expansion based on the potential in various production clusters under the project.

Each collective would be provided with the required building and equipments from the project, and also linked to the financial institutions/ activity based companies for credit mobilization to meet working capital requirements. In order to facilitate the smooth and orderly functioning of these collectives, members of these collectives would be trained in the reeling/ spinning activities and some of the members would also be trained in management & cooperative aspects. Similar to BSPUs, required modifications will be attempted as far as the number, infrastructure, working capital depending on the field requirements. For example, if buildings of DOS/ other private or public can be made available the allocated fund would be utilized to meet the requirements of production incentives to rearer's and reelers. These collectives shall be managed by the members themselves in accordance with the prevailing cooperative act, or other rules and regulations of the state. Possibility of cocoon conversion by establishing CFCs with facilities for cocoon stifling, storage, work shed, equipment, consumables and working capital, by involving production houses viz., Eco- Tasar Pvt Ltd., to bring in professionalism and also for value addition locally, will also be attempted.

Provisions available towards working capital and also other savings under the collective if PIA can get other suitable building from DOS /private or public, can be maintained as non-erodable Community Investment Fund, which can be utilized for increasing the number of units, strengthening available infrastructure at nominal costs, production incentives, advance towards cocoon procurement, with well documented modalities involving producer groups/ TVS/SHGs, as the case may be.

This includes all the cost incurred in the construction of the infrastructure, establishing CFCs with facilities for cocoon stifling, storage, work shed, equipment, consumables, working capital and all other cost required to assist the Reeler's collective.

- 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 CSTR I 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 melas, 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 EA/ 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 CSTR, 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 of Sericulture 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.20, 120 per family under the project out of which Rs.1043 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	617.26	23,257.61
Cost of Total grant support per Family	534.00	20,120.51
Cost of Program cost per Family	408.16	15,378.94
Cost of Human resource Development per Family	77.74	2,929.31
Cost of Programme support Implementation cost per Family	68.00	2,562.17
Cost of Project administrative expenses per Family	27.67	1,042.69
Cost of Technology Extension and Business Development support per Family	27.67	1,042.69
Cost of Project Monitoring cost per Family	8.01	301.81
Cost of Contribution (Self contribution & Credit) cost per Family	83.26	3,137.12

Multi-State Project under MKSP-NTFP for Promotion of Large Scale Tasar Sericulture Based Livelihoods in WEST BENGAL
YEAR-WISE PHYSICAL & FINANCIAL PHASING

Rs in Lakhs

Sl. No.	Component/ Activity	Unit	PHYSICAL				Unit cost (lakh)	FINANCIAL				SHARING PATTERN				Project Grant (lakhs)
			Yr-1	Yr-2	Yr-3	Total		Yr-1	Yr-2	Yr-3	Total Cost (lakhs)	Credit	Benef - Contri	MORD	CSB	
1	Raising of Block plantation															
1.1	Raising Tasar host plantation	Hac.	80	50	-	130	0.45	35.79	22.37	-	58.16	-	11.56	15.40	31.20	46.60
1.2	Maintenance of host plant - 1st Year	Hac.	-	80	50	130	0.07	-	5.61	3.51	9.12	-	1.30	7.82	-	7.82
1.3	Maintenance of host plant - 2nd Year	Hac.	-	-	130	130	0.09	-	-	12.20	12.20	-	1.85	10.36	-	10.36
Sub-total			80	130	180	390	0.61	35.79	27.98	15.71	79.49	-	14.71	33.58	31.20	64.78
2	Assistance to Nucleus Seed Rearer's															
2.1	Supply of rearing equipments	No.	40	-	-	40	0.06	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	0.09	2.65	2.65	-	5.29	-	0.37	2.28	2.65	4.92
2.3	Assistance for Tasar silkworm rearing	No.	40	40	40	120	0.02	0.96	0.96	0.96	2.87	1.44	0.26	0.41	0.75	1.16
2.4	Crop insurance	Dfls	8,000	8,000	8,000	24,000	0.00	0.16	0.16	0.16	0.49	-	-	0.24	0.24	0.49
2.5	Rearer's insurance	No.	20	20	80	120	0.00	0.01	0.01	0.02	0.04	-	-	0.02	0.02	0.04
Sub-total			8,128	8,088	8,120	24,336	0.18	6.21	3.77	1.14	11.12	1.44	0.87	3.93	4.88	8.81
3	Assistance to Basic Seed Rearer's															
3.1	Supply of rearing equipments	No.	50	80	25	155	0.06	3.06	4.87	1.53	9.46	-	0.93	3.80	4.73	8.53
3.2	Supply of inputs for maintenance of block plantation	Hac	35	91	66	193	0.09	3.32	8.59	6.28	18.19	-	1.27	7.83	9.10	16.92
3.3	Assistance for tasar silkworm rearing	No.	50	130	130	310	0.02	1.20	3.10	3.10	7.40	3.72	0.68	1.06	1.94	3.00
3.4	Crop insurance	Dfls	10,033	25,985	25,983	62,000	0.00	0.19	0.49	0.49	1.17	-	-	0.59	0.59	1.17
3.5	Rearer's insurance	No.	50	130	130	310	0.00	0.02	0.04	0.04	0.10	-	-	0.05	0.05	0.10
Sub-total			10,218	26,415	26,334	62,968	0.18	7.78	17.09	11.44	36.31	3.72	2.88	13.32	16.39	29.71
4	Assistance to Commercial Rearer's															
4.1	Supply of rearing equipment	No.	400	636	200	1,236	0.06	24.40	38.80	12.18	75.38	-	7.41	37.07	30.89	67.96
4.2	Assistance for Tasar silkworm rearing	No.	400	1,036	1,035	2,471	0.02	8.01	20.75	20.73	49.49	29.66	13.59	6.24	-	6.24
4.3	Crop insurance	Dfls	80,000	207,200	207,086	494,286	0.00	1.63	4.22	4.22	10.07	-	-	5.04	5.04	10.07
4.4	Rearer's insurance	No.	400	1,036	1,035	2,471	0.00	0.12	0.32	0.32	0.77	-	-	0.38	0.38	0.77
Sub-total			81,200	209,908	209,356	500,464	0.08	34.16	64.09	37.46	135.71	29.66	21.01	48.73	36.31	85.04

Multi-State Project under MKSP-NTFP for Promotion of Large Scale Tasar Sericulture Based Livelihoods in WEST BENGAL
YEAR-WISE PHYSICAL & FINANCIAL PHASING

Rs in Lakhs

Sl. No.	Component/ Activity	Unit	PHYSICAL				Unit cost (lakh)	FINANCIAL				SHARING PATTERN				Project Grant (lakhs)
			Yr-1	Yr-2	Yr-3	Total		Yr-1	Yr-2	Yr-3	Total Cost (lakhs)	Credit	Benef - Contri	MORD	CSB	
5	Assistance to Private Graineurs															
5.1	Construction of grainage building	No.	13	20	6	39	1.00	13.00	20.00	6.00	39.00	-	1.95	15.60	21.45	37.05
5.2	Supply of grainage equipment	No.	13	20	6	39	0.42	5.46	8.40	2.52	16.38	-	-	8.19	8.19	16.38
5.3	Working capital	No.	13	20	6	39	0.35	4.55	7.00	2.10	13.65	3.90	2.34	0.59	6.83	7.41
5.4	Grainage consumables	No.	13	33	32	78	0.03	0.39	0.99	0.96	2.34	0.39	0.39	0.78	0.78	1.56
Sub-total			52	93	50	195	1.80	23.40	36.39	11.58	71.37	4.29	4.68	25.16	37.25	62.40
6	Assistance to Basic Seed Production Units															
6.1	Construction of grainage building	No.	1	-	-	1	36.34	36.34	-	-	36.34	-	-	34.79	1.55	36.34
6.2	Supply of grainage equipment	No.	1	-	-	1	2.94	2.94	-	-	2.94	-	-	2.94	-	2.94
6.3	Working capital	No.	1	-	-	1	2.98	2.98	-	-	2.98	-	-	2.98	-	2.98
6.4	Grainage consumables	No.	1	1	2	4	0.10	0.10	0.10	0.20	0.40	-	-	0.39	0.02	0.40
Sub-total			4	1	2	7	42.36	42.36	0.10	0.20	42.66	-	-	41.09	1.57	42.66
7	Assistance to Rearer's Collectives															
7.1	Cocoon storage facilities	No.	-	2	2	4	7.50	-	15.00	15.00	30.00	-	-	24.00	6.00	30.00
7.2	Common facilities	No.	-	2	2	4	0.37	-	0.75	0.75	1.49	-	-	1.49	-	1.49
Sub-total			-	4	4	8	7.87	-	15.75	15.75	31.49	-	-	25.49	6.00	31.49
Sub-Total (1-7)								149.71	165.17	93.28	408.16	39.11	44.15	191.30	133.60	324.90
8	Human Resource Development															
8.1	Technical training of project personnel															
8.1.1	Technical training for Project Families for implementation of sericulture activities	No.	2	2	1	5	0.10	0.20	0.20	0.10	0.50	-	-	0.50	-	0.50
8.2	Technical training for Project Families for implementation of sericulture activities															
8.2.1	Nursery farmers	No.	18	12	-	30	0.01	0.18	0.12	-	0.29	-	-	0.29	-	0.29
8.2.2	Nucleus Seed Rearer's	No.	40	-	-	40	0.01	0.46	-	-	0.46	-	-	0.46	-	0.46
8.2.3	Basic Seed Rearer's	No.	50	80	23	153	0.01	0.48	0.76	0.22	1.45	-	-	1.45	-	1.45
8.2.4	Private Graineurs	No.	12	20	6	38	0.13	1.50	2.50	0.76	4.76	-	-	4.76	-	4.76
8.2.5	Commercial Rearer's	No.	400	664	200	1,264	0.01	2.76	4.58	1.38	8.72	-	-	8.72	-	8.72
8.2.6	Study tour/ Exposure visit	No.	112	195	74	381	0.01	1.06	1.84	0.70	3.59	-	-	3.59	-	3.59
Sub-total			632	971	303	1,906	0.17	6.42	9.80	3.05	19.27	-	-	19.27	-	19.27
8.3	Technical training for sectoral activities															
8.3.1	Improved Agriculture	No.	433	767	295	1,495	0.00	1.42	2.51	0.97	4.90	-	-	4.90	-	4.90
8.3.2	vegetable cultivation	No.	87	153	59	299	0.00	0.19	0.33	0.13	0.65	-	-	0.65	-	0.65
8.3.3	Exposure of Project families to improved	No.	108	192	74	374	0.00	0.37	0.66	0.25	1.29	-	-	1.29	-	1.29

Multi-State Project under MKSP-NTFP for Promotion of Large Scale Tasar Sericulture Based Livelihoods in WEST BENGAL
YEAR-WISE PHYSICAL & FINANCIAL PHASING

Rs in Lakhs

Sl. No.	Component/ Activity	Unit	PHYSICAL				Unit cost (lakh)	FINANCIAL				SHARING PATTERN				Project Grant (lakhs)
			Yr-1	Yr-2	Yr-3	Total		Yr-1	Yr-2	Yr-3	Total Cost (lakhs)	Credit	Benef - Contri	MORD	CSB	
	practices															
Sub-total			628	1,112	428	2,168	0.01	1.98	3.51	1.35	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.	10	20	7	37	0.26	2.55	5.11	1.88	9.54	-	-	9.54	-	9.54
8.4.2	Exposure to improved practices	No.	6	10	3	19	0.02	0.09	0.16	0.05	0.29	-	-	0.29	-	0.29
8.4.3	Technical and Refresher Training	No.	10	20	7	37	0.01	0.13	0.26	0.09	0.47	-	-	0.47	-	0.47
Sub-total			26	50	17	93	0.28	2.77	5.52	2.02	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.	490	744	223	1,457	0.01	3.52	5.35	1.61	10.47	-	-	10.47	-	10.47
8.5.2	Tasar Seed Production	No.	12	20	6	38	0.01	0.10	0.17	0.05	0.33	-	-	0.33	-	0.33
8.5.3	Est. of Community Arjuna Nursery	No.	18	12	-	30	0.01	0.26	0.17	-	0.43	-	-	0.43	-	0.43
8.5.4	Improved agriculture	No.	433	767	295	1,495	0.00	1.87	3.31	1.27	6.45	-	-	6.45	-	6.45
8.5.5	Vegetable cultivation	No.	87	153	59	299	0.00	0.18	0.32	0.12	0.62	-	-	0.62	-	0.62
Sub-total			1,040	1,696	583	3,319	0.04	5.93	9.32	3.05	18.30	-	-	18.30	-	18.30
8.6	Institution building of Producer Collectives															
8.6.1	Membership training	No.	433	767	295	1,495	0.01	2.99	5.29	2.04	10.32	-	-	10.32	-	10.32
8.6.2	Leadership/ Governance Training	No.	22	38	15	75	0.03	0.57	0.98	0.38	1.93	-	-	1.93	-	1.93
8.6.3	Exposure of Board members & staff	No.	6	7	4	17	0.05	0.31	0.36	0.21	0.88	-	-	0.88	-	0.88
Sub-total			461	812	314	1,587	0.08	3.87	6.64	2.62	13.12	-	-	13.12	-	13.12
8.7	Nurturing of New Self-Help-Groups (SHGs)															
8.7.1	Membership training (25%)	No.	108	192	74	374	0.00	0.50	0.88	0.34	1.72	-	-	1.72	-	1.72
8.7.2	Leadership Training (20%)	No.	87	153	59	299	0.01	0.61	1.07	0.41	2.09	-	-	2.09	-	2.09
8.7.3	Book keeping Training (7.5%)	No.	33	57	22	112	0.01	0.28	0.48	0.18	0.94	-	-	0.94	-	0.94
8.7.4	Exposure of Cluster & Federation Members (2.25%)	No.	10	14	10	34	0.01	0.06	0.09	0.06	0.22	-	-	0.22	-	0.22
8.7.5	Livelihood Visioning (50%)	No.	218	384	147	749	0.00	0.41	0.73	0.28	1.42	-	-	1.42	-	1.42
Sub-total			456	800	312	1,568	0.03	1.86	3.25	1.28	6.39	-	-	6.39	-	6.39

Multi-State Project under MKSP-NTFP for Promotion of Large Scale Tasar Sericulture Based Livelihoods in WEST BENGAL
YEAR-WISE PHYSICAL & FINANCIAL PHASING

Rs in Lakhs

Sl. No.	Component/ Activity	Unit	PHYSICAL				Unit cost (lakh)	FINANCIAL				SHARING PATTERN				Project Grant (lakhs)
			Yr-1	Yr-2	Yr-3	Total		Yr-1	Yr-2	Yr-3	Total Cost (lakhs)	Credit	Benef - Contri	MORD	CSB	
8.8	Trainers Training prog	LS	1	-	-	1	3.00	3.00	-	-	3.00	-	-	3.00	-	3.00
Sub- Total (8.1-8.8)								26.04	38.23	13.47	77.74	-	-	77.74	-	77.74
9	Publicity and extension															
9.1	Workshop/seminar	No	1	-	1	2	4.00	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	No	-	2	2	4	0.50	-	1.00	1.00	2.00	-	-	2.00	-	2.00
	Sub-total		1	2	3	6	4.50	6.00	2.00	5.00	13.00	-	-	13.00	-	13.00
10	Disease monitoring	LS	NA					5.00	5.00		10.00	-	-	10.00	-	10.00
11	Design Development & Diversification	LS	NA					2.00	5.00	3.00	10.00	-	-	10.00	-	10.00
12	Documentation and evaluation	LS	NA					5.00	5.00	5.00	15.00	-		15.00	-	15.00
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					9.92	11.52	6.24	27.67					-
15	Project Implementation cost	LS	NA					9.92	11.52	6.24	27.67	-	-	55.35	-	55.35
16	Project Monitoring cost	LS	NA					2.88	3.28	1.84	8.01	-	-	8.01	-	8.01
Sub- Total (9-16)								45.71	53.32	32.32	131.36	-	-	131.36	-	131.36
GRAND TOTAL								221.47	256.72	139.07	617.26	39.11	44.15	400.40	133.60	534.00
Percentage to total financial outlay								35.88	41.59	22.53	100.00	6.34	7.15	64.87	21.64	86.51
<i>Percentage to the Project assistance</i>														75.0	25.0	100.00

ANNEXURES

Annexure-1

Project at a glance

1	Title	Promotion of Large Scale Tasar Sericulture Based Livelihoods in West Bengal		
2	Project area	Bankura and West Medinipore		
3	Coordinating Agency	Central Silk Board, Min.of Textiles, Govt. of India		
4	Project Implementing Agency	PRADAN		
5	Total Project Cost (Rs. In Lakhs)	617.260		
6	Funding Pattern (Rs. in lakhs)	CREDIT & BENEFICIARY	MORD	CSB
		83.260	400.400	133.600
	<i>Sharing pattern (%)</i>	<i>13.5</i>	<i>64.9</i>	<i>21.6</i>
		<i>Cost/beneficiary</i>	<i>%</i>	
	<i>Investment per beneficiary</i>	<i>20120.6</i>		
	<i>Cost of capacity building/ beneficiary</i>	<i>2929.2</i>		<i>14.7</i>
	<i>Cost of infrastructure per beneficiary</i>	<i>6986.9</i>		<i>17.1</i>
	<i>Cost of equipment per beneficiary</i>	<i>7070.1</i>		<i>17.3</i>
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	155		
	Commercial rearer's	1236		
	Private Graineurs	39		
	Community Resource Persons	37		
	BSPU members (15 per unit)	15		
	Improved agriculture	1495		
	Vegetable cultivation	299		
	Women SHG members	748		
	Indirect beneficiaries	381		
	Total Project Beneficiaries	2654		
	9	Infrastructure to be created		
a	Block plantation (Forest/ private/ revenue lands) (ha.)	130		
b	Regeneration of block plantation (ha.)	946		
c	Basic Seed Production Units (No.)	1		
d	Rearer's' Collective (No.)	4		
10	Project Output (during the Project period):			
	Tasar basic seed (Lakh dfls)	0.5		
	Tasar commercial seed (Lakh dfls)	5.1		
	Tasar Reeling Cocoons (Lakh Nos.)	290.1		
11	Value of the Project output (Lakh Rs.)	756.00		

Annexure-2

Promotion of Large Scale Tasar Sericulture Based Livelihoods in West Bengal
Productivity norms

#	PARAMETERS	TASAR
1	Spacing/ number of plants in Tasar host plantation per ha.	
	Block plantation (3.0 m x 1.8m)	1852
	Chawkie garden (1.8m x 1.8m)	3086
	Block plantation with Chawkie garden (90:10)	1975
2	Requirement of seedlings per ha. including 10% mortality	
	Block plantation (3.0 m x 1.8m)	2037
	Chawkie garden (1.8m x 1.8m)	3395
	Block plantation with Chawkie garden (90:10)	2173
3	Number of seedlings/ kisan nursery	76400
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

Promotion of Large Scale Tasar Sericulture Based Livelihoods in West Bengal
Productivity norms

#	PARAMETERS	TASAR
17	Yield of spun silk from pierced cocoons / 1000 cocoons (kg.)	0.8
18	Average rate of reeling cocoons / '000 cocoons (Rs.)	
	Bivoltine	1600
	Trivoltine	1300
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.)	2800
22	Avg. Rate/kg. spun silk (Rs.)	1800

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

Annexure-3

Year wise Physical phasing

Sl. No.	Component/ Activity	Unit	PHYSICAL			
			Year-1	Year-2	Year-3	Total
1	Raising of Block plantation					
	Raising Tasar host plantation	Hac.	80	50	0	130
	Maintenance of host plant - 1st Year	Hac.	0	80	50	130
	Maintenance of host plant - 2nd Year	Hac.	0	0	130	130
	Sub-total		80	130	180	390
2	Assistance to Nucleus Seed Rearer's					
	Supply of rearing equipments	No.	40	0	0	40
	Supply of inputs for maintenance of block plantation	Hac.	28	28	0	56
	Assistance for Tasar silkworm rearing	No.	40	40	40	120
	Crop insurance	Dfls	8000	8000	8000	24000
	Rearer's insurance	No.	20	20	80	120
	Sub-total		8128	8088	8120	24336
3	Assistance to Basic Seed Rearer's					
	Supply of rearing equipments	No.	50.163	79.760	25.082	155.005
	Supply of inputs for maintenance of block plantation	Hac	35.11	90.95	66.44	192.50
	Assistance for Tasar silkworm rearing	No.	50	130	130	310
	Crop insurance	Dfls	10033	25985	25983	62000
	Rearer's insurance	No.	50	130	130	310
	Sub-total		10218	26415	26334	62968
4	Assistance to Commercial Rearer's					
	Supply of rearing equipment	No.	400	636	199.71	1235.71
	Assistance for Tasar silkworm rearing	No.	400	1036	1035.43	2471.43
	Crop insurance	Dfls	80000	207200	207086	494286
	Rearer's insurance	No.	400	1036	1035	2471
	Sub-total		81200	209908	209356	500464.3
5	Assistance to Private Graineurs					
	Construction of Grainage building	No.	13	20	6	39
	Supply of Grainage equipment	No.	13	20	6	39
	Working capital	No.	13	20	6	39
	Grainage consumables	No.	13	33	32	78
	Sub-total		52	93	50	195
6	Assistance to Basic Seed Production Units					
	Construction of Grainage building	No.	1	0	0	1
	Supply of Grainage equipment	No.	1	0	0	1
	Working capital	No.	1	0	0	1
	Grainage consumables	No.	1	1	2	4
	Sub-total		4	1	2	7
7	Assistance to Rearer's' Collectives					
	Cocoon storage facilities	No.	0	2	2	4
	Common facilities	No.	0	2	2	4
	Sub-total		0	4	4	8
8	Human Resource Development					

Year wise Physical phasing

Sl. No.	Component/ Activity	Unit	PHYSICAL			
			Year-1	Year-2	Year-3	Total
8.1.	Technical training of project personnel	No.	2	2	1	5
8.2	Technical training for project families for implementation of sericulture activities					
	Nursery farmers	No.	18	12	0	30
	Nucleus Seed Rearer's	No.	40	0	0	40
	Basic Seed Rearer's	No.	50	80	23	153
	Private Graineurs	No.	12	20	6.05	38
	Commercial Rearer's	No.	400	664	200	1264
	Study tour/ Exposure visit	No.	112	195	74	381
	Sub-total		520	776	229	1525
8.3	Technical training for sectoral activities					
	Improved Agriculture	No.	433	767	295	1495
	vegetable cultivation	No.	87	153	59	299
	Exposure of families to improved practices	No.	108	192	73.75	374
	Sub-total		628	1112	428	2168
8.4	Training of Community Resource Persons (CRPs) for extension of activities					
	Orientation and training on Tasar	No.	10	20	7.38	37
	Exposure to improved practices	No.	6	10	3	19
	Technical and Refresher Training	No.	10	20	7	37
	Sub-total		26	50	17	93
8.5	On-field training / handholding provided by CRPs to the project families					
	Tasar Silkworm Rearing	No.	490	744	223.4	1457
	Tasar Seed Production	No.	12	20	6.05	38
	Est. of Community Arjuna Nursery	No.	18	12	0	30
	Improved agriculture	No.	433	767	295	1495
	Vegetable cultivation	No.	87	153	59	299
	Sub-total		1040	1696	583	3319
8.6	Institution building of Producer Collectives					
	Membership training	No.	433	767	295	1495
	Leadership/ Governance Training	No.	22	38	14.5	75
	Exposure of Board members & staff	No.	6	7	4	17
	Sub-total		461	812	314	1587
8.7	Nurturing of New Self-Help-Groups (SHGs)					
	Membership training (25%)	No.	108	192	73.75	374
	Leadership Training (20%)	No.	87	153	59	299
	Book keeping Training (7.5%)	No.	33	57	22	112
	Exposure of Cluster & Federation Members (2.25%)	No.	10	14	10	34
	Livelihood Visioning (50%)	No.	218	384	147	748
	Sub-total		456	800	312	1567
8.8	Trainers Training programme	LS	1	0	0	1
	Total (8.1. to 8.8)		3134	5248	1884	10265
9	Publicity and extension					
	Workshop/seminar	No	1	0	1	2
	Krishi mela			2	2	4
	Sub-total		1	2	3	6

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	0.750
3	Private Graineurs	No.	39
	Basic seed rearer's	No.	155
	Nucleus seed rearer's	No.	40
4	Basic seed requirement	Lakh dfls	0.670
	Nucleus seed requirement	Lakh dfls	0.240
5	Silk worm rearer's- Commercial	No.	1236
6	Basic Seed cocoon production	Lakh nos.	26.807
7	Commercial dfl production	Lakh dfls	4.25
8	Reeling cocoon production	Lakh nos.	275

Annexure-5

Year wise Physical and Financial phasing

Rs in Lakhs

Sl. No.	Component/ Activity	Unit	PHYSICAL				Unit cost (lakh)	FINANCIAL			
			Yr-1	Yr-2	Yr-3	Total		Yr-1	Yr-2	Yr-3	Total Cost (lakhs)
1	Raising of Block plantation										
1.1	Raising Tasar host plantation	Hac.	80	50	-	130	0.45	35.79	22.37	-	58.16
1.2	Maintenance of host plant - 1st Year	Hac.	-	80	50	130	0.07	-	5.61	3.51	9.12
1.3	Maintenance of host plant - 2nd Year	Hac.	-	-	130	130	0.09	-	-	12.2	12.2
Sub-total			80	130	180	390	0.61	35.79	27.98	15.71	79.49
2	Assistance to Nucleus Seed Rearer's										
2.1	Supply of rearing equipments	No.	40	-	-	40	0.06	2.44	-	-	2.44
2.2	Supply of inputs for maintenance of block plantation	Hac.	28	28	-	56	0.09	2.65	2.65	-	5.29
2.3	Assistance for Tasar silkworm rearing	No.	40	40	40	120	0.02	0.96	0.96	0.96	2.87
2.4	Crop insurance	Dfls	8,000	8,000	8,000	24,000	0	0.16	0.16	0.16	0.49
2.5	Rearer's insurance	No.	20	20	80	120	0	0.01	0.01	0.02	0.04
Sub-total			8,128	8,088	8,120	24,336	0.18	6.21	3.77	1.14	11.12
3	Assistance to Basic Seed Rearer's										
3.1	Supply of rearing equipments	No.	50	80	25	155	0.06	3.06	4.87	1.53	9.46
3.2	Supply of inputs for maintenance of block plantation	Hac	35	91	66	193	0.09	3.32	8.59	6.28	18.19
3.3	Assistance for Tasar silkworm rearing	No.	50	130	130	310	0.02	1.2	3.1	3.1	7.4
3.4	Crop insurance	Dfls	10,033	25,985	25,983	62,000	0	0.19	0.49	0.49	1.17
3.5	Rearer's insurance	No.	50	130	130	310	0	0.02	0.04	0.04	0.1
Sub-total			10,218	26,415	26,334	62,968	0.18	7.78	17.09	11.44	36.31
4	Assistance to Commercial Rearer's										
4.1	Supply of rearing equipment	No.	400	636	200	1,236	24.4	38.8	12.18	75.38	
4.2	Assistance for Tasar silkworm rearing	No.	400	1,036	1,035	2,471	8.01	20.75	20.73	49.49	
4.3	Crop insurance	Dfls	80,000	207,200	207,086	494,286	1.63	4.22	4.22	10.07	
4.4	Rearer's insurance	No.	400	1,036	1,035	2,471	0.12	0.32	0.32	0.77	
Sub-total			81,200	209,908	209,356	500,464	34.16	64.09	37.46	135.71	
5	Assistance to Private Graineurs										
5.1	Construction of Grainage building	No.	13	20	6	39	1	13	20	6	39
5.2	Supply of Grainage equipment	No.	13	20	6	39	0.42	5.46	8.4	2.52	16.38

Year wise Physical and Financial phasing

Rs in Lakhs

Sl. No.	Component/ Activity	Unit	PHYSICAL				Unit cost (lakh)	FINANCIAL			
			Yr-1	Yr-2	Yr-3	Total		Yr-1	Yr-2	Yr-3	Total Cost (lakhs)
5.3	Working capital	No.	13	20	6	39	0.35	4.55	7	2.1	13.65
5.4	Grainage consumables	No.	13	33	32	78	0.03	0.39	0.99	0.96	2.34
Sub-total			52	93	50	195	1.8	23.4	36.39	11.58	71.37
6	Assistance to Basic Seed Production Units										
6.1	Construction of Grainage building	No.	1	-	-	1	36.34	36.34	-	-	36.34
6.2	Supply of Grainage equipment	No.	1	-	-	1	2.94	2.94	-	-	2.94
6.3	Working capital	No.	1	-	-	1	2.98	2.98	-	-	2.98
6.4	Grainage consumables	No.	1	1	2	4	0.1	0.1	0.1	0.2	0.4
Sub-total			4	1	2	7	42.36	42.36	0.1	0.2	42.66
7	Assistance to Rearer's Collectives										
7.1	Cocoon storage facilities	No.	-	2	2	4	7.5	-	15	15	30
7.2	Common facilities	No.	-	2	2	4	0.37	-	0.75	0.75	1.49
Sub-total			-	4	4	8	7.87	-	15.75	15.75	31.49
Sub-Total (1-7)								149.71	165.17	93.28	408.16
8	Human Resource Development										
8.1.	Technical training of project personnel										
		No.	2	2	1	5	0.1	0.2	0.2	0.1	0.5
8.2	Technical training for Project Families for implementation of sericulture activities										
8.2.1	Nursery farmers	No.	18	12	-	30	0.01	0.18	0.12	-	0.29
8.2.2	Nucleus Seed Rearer's	No.	40	-	-	40	0.01	0.46	-	-	0.46
8.2.3	Basic Seed Rearer's	No.	50	80	23	153	0.01	0.48	0.76	0.22	1.45
8.2.4	Private Graineurs	No.	12	20	6	38	0.13	1.5	2.5	0.76	4.76
8.2.5	Commercial Rearer's	No.	400	664	200	1,264	0.01	2.76	4.58	1.38	8.72
8.2.6	Study tour/ Exposure visit	No.	112	195	74	381	0.01	1.06	1.84	0.7	3.59
Sub-total			632	971	303	1,906	0.17	6.42	9.8	3.05	19.27
8.3	Technical training for sectoral activities										
8.3.1	Improved Agriculture	No.	433	767	295	1,495	0	1.42	2.51	0.97	4.9
8.3.2	vegetable cultivation	No.	87	153	59	299	0	0.19	0.33	0.13	0.65
8.3.3	Exposure of Project families to improved practices	No.	108	192	74	374	0	0.37	0.66	0.25	1.29
Sub-total			628	1,112	428	2,168	0.01	1.98	3.51	1.35	6.84

Year wise Physical and Financial phasing

Rs in Lakhs

Sl. No.	Component/ Activity	Unit	PHYSICAL				Unit cost (lakh)	FINANCIAL			
			Yr-1	Yr-2	Yr-3	Total		Yr-1	Yr-2	Yr-3	Total Cost (lakhs)
8.4	Training of Community Resource Persons (CRPs) for extension of activities										
8.4.1	Orientation and training on Tasar	No.	10	20	7	37	0.26	2.55	5.11	1.88	9.54
8.4.2	Exposure to improved practices	No.	6	10	3	19	0.02	0.09	0.16	0.05	0.29
8.4.3	Technical and Refresher Training	No.	10	20	7	37	0.01	0.13	0.26	0.09	0.47
Sub-total			26	50	17	93	0.28	2.77	5.52	2.02	10.31
8.5	On-field training / handholding provided by CRPs to the Project families										
8.5.1	Tasar Silkworm Rearing	No.	490	744	223	1,457	0.01	3.52	5.35	1.61	10.47
8.5.2	Tasar Seed Production	No.	12	20	6	38	0.01	0.1	0.17	0.05	0.33
8.5.3	Est. of Community Arjuna Nursery	No.	18	12	-	30	0.01	0.26	0.17	-	0.43
8.5.4	Improved agriculture	No.	433	767	295	1,495	0	1.87	3.31	1.27	6.45
8.5.5	Vegetable cultivation	No.	87	153	59	299	0	0.18	0.32	0.12	0.62
Sub-total			1,040	1,696	583	3,319	0.04	5.93	9.32	3.05	18.3
8.6	Institution building of Producer Collectives										
8.6.1	Membership training	No.	433	767	295	1,495	0.01	2.99	5.29	2.04	10.32
8.6.2	Leadership/ Governance Training	No.	22	38	15	75	0.03	0.57	0.98	0.38	1.93
8.6.3	Exposure of Board members & staff	No.	6	7	4	17	0.05	0.31	0.36	0.21	0.88
Sub-total			461	812	314	1,587	0.08	3.87	6.64	2.62	13.12
8.7	Nurturing of New Self-Help-Groups (SHGs)										
8.7.1	Membership training (25%)	No.	108	192	74	374	0	0.5	0.88	0.34	1.72
8.7.2	Leadership Training (20%)	No.	87	153	59	299	0.01	0.61	1.07	0.41	2.09
8.7.3	Book keeping Training (7.5%)	No.	33	57	22	112	0.01	0.28	0.48	0.18	0.94
8.7.4	Exposure of Cluster & Federation Members (2.25%)	No.	10	14	10	34	0.01	0.06	0.09	0.06	0.22
8.7.5	Livelihood Visioning (50%)	No.	218	384	147	749	0	0.41	0.73	0.28	1.42
Sub-total			456	800	312	1,568	0.03	1.86	3.25	1.28	6.39
8.8	Trainers Training programme	LS	1	-	-	1	3	3	-	-	3
Sub- Total (8.1-8.8)								26.04	38.23	13.47	77.74
9	Publicity and extension										
9.1	Workshop/seminar	No	1	-	1	2	4	4	-	4	8
9.2	Printing passbook/pamphlets	LS	NA					2	1	-	3

Year wise Physical and Financial phasing

Rs in Lakhs

Sl. No.	Component/ Activity	Unit	PHYSICAL				Unit cost (lakh)	FINANCIAL			
			Yr-1	Yr-2	Yr-3	Total		Yr-1	Yr-2	Yr-3	Total Cost (lakhs)
9.3	Krishi mela	No	-	2	2	4	0.5	-	1	1	2
	Sub-total		1	2	3	6	4.5	6	2	5	13
10	Disease monitoring	LS						5	5		10
11	Design Development & Diversification	LS						2	5	3	10
12	Documentation and evaluation	LS						5	5	5	15
13	Consultancy & Advocacy	LS						5	10	5	20
14	Technology Extension and Business Development support	LS						9.92	11.52	6.24	27.67
15	Project Implementation cost	LS						9.92	11.52	6.24	27.67
16	Project Monitoring cost	LS						2.88	3.28	1.84	8.01
Sub- Total (9-16)								45.71	53.32	32.32	131.36
GRAND TOTAL								221.47	256.72	139.07	617.26
Percentage to total financial outlay								35.88	41.59	22.53	100

MKSP Component Analysis	Total Budget (Lakh Rs)	Rs/ Family
Cost of Total project cost per family	617.26	23,257.61
Cost of Total grant support per Family	534	20,120.51
Cost of Program cost per Family	408.16	15,378.94
Cost of Human resource Development per Family	77.74	2,929.31
Cost of Programme support Implementation cost per Family	68	2,562.17
Cost of Project administrative expenses per Family	27.67	1,042.69
Cost of Technology Extension and Business Development support per Family	27.67	1,042.69
Cost of Project Monitoring cost per Family	8.01	301.81
Cost of Contribution (Self contribution & Credit) cost per Family	83.26	3,137.12

Annexure-6

Year wise Phasing of Financial outlay and Sharing pattern

Rs in Lakhs

Sl. No.	Component/ Activity	Unit	Unit cost (lakh)	FINANCIAL				SHARING PATTERN				Project Grant (lakhs)
				Yr-1	Yr-2	Yr-3	Total Cost (lakhs)	Credit	Benef-Contri	MORD	CSB	
1	Raising of Block plantation											
1.1	Raising Tasar host plantation	Hac.	0.45	35.79	22.37	-	58.16	-	11.56	15.4	31.2	46.6
1.2	Maintenance of host plant - 1st Year	Hac.	0.07	-	5.61	3.51	9.12	-	1.3	7.82	-	7.82
1.3	Maintenance of host plant - 2nd Year	Hac.	0.09	-	-	12.2	12.2	-	1.85	10.36	-	10.36
Sub-total			0.61	35.79	27.98	15.71	79.49	-	14.71	33.58	31.2	64.78
2	Assistance to Nucleus Seed Rearer's											
2.1	Supply of rearing equipments	No.	0.06	2.44	-	-	2.44	-	0.24	0.98	1.22	2.2
2.2	Supply of inputs for maintenance of block plantation	Hac.	0.09	2.65	2.65	-	5.29	-	0.37	2.28	2.65	4.92
2.3	Assistance for Tasar silkworm rearing	No.	0.02	0.96	0.96	0.96	2.87	1.44	0.26	0.41	0.75	1.16
2.4	Crop insurance	Dfls	0	0.16	0.16	0.16	0.49	-	-	0.24	0.24	0.49
2.5	Rearer's insurance	No.	0	0.01	0.01	0.02	0.04	-	-	0.02	0.02	0.04
Sub-total			0.18	6.21	3.77	1.14	11.12	1.44	0.87	3.93	4.88	8.81
3	Assistance to Basic Seed Rearer's											
3.1	Supply of rearing equipments	No.	0.06	3.06	4.87	1.53	9.46	-	0.93	3.8	4.73	8.53
3.2	Supply of inputs for maintenance of block plantation	Hac	0.09	3.32	8.59	6.28	18.19	-	1.27	7.83	9.1	16.92
3.3	Assistance for Tasar silkworm rearing	No.	0.02	1.2	3.1	3.1	7.4	3.72	0.68	1.06	1.94	3
3.4	Crop insurance	Dfls	0	0.19	0.49	0.49	1.17	-	-	0.59	0.59	1.17
3.5	Rearer's insurance	No.	0	0.02	0.04	0.04	0.1	-	-	0.05	0.05	0.1
Sub-total			0.18	7.78	17.09	11.44	36.31	3.72	2.88	13.32	16.39	29.71
4	Assistance to Commercial Rearer's											
4.1	Supply of rearing equipment	No.		24.4	38.8	12.18	75.38	-	7.41	37.07	30.89	67.96
4.2	Assistance for Tasar silkworm rearing	No.		8.01	20.75	20.73	49.49	29.66	13.59	6.24	-	6.24
4.3	Crop insurance	Dfls		1.63	4.22	4.22	10.07	-	-	5.04	5.04	10.07
4.4	Rearer's insurance	No.		0.12	0.32	0.32	0.77	-	-	0.38	0.38	0.77
Sub-total				34.16	64.09	37.46	135.71	29.66	21.01	48.73	36.31	85.04
5	Assistance to Private Graineurs											
5.1	Construction of Grainage building	No.	1	13	20	6	39	-	1.95	15.6	21.45	37.05
5.2	Supply of Grainage equipment	No.	0.42	5.46	8.4	2.52	16.38	-	-	8.19	8.19	16.38

Year wise Phasing of Financial outlay and Sharing pattern

Rs in Lakhs

Sl. No.	Component/ Activity	Unit	Unit cost (lakh)	FINANCIAL				SHARING PATTERN				Project Grant (lakhs)
				Yr-1	Yr-2	Yr-3	Total Cost (lakhs)	Credit	Benef-Contri	MORD	CSB	
5.3	Working capital	No.	0.35	4.55	7	2.1	13.65	3.9	2.34	0.59	6.83	7.41
5.4	Grainage consumables	No.	0.03	0.39	0.99	0.96	2.34	0.39	0.39	0.78	0.78	1.56
Sub-total			1.8	23.4	36.39	11.58	71.37	4.29	4.68	25.16	37.25	62.4
6	Assistance to Basic Seed Production Units											
6.1	Construction of Grainage building	No.	36.34	36.34	-	-	36.34	-	-	34.79	1.55	36.34
6.2	Supply of Grainage equipment	No.	2.94	2.94	-	-	2.94	-	-	2.94	-	2.94
6.3	Working capital	No.	2.98	2.98	-	-	2.98	-	-	2.98	-	2.98
6.4	Grainage consumables	No.	0.1	0.1	0.1	0.2	0.4	-	-	0.39	0.02	0.4
Sub-total			42.36	42.36	0.1	0.2	42.66	-	-	41.09	1.57	42.66
7	Assistance to Rearer's Collectives											
7.1	Cocoon storage facilities	No.	7.5	-	15	15	30	-	-	24	6	30
7.2	Common facilities	No.	0.37	-	0.75	0.75	1.49	-	-	1.49	-	1.49
Sub-total			7.87	-	15.75	15.75	31.49	-	-	25.49	6	31.49
Sub-Total (1-7)				149.71	165.17	93.28	408.16	39.11	44.15	191.3	133.6	324.9
8	Human Resource Development											
8.1	Technical training of project personnel											
		No.	0.1	0.2	0.2	0.1	0.5	-	-	0.5	-	0.5
8.2	Technical training for Project Families for implementation of sericulture activities											
8.2.1	Nursery farmers	No.	0.01	0.18	0.12	-	0.29	-	-	0.29	-	0.29
8.2.2	Nucleus Seed Rearer's	No.	0.01	0.46	-	-	0.46	-	-	0.46	-	0.46
8.2.3	Basic Seed Rearer's	No.	0.01	0.48	0.76	0.22	1.45	-	-	1.45	-	1.45
8.2.4	Private Graineurs	No.	0.13	1.5	2.5	0.76	4.76	-	-	4.76	-	4.76
8.2.5	Commercial Rearer's	No.	0.01	2.76	4.58	1.38	8.72	-	-	8.72	-	8.72
8.2.6	Study tour/ Exposure visit	No.	0.01	1.06	1.84	0.7	3.59	-	-	3.59	-	3.59
Sub-total			0.17	6.42	9.8	3.05	19.27	-	-	19.27	-	19.27
8.3	Technical training for sectoral activities											
8.3.1	Improved Agriculture	No.	0	1.42	2.51	0.97	4.9	-	-	4.9	-	4.9
8.3.2	vegetable cultivation	No.	0	0.19	0.33	0.13	0.65	-	-	0.65	-	0.65
8.3.3	Exposure of Project families to improved practices	No.	0	0.37	0.66	0.25	1.29	-	-	1.29	-	1.29
Sub-total			0.01	1.98	3.51	1.35	6.84	-	-	6.84	-	6.84

Year wise Phasing of Financial outlay and Sharing pattern

Rs in Lakhs

Sl. No.	Component/ Activity	Unit	Unit cost (lakh)	FINANCIAL				SHARING PATTERN				Project Grant (lakhs)
				Yr-1	Yr-2	Yr-3	Total Cost (lakhs)	Credit	Benef-Contri	MORD	CSB	
8.4	Training of Community Resource Persons (CRPs) for extension of activities											
8.4.1	Orientation and training on Tasar	No.	0.26	2.55	5.11	1.88	9.54	-	-	9.54	-	9.54
8.4.2	Exposure to improved practices	No.	0.02	0.09	0.16	0.05	0.29	-	-	0.29	-	0.29
8.4.3	Technical and Refresher Training	No.	0.01	0.13	0.26	0.09	0.47	-	-	0.47	-	0.47
Sub-total			0.28	2.77	5.52	2.02	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.	0.01	3.52	5.35	1.61	10.47	-	-	10.47	-	10.47
8.5.2	Tasar Seed Production	No.	0.01	0.1	0.17	0.05	0.33	-	-	0.33	-	0.33
8.5.3	Est. of Community Arjuna Nursery	No.	0.01	0.26	0.17	-	0.43	-	-	0.43	-	0.43
8.5.4	Improved agriculture	No.	0	1.87	3.31	1.27	6.45	-	-	6.45	-	6.45
8.5.5	Vegetable cultivation	No.	0	0.18	0.32	0.12	0.62	-	-	0.62	-	0.62
Sub-total			0.04	5.93	9.32	3.05	18.3	-	-	18.3	-	18.3
8.6	Institution building of Producer Collectives											
8.6.1	Membership training	No.	0.01	2.99	5.29	2.04	10.32	-	-	10.32	-	10.32
8.6.2	Leadership/ Governance Training	No.	0.03	0.57	0.98	0.38	1.93	-	-	1.93	-	1.93
8.6.3	Exposure of Board members & staff	No.	0.05	0.31	0.36	0.21	0.88	-	-	0.88	-	0.88
Sub-total			0.08	3.87	6.64	2.62	13.12	-	-	13.12	-	13.12
8.7	Nurturing of New Self-Help-Groups (SHGs)											
8.7.1	Membership training (25%)	No.	0	0.5	0.88	0.34	1.72	-	-	1.72	-	1.72
8.7.2	Leadership Training (20%)	No.	0.01	0.61	1.07	0.41	2.09	-	-	2.09	-	2.09
8.7.3	Book keeping Training (7.5%)	No.	0.01	0.28	0.48	0.18	0.94	-	-	0.94	-	0.94
8.7.4	Exposure of Cluster & Federation Members (2.25%)	No.	0.01	0.06	0.09	0.06	0.22	-	-	0.22	-	0.22
8.7.5	Livelihood Visioning (50%)	No.	0	0.41	0.73	0.28	1.42	-	-	1.42	-	1.42
Sub-total			0.03	1.86	3.25	1.28	6.39	-	-	6.39	-	6.39
8.8	Trainers Training programme	LS	3	3	-	-	3	-	-	3	-	3
Sub- Total (8.1-8.8)				26.04	38.23	13.47	77.74	-	-	77.74	-	77.74
9	Publicity and extension											
9.1	Workshop/seminar	No	4	4	-	4	8	-	-	8	-	8
9.2	Printing passbook/pamphlets	LS		2	1	-	3	-	-	3	-	3

Year wise Phasing of Financial outlay and Sharing pattern

Rs in Lakhs

Sl. No.	Component/ Activity	Unit	Unit cost (lakh)	FINANCIAL				SHARING PATTERN				Project Grant (lakhs)
				Yr-1	Yr-2	Yr-3	Total Cost (lakhs)	Credit	Benef-Contri	MORD	CSB	
9.3	Krishi mela	No	0.5	-	1	1	2	-	-	2	-	2
	Sub-total		4.5	6	2	5	13	-	-	13	-	13
10	Disease monitoring	LS		5	5		10	-	-	10	-	10
11	Design Development & Diversification	LS		2	5	3	10	-	-	10	-	10
12	Documentation and evaluation	LS		5	5	5	15	-	-	15	-	15
13	Consultancy & Advocacy	LS		5	10	5	20	-	-	20	-	20
14	Technology Extension and Business Development support	LS		9.92	11.52	6.24	27.67					-
15	Project Implementation cost	LS		9.92	11.52	6.24	27.67	-	-	55.35	-	55.35
16	Project Monitoring cost	LS		2.88	3.28	1.84	8.01	-	-	8.01	-	8.01
Sub- Total (9-16)				45.71	53.32	32.32	131.36	-	-	131.36	-	131.36
GRAND TOTAL				221.47	256.72	139.07	617.26	39.11	44.15	400.4	133.6	534
Percentage to total financial outlay				35.88	41.59	22.53	100	6.34	7.15	64.87	21.64	86.51
<i>Percentage to the Project assistance</i>										<i>75</i>	<i>25</i>	<i>100</i>

MKSP Component Analysis	Total Budget (Lakh Rs)	Rs/ Family
Cost of Total project cost per family	617.26	23,257.61
Cost of Total grant support per Family	534.00	20,120.51
Cost of Program cost per Family	408.16	15,378.94
Cost of Human resource Development per Family	77.74	2,929.31
Cost of Programme support Implementation cost per Family	68.00	2,562.17
Cost of Project administrative expenses per Family	27.67	1,042.69
Cost of Technology Extension and Business Development support per Family	27.67	1,042.69
Cost of Project Monitoring cost per Family	8.01	301.81
Cost of Contribution (Self contribution & Credit) cost per Family	83.26	3,137.12

Annexure-7

First Year Physical and Financial phasing

Amount in Lakhs

Sl. No.	Component/ Activity	Unit	PHYSICAL	Unit cost (lakh)	FINANCIAL	SHARING PATTERN Yr-1 (Lakh Rs)				
			Yr-1		Yr-1	Credit	Beneficiary	MORD	CSB	Total grant
1	Raising of Block plantation									
1.1	Raising Tasar host plantation	Hac.	80	0.45	35.79	-	7.12	9.48	19.20	28.68
1.2	Maintenance of host plant - 1st Year	Hac.	-	0.07	-	-	-	-	-	-
1.3	Maintenance of host plant - 2nd Year	Hac.	-	0.09	-	-	-	-	-	-
Sub-total			80	0.61	35.79	-	7.12	9.48	19.20	28.68
2	Assistance to Nucleus Seed Rearer's									
2.1	Supply of rearing equipments	No.	40	0.061	2.44	-	0.24	0.98	1.22	2.20
2.2	Supply of inputs for maintenance of block plantation	Hac.	28	0.095	2.65	-	0.18	1.14	1.32	2.46
2.3	Assistance for Tasar silkworm rearing	No.	40	0.024	0.96	0.48	0.09	0.14	0.25	0.39
2.4	Crop insurance	Dfls	8,000	0.000	0.16	-	-	0.08	0.08	0.16
2.5	Rearer's insurance	No.	20	0.000	0.01	-	-	0.00	0.00	0.01
Sub-total			8,128	0.18	6.21	0.48	0.51	2.34	2.88	5.22
3	Assistance to Basic Seed Rearer's									
3.1	Supply of rearing equipments	No.	50	0.061	3.06	-	0.30	1.23	1.53	2.76
3.2	Supply of inputs for maintenance of block plantation	Hac	35	0.095	3.32	-	0.23	1.43	1.66	3.09
3.3	Assistance for Tasar silkworm rearing	No.	50	0.024	1.20	0.60	0.11	0.17	0.31	0.49
3.4	Crop insurance	Dfls	10,033	0.000	0.19	-	-	0.09	0.09	0.19
3.5	Rearer's insurance	No.	50	0.000	0.02	-	-	0.01	0.01	0.02
Sub-total			10,218	0.180	7.780881	0.60	0.64	2.93	3.61	6.54
4	Assistance to Commercial Rearer's									
4.1	Supply of rearing equipment	No.	400	0.061	24.40	-	2.40	12.00	10.00	22.00
4.2	Assistance for Tasar silkworm rearing	No.	400	0.020	8.01	4.80	2.20	1.01	-	1.01
4.3	Crop insurance	Dfls	80,000	0.000	1.63	-	-	0.82	0.82	1.63
4.4	Rearer's insurance	No.	400	0.000	0.12	-	-	0.06	0.06	0.12
Sub-total			81,200	0.081	34.16	4.80	4.60	13.89	10.88	24.76
5	Assistance to Private Graineurs									
5.1	Construction of Grainage building	No.	13	1.000	13.00	-	0.65	5.20	7.15	12.35
5.2	Supply of Grainage equipment	No.	13	0.420	5.46	-	-	2.73	2.73	5.46

First Year Physical and Financial phasing

Amount in Lakhs

Sl. No.	Component/ Activity	Unit	PHYSICAL	Unit cost (lakh)	FINANCIAL	SHARING PATTERN Yr-1 (Lakh Rs)				
			Yr-1		Yr-1	Credit	Beneficiary	MORD	CSB	Total grant
5.3	Working capital	No.	13	0.350	4.55	1.30	0.78	0.20	2.28	2.47
5.4	Grainage consumables	No.	13	0.030	0.39	0.07	0.07	0.13	0.13	0.26
Sub-total			52	1.80	23.40	1.37	1.50	8.26	12.29	20.54
6	Assistance to Basic Seed Production Units									
6.1	Construction of Grainage building	No.	1	36.343	36.34	-	-	34.79	1.55	36.34
6.2	Supply of Grainage equipment	No.	1	2.944	2.94	-	-	2.94	-	2.94
6.3	Working capital	No.	1	2.975	2.98	-	-	2.98	-	2.98
6.4	Grainage consumables	No.	1	0.100	0.10	-	-	0.10	0.00	0.10
Sub-total			4	42.36	42.36	-	-	40.81	1.56	42.36
7	Assistance to Rearer's Collectives									
7.1	Cocoon storage facilities	No.	-	7.500	-	-	-	-	-	-
7.2	Common facilities	No.	-	0.373	-	-	-	-	-	-
Sub-total			-	7.87	-	-	-	-	-	-
Sub-Total (1-7)					149.71	7.25	14.37	77.70	50.40	128.10
8	Human Resource Development									
8.1.	Technical training of project personnel									
		No.	2	0.1	0.2	-	-	0.20	-	0.20
8.2	Technical training for Project Families for implementation of sericulture activities									
8.2.1	Nursery farmers	No.	18	0.01	0.176	-	-	0.18	-	0.18
8.2.2	Nucleus Seed Rearer's	No.	40	0.01	0.455	-	-	0.46	-	0.46
8.2.3	Basic Seed Rearer's	No.	50	0.01	0.476	-	-	0.48	-	0.48
8.2.4	Private Graineurs	No.	12	0.13	1.501	-	-	1.50	-	1.50
8.2.5	Commercial Rearer's	No.	400	0.01	2.760	-	-	2.76	-	2.76
8.2.6	Study tour/ Exposure visit	No.	112	0.01	1.056	-	-	1.06	-	1.06
Sub-total			632	0.18	6.42	-	-	6.42	-	6.42
8.3	Technical training for sectoral activities									
8.3.1	Improved Agriculture	No.	433	0.003	1.419	-	-	1.42	-	1.42
8.3.2	vegetable cultivation	No.	87	0.002	0.190	-	-	0.19	-	0.19
8.3.3	Exposure of Project families to improved practices	No.	108	0.003	0.373	-	-	0.37	-	0.37
Sub-total			628	0.009	1.98	-	-	1.98	-	1.98

First Year Physical and Financial phasing

Amount in Lakhs

Sl. No.	Component/ Activity	Unit	PHYSICAL	Unit cost (lakh)	FINANCIAL	SHARING PATTERN Yr-1 (Lakh Rs)				
			Yr-1		Yr-1	Credit	Beneficiary	MORD	CSB	Total grant
8.4	Training of Community Resource Persons (CRPs) for extension of activities									
8.4.1	Orientation and training on Tasar	No.	10	0.255	2.553	-	-	2.55	-	2.55
8.4.2	Exposure to improved practices	No.	6	0.016	0.093	-	-	0.09	-	0.09
8.4.3	Technical and Refresher Training	No.	10	0.013	0.128	-	-	0.13	-	0.13
Sub-total			26	0.28	2.77	-	-	2.77	-	2.77
8.5	On-field training / handholding provided by CRPs to the Project families									
8.5.1	Tasar Silkworm Rearing	No.	490	0.007	3.523	-	-	3.52	-	3.52
8.5.2	Tasar Seed Production	No.	12	0.009	0.104	-	-	0.10	-	0.10
8.5.3	Est. of Community Arjuna Nursery	No.	18	0.014	0.259	-	-	0.26	-	0.26
8.5.4	Improved agriculture	No.	433	0.004	1.867	-	-	1.87	-	1.87
8.5.5	Vegetable cultivation	No.	87	0.002	0.180	-	-	0.18	-	0.18
Sub-total			1,040	0.04	5.93	-	-	5.93	-	5.93
8.6	Institution building of Producer Collectives									
8.6.1	Membership training	No.	433	0.007	2.988	-	-	2.99	-	2.99
8.6.2	Leadership/ Governance Training	No.	22	0.026	0.569	-	-	0.57	-	0.57
8.6.3	Exposure of Board members & staff	No.	6	0.052	0.311	-	-	0.31	-	0.31
Sub-total			461	0.08	3.87	-	-	3.87	-	3.87
8.7	Nurturing of New Self-Help-Groups (SHGs)									
8.7.1	Membership training (25%)	No.	108	0.00	0.497	-	-	0.50	-	0.50
8.7.2	Leadership Training (20%)	No.	87	0.01	0.609	-	-	0.61	-	0.61
8.7.3	Book keeping Training (7.5%)	No.	33	0.01	0.277	-	-	0.28	-	0.28
8.7.4	Exposure of Cluster & Federation Members (2.25%)	No.	10	0.01	0.064	-	-	0.06	-	0.06
8.7.5	Livelihood Visioning (50%)	No.	218	0.00	0.414	-	-	0.41	-	0.41
Sub-total			456	0.03	1.86	-	-	1.86	-	1.86
8.8	Trainers Training programme	LS	1	3.00	3.00	-	-	3.00	-	3.00
Sub- Total (8.1-8.8)					26.04	-	-	26.04	-	26.04
9	Publicity and extension									
9.1	Workshop/seminar	No	1	4	4.00	-	-	4.00	-	4.00
9.2	Printing passbook/pamphlets	LS	NA		2.00	-	-	2.00	-	2.00
9.3	Krishi mela	No	-	0.5	-	-	-	-	-	-

First Year Physical and Financial phasing

Amount in Lakhs

Sl. No.	Component/ Activity	Unit	PHYSICAL	Unit cost (lakh)	FINANCIAL	SHARING PATTERN Yr-1 (Lakh Rs)				
			Yr-1		Yr-1	Credit	Beneficiary	MORD	CSB	Total grant
Sub-total			1	5	6.00	-	-	6.00	-	6.00
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		5.00	-	-	5.00	-	5.00
13	Consultancy & Advocacy	LS	NA		5.00	-	-	5.00	-	5.00
14	Technology Extension and Business Development support	LS	NA		9.92	-	-	9.92	-	9.92
15	Project Implementation cost	LS	NA		9.92	-	-	9.92	-	9.92
16	Project Monitoring cost	LS	NA		2.88	-	-	2.88	-	2.88
Sub- Total (9-16)					45.72	-	-	45.72	-	45.72
GRAND TOTAL					221.47	7.25	14.37	149.46	50.40	199.86
Percentage to total financial outlay					35.88	3	6.49	67.48	22.76	90.24

Annexure-8

Second Year Physical and Financial phasing

Amount in Lakh

Sl. No.	Component/ Activity	Unit	PHYSICAL	Unit cost (lakh)	FINANCIAL	SHARING PATTERN				
			Yr-2		Yr-2	Credit	Beneficiary	MORD	CSB	Total grant
1	Raising of Block plantation									
1.1	Raising Tasar host plantation	Hac.	50	0.45	22.37	-	4.45	5.92	12.00	17.92
1.2	Maintenance of host plant - 1st Year	Hac.	80	0.07	5.61	-	0.80	4.81	-	4.81
1.3	Maintenance of host plant - 2nd Year	Hac.	-	0.09	-	-	-	-	-	-
Sub-total			130		27.98	-	5.25	10.74	12.00	22.74
2	Assistance to Nucleus Seed Rearer's									
2.1	Supply of rearing equipments	No.	-	0.061	-	-	-	-	-	-
2.2	Supply of inputs for maintenance of block plantation	Hac.	28	0.095	2.65	-	0.18	1.14	1.32	2.46
2.3	Assistance for Tasar silkworm rearing	No.	40	0.024	0.96	0.48	0.09	0.14	0.25	0.39
2.4	Crop insurance	Dfls	8,000	0.000	0.16	-	-	0.08	0.08	0.16
2.5	Rearer's insurance	No.	20	0.000	0.01	-	-	0.00	0.00	0.01
Sub-total			8,088		3.77	0.48	0.27	1.36	1.66	3.02
3	Assistance to Basic Seed Rearer's									
3.1	Supply of rearing equipments	No.	80	0.061	4.87	-	0.48	1.95	2.43	4.39
3.2	Supply of inputs for maintenance of block plantation	Hac	91	0.095	8.59	-	0.60	3.70	4.30	7.99
3.3	Assistance for Tasar silkworm rearing	No.	130	0.024	3.10	1.56	0.29	0.44	0.81	1.26
3.4	Crop insurance	Dfls	25,985	0.000	0.49	-	-	0.25	0.25	0.49
3.5	Rearer's insurance	No.	130	0.000	0.04	-	-	0.02	0.02	0.04
Sub-total			26,415		17.09252	1.56	1.36	6.36	7.81	14.17
4	Assistance to Commercial Rearer's									
4.1	Supply of rearing equipment	No.	636	0.060	38.80	-	3.82	19.08	15.90	34.98
4.2	Assistance for Tasar silkworm rearing	No.	1036	0.020	20.75	12.43	5.70	2.62	-	2.62
4.3	Crop insurance	Dfls	207,200	0.000	4.22	-	-	2.11	2.11	4.22
4.4	Rearer's insurance	No.	1036	0.000	0.32	-	-	0.16	0.16	0.32
Sub-total			209,908	0.080	64.09	12.43	9.51	23.97	18.17	18.17
5	Assistance to Private Graineurs									
5.1	Construction of grainage building	No.	20	1.000	20.00	-	1.00	8.00	11.00	19.00
5.2	Supply of grainage equipment	No.	20	0.420	8.40	-	-	4.20	4.20	8.40

Second Year Physical and Financial phasing

Amount in Lakh

Sl. No.	Component/ Activity	Unit	PHYSICAL	Unit cost (lakh)	FINANCIAL	SHARING PATTERN				
			Yr-2		Yr-2	Credit	Beneficiary	MORD	CSB	Total grant
5.3	Working capital	No.	20	0.350	7.00	2.00	1.20	0.30	3.50	3.80
5.4	Grainage consumables	No.	33	0.030	0.99	0.17	0.17	0.33	0.33	0.66
Sub-total			93		36.39	2.17	2.37	12.83	19.03	31.86
6	Assistance to Basic Seed Production Units									
6.1	Construction of grainage building	No.	0	36.343	-	-	-	-	-	-
6.2	Supply of grainage equipment	No.	0	2.944	-	-	-	-	-	-
6.3	Working capital	No.	0	2.975	-	-	-	-	-	-
6.4	Grainage consumables	No.	1	0.100	0.10	-	-	0.10	0.00	0.10
Sub-total			1		0.10	-	-	0.10	0.00	0.10
7	Assistance to Rearer's Collectives									
7.1	Cocoon storage facilities	No.	2	7.500	15.00	-	-	12.00	3.00	15.00
7.2	Common facilities	No.	2	0.373	0.75	-	-	0.75	-	0.75
Sub-total			4		15.75	-	-	12.75	3.00	15.75
Sub-Total (1-7)					165.17	16.64	18.76	68.10	61.67	129.77
8	Human Resource Development									
8.1.	Technical training of project personnel									
		No.	2		0.2	-	-	0.20	-	0.20
8.2	Technical training for Project Families for implementation of sericulture activities									
8.2.1	Nursery farmers	No.	12		0.117	-	-	0.12	-	0.12
8.2.2	Nucleus Seed Rearer's	No.	0		0.000	-	-	-	-	-
8.2.3	Basic Seed Rearer's	No.	80		0.757	-	-	0.76	-	0.76
8.2.4	Private Graineurs	No.	20		2.501	-	-	2.50	-	2.50
8.2.5	Commercial Rearer's	No.	664		4.582	-	-	4.58	-	4.58
8.2.6	Study tour/ Exposure visit	No.	195		1.839	-	-	1.84	-	1.84
Sub-total			971		9.80	-	-	9.80	-	9.80
8.3	Technical training for sectoral activities									
8.3.1	Improved Agriculture	No.	767	0.003	2.514	-	-	2.51	-	2.51
8.3.2	vegetable cultivation	No.	153	0.002	0.334	-	-	0.33	-	0.33
8.3.3	Exposure of Project families to improved practices	No.	192	0.003	0.662	-	-	0.66	-	0.66
Sub-total			1112		3.51	-	-	3.51	-	3.51

Second Year Physical and Financial phasing

Amount in Lakh

Sl. No.	Component/ Activity	Unit	PHYSICAL	Unit cost (lakh)	FINANCIAL	SHARING PATTERN				
			Yr-2		Yr-2	Credit	Beneficiary	MORD	CSB	Total grant
8.4	Training of Community Resource Persons (CRPs) for extension of activities									
8.4.1	Orientation and training on Tasar	No.	20	0.255	5.106	-	-	5.11	-	5.11
8.4.2	Exposure to improved practices	No.	10	0.016	0.155	-	-	0.16	-	0.16
8.4.3	Technical and Refresher Training	No.	20	0.013	0.255	-	-	0.26	-	0.26
Sub-total			50		5.52	-	-	5.52	-	5.52
8.5	On-field training / handholding provided by CRPs to the Project families									
8.5.1	Tasar Silkworm Rearing	No.	744	0.007	5.346	-	-	5.35	-	5.35
8.5.2	Tasar Seed Production	No.	20	0.009	0.173	-	-	0.17	-	0.17
8.5.3	Est. of Community Arjuna Nursery	No.	12	0.014	0.173	-	-	0.17	-	0.17
8.5.4	Improved agriculture	No.	767	0.004	3.308	-	-	3.31	-	3.31
8.5.5	Vegetable cultivation	No.	153	0.002	0.317	-	-	0.32	-	0.32
Sub-total			1,696		9.32	-	-	9.32	-	9.32
8.6	Institution building of Producer Collectives									
8.6.1	Membership training	No.	767	0.007	5.292	-	-	5.29	-	5.29
8.6.2	Leadership/ Governance Training	No.	38	0.026	0.983	-	-	0.98	-	0.98
8.6.3	Exposure of Board members & staff	No.	7	0.052	0.362	-	-	0.36	-	0.36
Sub-total			812		6.64	-	-	6.64	-	6.64
8.7	Nurturing of New Self-Help-Groups (SHGs)									
8.7.1	Membership training (25%)	No.	192	0.00	0.883	-	-	0.88	-	0.88
8.7.2	Leadership Training (20%)	No.	153	0.01	1.071	-	-	1.07	-	1.07
8.7.3	Book keeping Training (7.5%)	No.	57	0.01	0.479	-	-	0.48	-	0.48
8.7.4	Exposure of Cluster & Federation Members (2.25%)	No.	14	0.01	0.090	-	-	0.09	-	0.09
8.7.5	Livelihood Visioning (50%)	No.	384	0.00	0.730	-	-	0.73	-	0.73
			800		3.25	-	-	3.25	-	3.25
8.8	Trainers Training programme	LS	0		-	-	-	-	-	-
Sub- Total (8.1-8.8)					38.23	-	-	38.23	-	38.23
9	Publicity and extension									
9.1	Workshop/seminar	No	-		-	-	-	-	-	-
9.2	Printing passbook/pamphlets	LS			1.00	-	-	1.00	-	1.00
9.3	Krishi mela	No	2		1.00	-	-	1.00	-	1.00

Second Year Physical and Financial phasing

Amount in Lakh

Sl. No.	Component/ Activity	Unit	PHYSICAL	Unit cost (lakh)	FINANCIAL	SHARING PATTERN				
			Yr-2		Yr-2	Credit	Benefi- ciary	MORD	CSB	Total grant
			2		2.00	-	-	2.00	-	2.00
10	Disease monitoring	LS			5.00	-	-	5.00	-	5.00
11	Design Development & Diversification	LS			5.00	-	-	5.00	-	5.00
12	Documentation and evaluation	LS			5.00	-	-	5.00	-	5.00
13	Consultancy & Advocacy	LS			10.00	-	-	10.00	-	10.00
14	Technology Extension and Business Development support	LS			11.52	-	-	11.52	-	11.52
15	Project Implementation cost	LS			11.52	-	-	11.52	-	11.52
16	Project Monitoring cost	LS			3.28	-	-	3.28	-	3.28
Sub- Total (9-16)					53.32	-	-	53.32	-	53.32
GRAND TOTAL					256.72	16.64	18.76	159.65	61.67	221.32
Percentage to total financial outlay					41.59	6	7.31	62.19	24.02	86.21

Annexure-9

Third Year Physical and Financial phasing

Rs in Lakhs

Sl. No.	Component/ Activity	Unit	PHYSICAL	Unit cost (lakh)	FINANCIAL	SHARING PATTERN				
			Yr-3		Yr-3	Credit	Beneficiary	MORD	CSB	Total grant
1	Raising of Block plantation									
1.1	Raising Tasar host plantation	Hac.	-	0.45	-	-	-	-	-	-
1.2	Maintenance of host plant - 1st Year	Hac.	50	0.07	3.51	-	0.50	3.01	-	3.01
1.3	Maintenance of host plant - 2nd Year	Hac.	130	0.09	12.20	-	1.85	10.36	-	10.36
Sub-total			180	0.61	15.71	-	2.35	13.36	-	13.36
2	Assistance to Nucleus Seed Rearer's									
2.1	Supply of rearing equipments	No.	-	0.061	-	-	-	-	-	-
2.2	Supply of inputs for maintenance of block plantation	Hac.	-	0.095	-	-	-	-	-	-
2.3	Assistance for Tasar silkworm rearing	No.	40	0.024	0.96	0.48	0.09	0.14	0.25	0.39
2.4	Crop insurance	Dfls	8,000	0.000	0.16	-	-	0.08	0.08	0.16
2.5	Rearer's insurance	No.	80	0.000	0.02	-	-	0.01	0.01	0.02
Sub-total			8,120	0.18	1.14	0.48	0.09	0.23	0.34	0.57
3	Assistance to Basic Seed Rearer's									
3.1	Supply of rearing equipments	No.	25	0.061	1.53	-	0.15	0.61	0.76	1.38
3.2	Supply of inputs for maintenance of block plantation	Hac	66	0.095	6.28	-	0.44	2.70	3.14	5.84
3.3	Assistance for Tasar silkworm rearing	No.	130	0.024	3.10	1.56	0.29	0.44	0.81	1.26
3.4	Crop insurance	Dfls	25,983	0.000	0.49	-	-	0.25	0.25	0.49
3.5	Rearer's insurance	No.	130	0.000	0.04	-	-	0.02	0.02	0.04
Sub-total			26,334	0.180	11.44105	1.56	0.87	4.03	4.98	9.01
4	Assistance to Commercial Rearer's									
4.1	Supply of rearing equipment	No.	200	0.061	12.18	-	1.20	5.99	4.99	10.98
4.2	Assistance for Tasar silkworm rearing	No.	1035.43	0.020	20.73	12.43	5.69	2.61	-	2.61
4.3	Crop insurance	Dfls	207,086	0.000	4.22	-	-	2.11	2.11	4.22
4.4	Rearer's insurance	No.	1035.43	0.000	0.32	-	-	0.16	0.16	0.32
Sub-total			209,356	0.081	37.46	12.43	6.89	10.88	7.26	18.14
5	Assistance to Private Graineurs									
5.1	Construction of grainage building	No.	6	1.000	6.00	-	0.30	2.40	3.30	5.70
5.2	Supply of grainage equipment	No.	6	0.420	2.52	-	-	1.26	1.26	2.52

Third Year Physical and Financial phasing

Rs in Lakhs

Sl. No.	Component/ Activity	Unit	PHYSICAL	Unit cost (lakh)	FINANCIAL	SHARING PATTERN				
			Yr-3		Yr-3	Credit	Beneficiary	MORD	CSB	Total grant
5.3	Working capital	No.	6	0.350	2.10	0.60	0.36	0.09	1.05	1.14
5.4	Grainage consumables	No.	32	0.030	0.96	0.16	0.16	0.32	0.32	0.64
Sub-total			50	1.80	11.58	0.76	0.82	4.07	5.93	10.00
6	Assistance to Basic Seed Production Units									
6.1	Construction of grainage building	No.	0	36.343	-	-	-	-	-	-
6.2	Supply of grainage equipment	No.	0	2.944	-	-	-	-	-	-
6.3	Working capital	No.	0	2.975	-	-	-	-	-	-
6.4	Grainage consumables	No.	2	0.100	0.20	-	-	0.19	0.01	0.20
Sub-total			2	42.36	0.20	-	-	0.19	0.01	0.20
7	Assistance to Rearer's Collectives									
7.1	Cocoon storage facilities	No.	2	7.500	15.00	-	-	12.00	3.00	15.00
7.2	Common facilities	No.	2	0.373	0.75	-	-	0.75	-	0.75
Sub-total			4	7.87	15.75	-	-	12.75	3.00	15.75
Sub-Total (1-7)					93.28	15.22	11.02	45.51	21.53	67.03
8	Human Resource Development									
8.1.	Technical training of project personnel									
	No.	1	0.1	0.1	-	-	0.10	-	0.10	
8.2	Technical training for Project Families for implementation of sericulture activities									
8.2.1	Nursery farmers	No.	0	0.01	0.000	-	-	-	-	-
8.2.2	Nucleus Seed Rearer's	No.	0	0.01	0.000	-	-	-	-	-
8.2.3	Basic Seed Rearer's	No.	23	0.01	0.218	-	-	0.22	-	0.22
8.2.4	Private Graineurs	No.	6	0.13	0.757	-	-	0.76	-	0.76
8.2.5	Commercial Rearer's	No.	200	0.01	1.382	-	-	1.38	-	1.38
8.2.6	Study tour/ Exposure visit	No.	74	0.01	0.698	-	-	0.70	-	0.70
Sub-total			303	0.18	3.05	-	-	3.05	-	3.05
8.3	Technical training for sectoral activities									
8.3.1	Improved Agriculture	No.	295	0.003	0.967	-	-	0.97	-	0.97
8.3.2	vegetable cultivation	No.	59	0.002	0.129	-	-	0.13	-	0.13
8.3.3	Exposure of Project families to improved practices	No.	74	0.003	0.254	-	-	0.25	-	0.25
Sub-total			427.75	0.009	1.35	-	-	1.35	-	1.35
8.4	Training of Community Resource Persons (CRPs) for extension of activities									

Third Year Physical and Financial phasing

Rs in Lakhs

Sl. No.	Component/ Activity	Unit	PHYSICAL	Unit cost (lakh)	FINANCIAL	SHARING PATTERN				
			Yr-3		Yr-3	Credit	Beneficiary	MORD	CSB	Total grant
8.4.1	Orientation and training on Tasar	No.	7	0.255	1.884	-	-	1.88	-	1.88
8.4.2	Exposure to improved practices	No.	3	0.016	0.047	-	-	0.05	-	0.05
8.4.3	Technical and Refresher Training	No.	7	0.013	0.089	-	-	0.09	-	0.09
Sub-total			17.38	0.28	2.02	-	-	2.02	-	2.02
8.5	On-field training / handholding provided by CRPs to the Project families									
8.5.1	Tasar Silkworm Rearing	No.	223	0.007	1.606	-	-	1.61	-	1.61
8.5.2	Tasar Seed Production	No.	6	0.009	0.052	-	-	0.05	-	0.05
8.5.3	Est. of Community Arjuna Nursery	No.	0	0.014	0.000	-	-	-	-	-
8.5.4	Improved agriculture	No.	295	0.004	1.272	-	-	1.27	-	1.27
8.5.5	Vegetable cultivation	No.	59	0.002	0.122	-	-	0.12	-	0.12
Sub-total			583	0.04	3.05	-	-	3.05	-	3.05
8.6	Institution building of Producer Collectives									
8.6.1	Membership training	No.	295	0.007	2.036	-	-	2.04	-	2.04
8.6.2	Leadership/ Governance Training	No.	15	0.026	0.375	-	-	0.38	-	0.38
8.6.3	Exposure of Board members & staff	No.	4	0.052	0.207	-	-	0.21	-	0.21
Sub-total			313.5	0.08	2.62	-	-	2.62	-	2.62
8.7	Nurturing of New Self-Help-Groups (SHGs)									
8.7.1	Membership training (25%)	No.	74	0.00	0.339	-	-	0.34	-	0.34
8.7.2	Leadership Training (20%)	No.	59	0.01	0.413	-	-	0.41	-	0.41
8.7.3	Book keeping Training (7.5%)	No.	22	0.01	0.185	-	-	0.18	-	0.18
8.7.4	Exposure of Cluster & Federation Members (2.25%)	No.	10	0.01	0.064	-	-	0.06	-	0.06
8.7.5	Livelihood Visioning (50%)	No.	147	0.00	0.279	-	-	0.28	-	0.28
			311.75	0.03	1.28	-	-	1.28	-	1.28
8.8	Trainers Training programme	LS	0	3.00	-	-	-	-	-	-
Sub- Total (8.1-8.8)					13.47	-	-	13.47	-	13.47
9	Publicity and extension									
9.1	Workshop/seminar	No	1	4	4.00	-	-	4.00	-	4.00
9.2	Printing passbook/pamphlets	LS			-	-	-	-	-	-
9.3	Krishi mela	No	2	0.5	1.00	-	-	1.00	-	1.00
			3	5	5.00	-	-	5.00	-	5.00

Third Year Physical and Financial phasing

Rs in Lakhs

Sl. No.	Component/ Activity	Unit	PHYSICAL	Unit cost (lakh)	FINANCIAL	SHARING PATTERN				
			Yr-3		Yr-3	Credit	Beneficiary	MORD	CSB	Total grant
10	Disease monitoring	LS			-	-	-	-	-	-
11	Design Development & Diversification	LS			3.00	-	-	3.00	-	3.00
12	Documentation and evaluation	LS			5.00	-	-	5.00	-	5.00
13	Consultancy & Advocacy	LS			5.00	-	-	5.00	-	5.00
14	Technology Extension and Business Development support	LS			6.24	-	-	6.24	-	6.24
15	Project Implementation cost	LS			6.24	-	-	6.24	-	6.24
16	Project Monitoring cost	LS			1.84	-	-	1.84	-	1.84
Sub- Total (9-16)					32.32	-	-	32.32	-	32.32
GRAND TOTAL					139.07	15.22	11.02	91.30	21.53	112.83
Percentage to total financial outlay					22.53	11	7.93	65.65	15.48	81.13

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							
SI	Particulars	Unit	Number	Rs/unit	Total (Rs)	Contribution (Rs)	Grant (Rs)
1	Cost Asan and Arjuna of seedlings including 10% mortality	No.	2173	3.00	6519	0	6519
2	Soil conservation						
a	Staggered trench (6ft x2ft x 2ft)	No.	279	33.60	9374	2344	7031
b	Cattle proof trench	cft	7500	1.40	10500	2625	7875
3	Pit digging (1.5ftx1.5ftx1ft)	No.	1975	3.15	6222	1556	4667
4	Cost of vermin-composts @ 400/ plant	Kg	790	5.00	3951	0	3951
5	Anti-termite treatment		LS		250	0	250
6	Transplantation of seedling	No.	1975	1.50	2963	1185	1778
7	Basin formation and weeding	No.	1975	1.50	2963	1185	1778
8	Intercropping	LS			2000	0	2000
	Total				44742	8895	35847
B. Unit Cost Estimate for the Maintenance of 1 Hac of Tasar Plantations in the 2nd. year							
SI	Particulars	Unit	Number	Rs/unit	Total	Contribution (Rs)	Grant
1	1st. Hoeing and basin formation in the 2nd. Year	No.	1975	1.50	2963	1185	1778
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	1778	0	1778
4	2nd. Hoeing in the 2nd. Year	No.	1975	1.00	1975	790	1185
	Sub-Total				7016	1975	5041
B. Unit Cost Estimate for the Maintenance of 1 Hac of Tasar Plantations in the 3rd. year							
SI	Particulars		Input	Rs/unit	Total		Grant
1	1st. Hoeing in the 3rd Year	No.	1975	1.60	3160	1264	1896
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	3556	0	3556
4	2nd. Hoeing in the 2nd. Year	No.	1975	1.20	2370	948	1422
	Sub-Total				9386	2212	7174
Maintenance total					16402	4188	12215
Total of raising and maintenance					61144	13082	48062
<i>Percentage sharing</i>						<i>21</i>	<i>79</i>

SHARING	Credit	Benef.	MORD	CSB	Total
Raising of Tasar host plants	0	8895	11847	24000	44742
<i>Percentage</i>	<i>0.0</i>	<i>19.9</i>	<i>26.5</i>	<i>53.6</i>	<i>100.00</i>
Maintenance in the 2nd year	0	1000	6016	0	7016
<i>Percentage</i>	<i>0.0</i>	<i>14.3</i>	<i>85.7</i>	<i>0.0</i>	<i>100.00</i>
Maintenance in the 3rd year	0	1420	7966	0	9386
<i>Percentage</i>	<i>0.0</i>	<i>15.1</i>	<i>84.9</i>	<i>0.0</i>	<i>100.00</i>
Total	0	11315	25830	24000	61144
	<i>0.0</i>	<i>18.5</i>	<i>42.2</i>	<i>39.3</i>	<i>100.0</i>

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	1000
2	Low volume sprayer (one for 10 rearer's)	No.	1		500	500
3	Nylon net (40'x30'x10')	No.	1		4000	4000
4	Bamboos	No.	12		50	600
Sub-total						6100
B	Maintenance of Tasar host plants (0.7 Hac)					
5	Cost of fertilizers NPK mixture for 2100 plants @200gm/plant	Kg	420		18	7560
6	Cost of insecticides for foliar spray	LS				240
7	Cultural operations	LS				1650
Sub-total						9450
C	Tasar Silkworm Rearing					
8	Cost of Tasar silkworm dfls	No.	200		6	1200
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						2388
TOTAL						17938

SHARING	Credit	Benef.	MORD	CSB	Total
Rearing Equipment	0	600	2450	3050	6100
<i>Percentage</i>	<i>0.0</i>	<i>9.8</i>	<i>40.2</i>	<i>50.0</i>	<i>100.0</i>
Maintenance of host plants	0	660	4065	4725	9450
<i>Percentage</i>	<i>0.0</i>	<i>7.0</i>	<i>43.0</i>	<i>50.0</i>	<i>100.0</i>
Tasar Silkworm Rearing	1200	220	343	625	2388
<i>Percentage</i>	<i>50.3</i>	<i>9.2</i>	<i>14.3</i>	<i>26.2</i>	<i>100.0</i>
Total	1200	1480	6858	8400	17938
<i>Percentage</i>	<i>6.7</i>	<i>8.3</i>	<i>38.2</i>	<i>46.8</i>	<i>100.0</i>

CDP unit cost- 16800/- (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	1000
2	Low volume sprayer (one for 10 rearer's)	No.	1		500	500
3	Nylon net (40'x30'x10')	No.	1		4000	4000
4	Bamboos	No.	12		50	600
Sub-total						6100
B	Maintenance of Tasar host plants (0.7 Hac)					
5	Cost of fertilizers NPK mixture for 2100 plants @200gm/plant	Kg	420		18	7560
6	Cost of insecticides for foliar spray	LS				240
7	Cultural operations	LS				1650
Sub-total						9450
C	Tasar Silkworm Rearing					
8	Cost of Tasar silkworm dfls	No.	200		6	1200
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						2388
TOTAL						17938

SHARING	Credit	Benef.	MORD	CSB	Total
Rearing Equipment	0	600	2450	3050	6100
<i>Percentage</i>	<i>0.0</i>	<i>9.8</i>	<i>40.2</i>	<i>50.0</i>	<i>100.0</i>
Maintenance of host plants	0	660	4065	4725	9450
<i>Percentage</i>	<i>0.0</i>	<i>7.0</i>	<i>43.0</i>	<i>50.0</i>	<i>100.0</i>
Tasar Silkworm Rearing	1200	220	343	625	2388
<i>Percentage</i>	<i>50.3</i>	<i>9.2</i>	<i>14.3</i>	<i>26.2</i>	<i>100.0</i>
Total	1200	1480	6858	8400	17938
<i>Percentage</i>	<i>6.7</i>	<i>8.3</i>	<i>38.2</i>	<i>46.8</i>	<i>100.0</i>

CDP unit cost- 16800/- (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	1000
2	Low volume sprayer (one for 10 rearer's)	No.	1	500	500
3	Nylon net (40'x30'x10')	No.	1	4000	4000
4	Bamboos	No.	12	50	600
Sub-total					6100
B	Tasar Silkworm Rearing				
5	Cost of Tasar silkworm dfls	No.	200	6	1200
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					2003
TOTAL					8103

SHARING	Credit	Benef.	MORD	CSB	Total
Rearing Equipment	0	600	3000	2500	6100
<i>Percentage</i>	<i>0</i>	<i>9.836</i>	<i>49.2</i>	<i>41.0</i>	<i>100.00</i>
Tasar Silkworm Rearing	1200	550	253	0	2003
<i>Percentage</i>	<i>59.93</i>	<i>27.47</i>	<i>12.6</i>	<i>0.0</i>	<i>100.00</i>
Total	1200	1150	3253	2500	8103
<i>Percentage</i>	<i>14.8</i>	<i>14.2</i>	<i>40.1</i>	<i>30.9</i>	<i>100.0</i>

CDP unit cost- 10800/- (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	100000	100000
B.	Grainage Equipments				
1	Microscope with light arrangement	No.	2	5000	10000
2	Egg laying boxes/ Nylon net bags	No.	3000	4	12000
3	Egg laying cabinet	No.	1	6500	6500
4	Wooden Moth Testing Table (5ft x 1.5ft)	No.	1	4000	4000
5	Stools	No.	2	750	1500
6	Plastic drum (60 liters)	No.	1	1100	1100
7	Plastic bucket	No.	5	200	1000
8	Plastic tub (small)	No.	5	150	750
9	Plastic tub (20 liters)	No.	5	300	1500
10	Plastic mug	No.	5	50	250
11	Mortar & Pestle	No.	5	320	1600
12	Measuring Cylinder (Plastic)	No.	1	300	300
13	Weighing balance	No.	1	1500	1500
Sub-total					42000
C.	Consumables & Working Capital				
1	Cost of seed cocoons	LS			35000
2	Consumables	LS			3000
Sub-total					38000
TOTAL					180000

SHARING	Credit	Benef.	MORD	CSB	Total
Grainage building	0	5000	40000	55000	100000
<i>Percentage</i>	<i>0</i>	<i>5.0</i>	<i>40.0</i>	<i>55.0</i>	<i>100.00</i>
Grainage equipment	0	0	21000	21000	42000
<i>Percentage</i>	<i>0</i>	<i>0.0</i>	<i>50.0</i>	<i>50.0</i>	<i>100.00</i>
Working capital	10000	6000	1500	17500	35000
<i>Percentage</i>	<i>28.6</i>	<i>17.1</i>	<i>4.3</i>	<i>50.0</i>	<i>100.00</i>
Consumables	500	500	1000	1000	3000
<i>Percentage</i>	<i>16.7</i>	<i>16.7</i>	<i>33.3</i>	<i>33.3</i>	<i>100.00</i>
Total	10500	11500	63500	94500	180000
<i>Percentage</i>	<i>5.8</i>	<i>6.4</i>	<i>35.3</i>	<i>52.5</i>	<i>100.0</i>

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.	15000	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.	150000	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	3484250	150000	3634250
<i>Percentage</i>	<i>0.0</i>	<i>0</i>	<i>95.9</i>	<i>4.1</i>	<i>100.00</i>
Grainage equipment	0	0	294400	0	294400
<i>Percentage</i>	<i>0.0</i>	<i>0</i>	<i>100.0</i>	<i>0.0</i>	<i>100.00</i>
Consumable & working capital	0	0	307500	0	307500
<i>Percentage</i>	<i>0.0</i>	<i>0</i>	<i>100.0</i>	<i>0.0</i>	<i>100.00</i>
Total	0	0	4086150	150000	4236150
<i>Percentage</i>	<i>0.0</i>	<i>0.0</i>	<i>96.5</i>	<i>3.5</i>	<i>100.0</i>

CDP unit cost- 384000/- (70% csb share) - provision is for state PPC strengthening 269290

Annexure-16

Unit Cost for Rearer's' Collective

Particulars	Unit	Input	Rate	Amount
1. Construction of Cocoon Storage & Office room	1		750000	750000
Sub-total				750000
2. Equipments				
Electrical wiring and lightning arrester	1		10000	10000
Almirah	No.	1	6000	6000
Wooden table	No.	1	1500	1500
Chairs	No.	5	400	2000
Wooden bench	No.	1	1500	1500
White Board	No.	1	2500	2500
Dari for meeting & training	No.	2	2400	4800
Utensils for training purpose	LS			3000
Insurance & Miscellaneous	LS			6000
Sub-total				37300
TOTAL				787300

SHARING	Credit	Benef.	MORD	CSB	Total
Storage & office room	0	0	600000	150000	750000
<i>Percentage</i>	<i>0</i>	<i>0.0</i>	<i>80.0</i>	<i>20.0</i>	<i>100.00</i>
Equipments	0	0	37300	0	37300
<i>Percentage</i>	<i>0</i>	<i>0.0</i>	<i>100.0</i>	<i>0.0</i>	<i>100.00</i>
Total	0	0	637300	150000	787300
<i>Percentage</i>	<i>0.0</i>	<i>0.0</i>	<i>80.9</i>	<i>19.1</i>	<i>100.0</i>

CDP unit cost- 225000/- (60% csb share)

Annexure-17

Project Out Put (Within Project Period)

Sl.No.	Output	Physical		
		Year-1	Year-2	Year-3
1	Commercial dfls produced (lakhs)	0.65	1.65	1.95
2	Total raw silk production (kg)	3328	8518	10148
3	Total Tasar spun silk production (kg)	1253	2933	3461
	Total	1253	2933	3461

Sl.No.	Output	Financial (Rs. in lakhs)		
		Year-1	Year-2	Year-3
1	Commercial dfls (lakhs)	3.90	9.90	11.70
2	Raw Silk	93.19	238.51	284.15
3	Tasar Spun silk (MT)	15.03	35.20	41.53
	Total	112.12	283.61	337.38

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)	70000
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.)	28485
3	Input costs and incidental expenditure (Rs.)	36965
4	Knapsack Sprayer (Rs.)	5000
5	Shade net (Rs.)	17500
6	Interest on working capital loan @ 12% for 4 months	3975
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.)	1.60
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)	16,000
	Total Income (Rs.)	16,000
	Gross Profit (Rs.)	14,050
	Profit after depreciation of assets (Rs.)	13,620

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

SI 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.)	1500
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.)	3000
15	Yearly maintenance & disinfection of building	3000
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		
SI.	Particulars	Amount (Rs.)
1	Cost of Seed cocoons (Rs.)	225,000
2	Cost of hiring 1 labor for 8 months	10500
3	Cost of grainage consumables	3,000
4	Cost of Hiring 8 microscopists	25000
5	Cost of hiring 8 laborers for 30 days	25400
6	Yearly maintenance and disinfection of grainage	3000
	Total Expenditure:	291,900
B Income		
SI.	Particulars	Amount (Rs.)
1	Sale of DFLs	180000
2	Sale of Pierced cocoons	150000
	Total Income:	330000
C	Gross profit: (Total Income- Total Expenditure)	38,100

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

