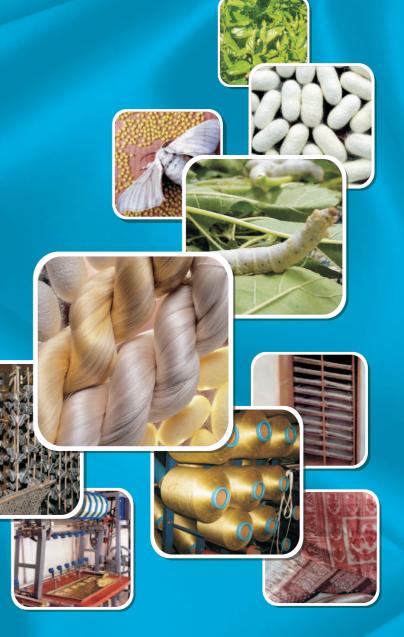


(Government of India)

## **Manual of Catalytic Development Program**

**XII Five Year Plan** (2012-17)



Udyog Bhavan, New Delhi, India September, 2013





# Manual of Catalytic Development Program (Centrally Sponsored Scheme)

## XII Five Year Plan (2012-17)

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Introduction



## CHAPTER I INTRODUCTION

#### **Preamble**

Sericulture and silk industry in India contribute significantly towards rural employment, poverty alleviation, income redistribution and equity securing, and in turn, towards national economy. The sector employs about 7.5 million (Mn) people, mostly from the vulnerable sections of society. The total raw silk production of 23,060 MT at the end of XI Five Year Plan (Plan) registered an annual growth of about 5.5% despite several adverse factors, including large scale uprooting due to urbanization and international price volatility. The centrally sponsored Catalytic Development Program (CDP) of Ministry of Textiles (MOT), Government of India (GOI) has been able to sustain and strengthen the sericulture activities in the country since the IX Plan. This program is implemented through the Central Silk Board (CSB), in collaboration with the state governments.

CSB, a statutory body under MOT, is a science and technology based research and development organization and its main thrust has been on research based development activities. The Board is covering areas like research and technology development, silkworm seed maintenance and production and development of sericulture and silk industry. As a part of its developmental initiatives, CSB has been implementing the centrally sponsored scheme, CDP since IX Plan period in association with concerned state sericulture departments and other implementing agencies.

CDP is the flagship scheme of the MOT for development of sericulture and silk industry consisting various components and sub-components for promotion of all varieties of silk in India. It has been an important tool for transfer and adoption of improved technology packages developed by the research institutes of CSB.

CDP was further fine-tuned during the XI Plan and implemented in a package-mode, covering all the major areas, *i.e.*, seed, cocoon, post-cocoon and support service sectors. Within each package, flexibility was built-in to cater to the specific needs of different sericulture zones of the country.

There has been quantifiable progress in improvement of economic conditions of the stakeholders including ethnic groups through focused approach in sericulture development catalyzed by central support. The objectives of X and XI Plans were mainly to bestow special attention for the improvement of productivity in all stages of silk production and to ensure higher income to the stakeholders, to produce competitively priced high quality silk and to create greater opportunities for

gainful employment in the rural areas through the spread of scientific sericultural practices and by promoting modernization and quality upgradation of sericulture and silk industry.

The components under the CDP scheme envisage the following major areas:

- (a) Development and expansion of silkworm host plants,
- (b) Strengthening and creation of silkworm seed multiplication infrastructure,
- (c) Development of farm and post-cocoon infrastructure,
- (d) Upgradation of reeling and processing technologies in silk,
- (e) Skill development / Enterprise Development Program (EDP), and
- (f) Support for publicity, study/consultancy, crop insurance, health insurance etc.

CDP has made a positive impact in the field in terms of increase in cocoon quantity and improvement in quality of cocoons both in mulberry, as well as *Vanya* sectors, besides improving the economic returns for farmers and supporting them through infrastructure development. The production of raw silk has reached 23,060 MT by the end of XI Plan against 18,475 MT of X Plan, resulting in an increase of 4,585 MT silk during 2011-12, the highest in the last Plan periods. This was possible due to the implementation of CDP with a focused approach. While mulberry silk production has reached 18,272 MT in XI Plan from 16,525 MT in X Plan, *Vanya* silk has shown a remarkable progress during XI Plan with a production of 4,788 MT during XI Plan as against 1,950 MT of X Plan. Support provided to the beneficiaries for construction of mulberry and eri rearing houses had a direct impact on increase in cocoon production during XI Plan.

#### **Continuation of CDP during XII Plan**

Based on the experience of previous plan periods and benefits accrued from implementation of the scheme, it has been decided to continue CDP in the XII Plan period also with certain modifications in its objectives and operational modalities.

#### XII Plan Program - Objectives

During the XII Plan, the core objectives are to scale up the production, particularly, production of quality Bivoltine and Improved Cross Breed (ICB) silk cocoons in the country through cluster approach. The other objectives of the scheme are as follows:

- > To accelerate the growth in production of Bivoltine and ICB mulberry silk varieties of international grade (2A/3A grade and above) and to achieve total production of 32,000 MT of silk, with a specific target of 5,000 MT Bivoltine silk of 3A grade and above and 6,000 MT ICB silk (2A grade and above) for consumption in power looms:
- > To generate total direct and indirect employment to the tune of 9.24 million persons by the terminal year of the Plan:
- > To increase the productivity and quality of Indian silks through a package of innovations, technologies and extension support;
- > To incentivize investments in sericulture and silk industry and create a host of sericulture entrepreneurs;
- To provide quality seed, plantation material and other inputs to the farmers with private participation to improve the quality of cocoons and silk;
- To enhance and improve seed infrastructure in government and private sectors to achieve higher cocoon production and ensure enhanced private participation in quality seed augmentation under both mulberry and *Vanya* sectors;
- To synchronize the sericulture activities neutralizing variations arising due to fragmented production base for international grade silk;
- > To accelerate growth in Vanya silk production and provide market linkages for better value realization;
- > To improve reeling infrastructure for mulberry and Vanya silk for production of quality yarn;
- > To improve silk production in rain-fed areas through soil and moisture management;

- > To induce generic promotion of quality silk in domestic and international markets;
- > To introduce a concept of flexi-fund to promote convergence with other schemes and also to address unforeseen issues severely affecting sericulture industry;
- > To improve income generation of sericulture workers and sustain their social security through health and silkworm crop insurance.

#### XII Plan - Approach

Learning lessons from the last three Plan periods, findings of evaluation study conducted by National Productivity Council and taking advantage of the infrastructure already created, it is proposed to boost the development of sericulture and silk industry in the country with the support of CDP.

- Maximization of benefits from the existing capacity in mulberry and non-mulberry sector: Various infrastructure facilities created during earlier plan period with CDP support at the state governments and other funding agencies shall be mapped for effective utilization and monitoring. Critical gaps in infrastructure shall only be created during the Plan, keeping in view the targets of production.
- > Intensive research and development, extension support, better management of practices and incentivization.
- Monitoring of the performance of CDP in XII plan in terms of production of silks through cluster approach;
- Focusing on seed sector to strengthen the seed production and delivery mechanism both in government and private sectors to match production targets of the Plan, as seed being the *sheet anchor* of the scheme and a significant gap in production of quality seed exists.
- > Improvement in on-farm and off-farm productivity and quality of cocoon and yarn shall be one of the major areas of focus.
- Improved infrastructure and market linkage support to *Vanya* silk sector which has demonstrated high growth potential during XI plan.
- Dovetailing of CDP with a number of other developmental schemes of central and state governments to achieve higher coverage and deepening of the schemes during the Plan.
- A few innovative programs have been conceived as a part of intensifying of the ongoing activities to meet the sector requirements and also to ensure that the industry grows at a healthy pace despite any unforeseeable problems in the future. Accordingly, the CDP has been redesigned to meet the zonal requirements ensuring that the sector grows at a healthy pace.
- Zone-wise approach on production planning with special focus on Bivoltine silk production: Since the crop pattern, agro-climatic conditions, sectoral priority, input requirements are different for different zones of the country, zone based interventions shall be introduced for effective implementation of scheme. Hence, during the Plan, CDP shall be implemented on the basis of zonal requirements like specific unit cost and cropping pattern etc. The monitoring and supporting mechanism of CSB shall be strengthened by utilizing the services of regional offices in the respective zones to coordinate the activities.
- Funding pattern: Rationalization in funding pattern to get matching share (not less than 25% as recommended by the Chaturvedi Committee) of the participating states for better physical coverage to achieve the targets set for XII Plan. However, the *status-quo* of higher central share in respect of Special Status States and the state share of 10% shall be maintained.
- > Graduating from Grants-in-Aid to credit linked subsidy in identified scheme components over a period of time.
- Cluster approach for exclusive production of Bivoltine and ICB of mulberry to produce quality silk of 2A grade and above.
- Popularization of Community Based Organizations (CBO) through federation of farmers groups for better synergy and synchronized crop schedule.

- Seri-business enterprises: Big farmers capable of taking up large scale farming in more than 2 ha by absorbing improved technology packages shall be encouraged to produce quality Bivoltine and ICB silks with bigger capacity models of rearing equipment, rearing houses, farm mechanisation, etc., proportionate to the area. This can be replicated in other sectors also including post-cocoon sector.
- Strengthening of the sericulture extension machinery by involving para-extension workers (*Resham Doot*) for effective delivery.
- > Shifting of production bases to other potential new areas by attracting new and young farmers.
- > Thrust area approach: Introduction of sericulture in thrust areas shall not be by merely motivating the farmers to take up the avocation, but by creating support mechanism and necessary linkages to make the venture economically sustainable and competitive.
- Dovetailing sericulture with other programs/funding agencies like RKVY, SGSY (NLRM), MGNREGA, Panchayat Raj Institutions (PRI), Border Area Development Program (BADP) etc. to tap the resources. Focus shall be on the convergence with other developmental programs for better synergy and integrated development of sericulture.
- Automatic Reeling Machine (ARM) and active Multi-end Reeling Units (MRU) to be linked to Bivoltine and ICB clusters through hinterland approach by building necessary forward and backward linkages.
- Components involving higher capital subsidy for infrastructure development like ARM shall be preferably disbursed to SPVs/Consortia, SHGs/CBOs etc. The operational modalities are detailed elsewhere in the manual.
- Another important change proposed is the extension of CDP benefits to the farmers who are not having cultivable land, but undertaking rearing activities by purchasing leaves or producing leaves from leased land. Such farmers associated with the sericulture industry shall be made eligible for all the benefits under various components of the scheme, like rearing house, equipment etc., with certain specific terms and conditions to ensure that the facilities provided would be utilized for a prescribed period of time.

#### Components of the scheme

While some of the existing components of the scheme are deepened/modified with additional inputs/sub-components while certain new interventions have also been proposed in order to meet the zonal requirements. New interventions proposed for XII Plan are listed below:

#### Mulberry silk sector (Bivoltine and Improved Cross Breed)

- 1. Franchisee disinfection program.
- 2. Support for construction of rearing houses for Adopted Seed Rearers (ASR)
- 3. Revolving capital fund support for state grainages and Registered Seed Producers (RSP)
- 4. Support for development of Kisan Nurseries
- 5. Assistance for maintenance of mulberry plantation raised during X and XI Plans for north-eastern and hilly states.
- 6. Support for construction of vermi-compost sheds.
- 7. Assistance towards fencing of mulberry gardens in north-eastern states.
- 8. Assistance towards extension of rearing houses for construction of mounting halls in north-eastern states.
- 9. Support for increasing the yield of existing rain-fed mulberry through water conservation techniques.

#### Vanya silk sector

- 10. Mobile seed testing and disinfection units.
- 11. Basic seed production units by states and SHGs/Co-operatives/NGOs.

- 12. Introduction of eri private graineurs.
- 13. Support for development of Kisan Nurseries.
- 14. Eco-race conservation.

#### Post-cocoon sector

- 15. Support for construction of reeling sheds.
- 16. Support for master technicians
- 17. Establishment of effluent treatment plant for yarn dyeing and fabric processing.
- 18. Interest subsidy on working capital loan taken from banks by reeling units.

#### General

19. Support for Community Based Organization including para-extension workers.

In addition to the above, a component namely, Special Initiative (Flexi fund), has also been proposed to address the critical requirements for implementation of sericulture projects. The need may arise while implementing various developmental programs including CDP, especially those oriented towards Bivoltine silk production.

The component shall encourage/incentivize new and young stakeholders to take up sericulture and silk related activities. As the centrally sponsored schemes cater to extremely diversified demographic, geographical, economic, rural and urban needs, it is difficult to design schemes to cater to the requirements of all within the overall framework of CDP in so far as sericulture sector is concerned.

Special initiatives are proposed to enable the states and other implementing agencies including CSB in Bivoltine cluster projects and *Vanya* silk producing states to meet their specific needs and pilot innovations within the overall objective of CDP for its expected outcome. Such critical projects *shall* be carefully examined by the Project Monitoring Committee (PMC) at the state level and Apex Monitoring Committee (AMC) at the national level.

#### **Outlay for XII Plan**

An amount of Rs.889 crore has been earmarked as central assistance for implementation of the scheme during XII Plan to commensurate with funding from the states and the stakeholders, as indicated below:

(Rs. in crore)

Particulars	Central share	State share	Beneficiary share	Total
Mulberry	476.00	295.08	435.62	1206.70
Mulberry post-cocoon	90.18	37.82	30.59	158.59
Vanya	235.85	56.49	41.24	333.58
Vanya post-cocoon	24.82	5.51	5.24	35.57
Support service	43.15	9.80	1.63	54.58
Special initiative (Flexi-fund)	19.00	22.17	22.17	63.34
Total	889.00	426.87	536.49	1,852.36

#### **Year-wise break-up of outlay (Central share)**

The sector-wise and year-wise provisions under different sectors/packages of CDP during XII Plan are given below:

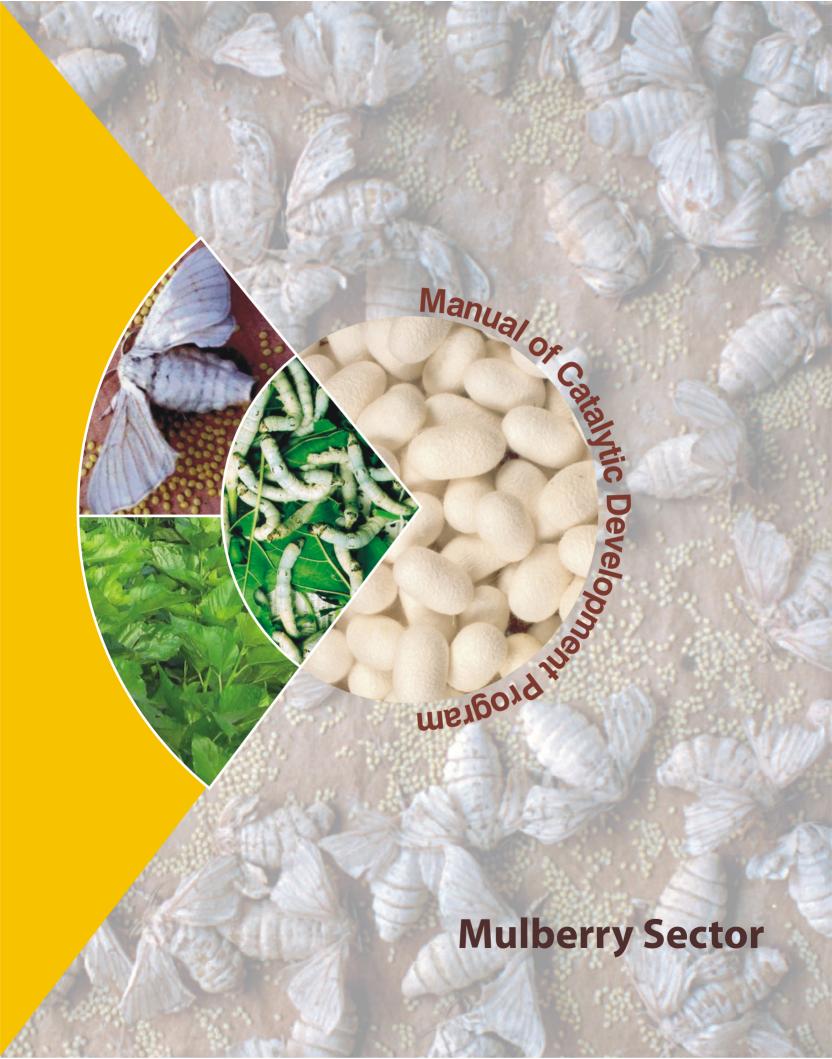
CSB Share (Rs. in crore)

#	Sector	2012-13	2013-14	2014-15	2015-16	2016-17	Total for XII Plan
1	Mulberry	131.31	191.97	83.00	40.00	29.72	476.00
2	Mulberry post-cocoon	8.36	20.91	29.00	21.91	10.00	90.18
3	Vanya	43.70	56.03	72.00	34.12	30.00	235.85
4	Vanya post-cocoon	3.92	5.31	6.50	4.29	4.80	25.53
5	Support service	17.87	13.28	4.50	4.00	3.50	43.15
6	Special initiative (Flexi fund)	-	3.50	5.00	5.00	5.50	19.00
	Total	205.16	291.00	200.00	109.32	83.52	889.00

Of the above allocation, an amount of Rs.266.00 crore is earmarked for implementation of CDP in north-eastern states (30%), which is the highest share of investment for North-east as compared to the provisions allocated for other sectors of Village and Small Industries (VSI) in MOT.

Sector and component-wise details are provided in the next segment of this manual. General guidelines for implementation of the scheme and annexures are given at the end of this document.





Catalytic Development Program (Centrally Sponsored Scheme)



## CHAPTER II MULBERRY SECTOR

#### Introduction

he diversity of Indian silk is enviable as India is the only country blessed with all the four types of silk, *viz.*, mulberry, tasar, eri and muga and among these, muga silk is unique to India. The country accounts for a little over 18% of the total world silk production, producing 23060 MT of raw silk by the end of XI Five Year Plan (Plan) and stands second in the world silk production. Indian silks are broadly categorized into mulberry and *Vanya* silks.

#### Mulberry

Mulberry silk is the most popular and technically equipped as a viable enterprise and contributes to 79% of total raw silk production. Production of mulberry raw silk is mainly confined to the states of Karnataka, Tamil Nadu, Andhra Pradesh, West Bengal and Jammu & Kashmir which together accounts for 97% of the total mulberry silk production. Three categories of mulberry silkworms are reared in the country, *viz.*, Bivoltine which produces high quality silk of import substitute 3A grade, Improved Cross Breed (ICB) capable of producing gradable silk for consumption in power looms, and Cross Breed/Multivoltine, which are much hardy and easier to rear and adopted to fluctuations in the environmental conditions.

Realizing the production potential of sericulture in the country and a need to bridge the gap in demand and supply, it is suggested to bring an additional area of 59,000 ha (148,000 ac) of mulberry plantation for XII Plan. Out of this, 15,600 ha (39,000 ac) shall be taken up through the Catalytic Development Program (CDP) and the remaining through the MGNREGS, RKVY and other similar programs of central and state departments. From the already available plantation and by providing supporting infrastructure for the new plantation, the production of mulberry silk is targeted to reach 23,000 MT by the end of XII Plan. This includes production of 5,000 MT Bivoltine silk of 3A grade and 6,060 MT of ICB gradable silk, which can be used for weaving in power looms replacing the imported silk.

These ambitious targets call for additional interventions through CDP. With the support from CDP, and tapping of funds from other sources, the national average productivity of silk is expected to increase from the current level of 90.55 kg/ha to 95.67 kg/ha at the end of XII Plan. However, the productivity of Bivoltine silk is expected to be higher than 100 kg/ha. The status of area under food plants and production of raw silk at end of XI Plan and projections for XII Plan under mulberry sector are indicated below:

Table: Status of silkworm food plants during XI and target for XII Plan

(Raw silk in MT)

#	Performance Indicators	Achievement (End of XI Plan) (2011-12)	Targets for XII Plan	Anticipated increase over XI Plan (%)
- 1	Mulberry plantation (Lakhha)	1.81	2.40	33
II	Mulberry raw silk production			
	Bivoltine (BV) (3A and above grade)	1685	5000	197
	Improved Cross Breed (ICB) (2A to 3A grade)	2980	6060	103
	Cross Breed (CB) (below 2A grade silk)	13607	11940	Upgradation to ICB
	Total mulberry raw silk	18272	23000	26

The components proposed under mulberry seed and cocoon sector are focused on production of Bivoltine and ICB silk only during XII Plan, and hence no assistance of any type under these sectors shall be extended for production of Cross Breed silk.

As could be seen from the above Table that, the Cross Breed silk production of 13,607 MT by end of XI Plan shall get scaled down to 11,940 MT by the end of XII Plan as substantial volume of Cross Breed silk shall be upgraded to ICB as per XII Plan strategy. For maintaining the level of Multivoltine/Cross Breed production, or reduction due to upgradation to ICB, the support already provided under CDP till XI Plan shall be optimally utilized. Besides, efforts shall be made for maximization of benefits from existing capacity for improving the quality of Cross Breed silk. Resources shall also be tapped from other schemes of the central and state governments.

The beneficiaries receiving assistance under any component of CDP shall be issued a pass book for proving their identity as a sericulture farmer along with other details such as Aadhaar number, bank account number, education level, family members, size of holding and other infrastructure, sericulture activities performed, manpower engaged, benefits availed at different stages and their utilization, production details, assistance availed from other schemes and departments for sericulture etc.

The beneficiary availing support for any one or more components together with a subsidy element of Rs.100000 and above shall have to enter into a legal agreement with DOS. Failure on the part of beneficiary shall attract penal action as per the legal binding.

#### **Mulberry Seed**

The growth trajectory of silk production could be sustained only through quality silkworm seed. Silkworm seed in the country is produced by various stakeholders *i.e.*, Central Silk Board (CSB), State Sericulture Departments (DOSs), Non-Government Organizations (NGOs) and private entrepreneurs. CSB plays a lead role for nucleus, basic and commercial silkworm seed with intrinsic quality parameters in all spheres of silkworm seed production.

The silkworm seed production system in India recognizes three generations, namely, nucleus, basic and commercial seed and provides adequate safeguards for quality assurance in the seed multiplication chain to maintain the vigour and purity of breeds as it flows from the breeders to the farmers. Silkworm seed industry is highly competitive thereby ensuring an efficient and responsible sector that offers the beneficiaries a continuous supply of high-yielding hybrid seed suitable for different environmental conditions for producing good cocoon crops and products to continue meeting the changing consumer demands.

#### **Present scenario**

National Silkworm Seed Organization (NSSO) is involved in the production of lion's share of Bivoltine hybrid seed and accounts for 70% of total Bivoltine silkworm seed produced. DOSs of Karnataka, Andhra Pradesh and Tamil Nadu also produce the Bivoltine silkworm hybrid seed. About 75% of the commercial seed production is in the hands of private seed producers producing mostly of Cross Breed silkworm seed. In the wake of implementation of CSB Act 2006, the maintenance of quality of silkworm seed is of prime importance for the CSB. NSSO is involved in the maintenance, multiplication of basic seed of parental breeds of silkworm hybrids (both Bivoltine and Multivoltine) as per the quality norms of Seed Act regulations and supply to various seed producing agencies.

The silkworm seed sector is geared up to an increase in the silkworm seed production to 32.78 crore dfls by 2016-17 from 27.58 crore dfls in 2012-13. About 73% of the total silkworm seed requirement in the country is met by the Registered Seed Producers (RSPs) in the private sector, while the DOSs and NSSO contribute to 18% and 9%, respectively.

In consonance with the silk production target set for the XII Plan, the commercial seed requirement during the XII Plan is given below:

#### Table: Requirement of commercial silkworm seed during XII Plan

(Unit: Lakh No.)

Year	Bivoltine	ICB	Cross Breed	Total
2012-13	263	477	2018	2758
2013-14	310	557	2013	2880
2014-15	423	607	1971	3001
2015-16	519	717	1885	3121
2016-17	625	808	1845	3278

Substantial part of the silkworm seed (CSB: 11%, State: 25% and LSPs: 64%) shall have to be produced in state and private grainages. For undertaking this enormous task, the state and private sectors shall be strengthened on certain critical areas, besides facilitating enhanced private participation in seed production. Moreover, the state and private Silkworm Seed Production Centres (SSPCs) shall have to be prepared for implementing the recently enacted Seed Act.

Accordingly, measures shall have to be taken by CSB to revive the existing non-functional seed production units in the state and private sector for augmenting the seed production. These issues shall be addressed during XII Plan through following interventions under CDP:

- 1. Franchisee disinfection program of NSSO.
- 2. Support to construct rearing houses for Adopted Seed Rearers (ASRs) of NSSO
- 3. Revolving capital fund support for state grainages and RSPs
- 4. Assistance for purchasing seed testing equipment for state grainages and private RSPs
- 5. Support to strengthen basic seed farms of states.
- 6. Support to upgrade state and private commercial seed production units

All these components are basically meant to support production of Bivoltine and ICB silkworm seed only. However, seed support for the mulberry sector shall continue for all varieties in order to achieve overall production target as male parent of Bivoltine silkworm is required for Cross Breed seed, in turn, silk production.

The component-wise objectives and description under the mulberry seed sector are as follows:

#### 1. Franchisee disinfection program of NSSO

#### a) Brief description

This is an on-going program of NSSO implemented under the central sector during the XI Plan, and proposed to be continued during XII Plan period through involvement of private sector (private RSPs). Under this program, the

franchisee Chawki Rearing Centres (CRC) of NSSO shall supply chawki worms to farmers ensuring high productivity. The commercial farmers covered under this program are required to disinfect their rearing house before supply of chawki worms for ensuring crop stability and success. Seri-polyclinics shall be attached to the franchisee CRC units to undertake the disinfection work. Each sericulture poly-clinic shall be provided with a power sprayer and a two/three wheeler for conducting the disinfection of rearing houses in their command areas. During the XII Plan, 100 such units shall be developed at Rs.1.10 lakh per unit. The estimated cost of Rs.1.10 crore shall be fully met by CSB. The component shall be directly implemented by NSSO.

#### b) Technical specifications/operational guidelines:

- > The franchisee shall use disinfectants authorized by CSB and National Research Development Corporation (NRDC) and the quantity of the disinfectants and the method of disinfection shall be as per recommendation of research institutes of CSB of particular zone.
- > The cost of disinfectants shall be borne by the farmers.
- > Service charges for disinfection collected by the franchisee shall not exceed 10% of the cost of disinfectants.
- Reasonable fuel charges for conveyance as agreed upon shall also be paid by the farmer.
- Support shall be extended only to Bivoltine and ICB farmers.
- The franchisee CRCs falling within the jurisdiction of identified clusters shall be prioritized for the support under the component.

The activities along with their cost break-up details required under the component are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

	State Category	CSB	State	Beneficiary
Sharing pattern	General category	100%		
	Special category	100%		-

Zone	Unit Cost	Physical	Fina	ncial Projec	ctions (Rs. in cro	re)
	(Rs.)	Target	CSB	State	Beneficiary	Total
Southern	110000					
North-western	110000					
Central and western	110000	100 No.	1.10			1.10
Eastern	110000					
North-eastern	110000					

#### 2. Support to construct rearing houses for Adopted Seed Rearers (ASRs) of NSSO

#### a) Brief description:

The seed cocoons (required for production of dfls in NSSO) are produced through the selected ASRs. Some of the ASRs do not have good rearing houses to take up the seed cocoon rearing. Since small quantities of dfls are used for seed rearing, the rearing house shall be small with reduced unit cost. Hence, under this component 275 seed rearers shall be supported for construction of specially designed small rearing houses at Rs.1.20 to 3.00 lakh per unit. The sharing pattern shall be 50:50 by CSB and beneficiaries, respectively. An amount of Rs.4.62 crore is estimated for the component with a CSB share of Rs.2.31 crore. This component shall be implemented by NSSO.

#### b) Technical specifications/operational guidelines:

The beneficiary shall use specially designed rearing house model suggested by NSSO (CSB) by meeting

50% cost of rearing house and rear the recommended quantity of layings per batch.

- The beneficiary shall be a recognized ASR of NSSO and attached to any of Silkworm Seed Production Centres (SSPCs) of NSSO.
- Support shall be extended to Bivoltine and ICB farmers only.
- The beneficiary shall be a registered seed cocoon producer with a valid certificate under CSB Act, 2006.

The activities and their cost details required under the component are indicated in the unit costs (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

	State Category	CSB	State	Beneficiary
Sharing pattern	General category	50%		50%
	Special category	50%		50%

Zone	Unit Cost	Physical	Fina	ncial Projec	ctions (Rs. in cro	ore)
20110	(Rs.)	Target	CSB	State	Beneficiary	Total
Southern	200000					
	and 300000					
North-western	125000	275 No.	2.31	-	2.31	4.62
Central and western	125000					
Eastern	120000					
North-eastern	120000					

#### 3. Revolving capital fund support for state grainages and registered seed producers

#### a) Brief description:

Working capital plays an important role in deciding the economic performance of the grainage. The SSPCs of state and private sectors often face difficulty in procuring quality seed cocoons due to shortage of working capital fund. All the NSSO grainages are provided with working capital fund. Hence, it is proposed to replicate the same in state and private grainages by providing one time working capital support to 485 grainages. Assistance at Rs.1.35 to 5.00 lakh per grainage based on production capacity in different zones shall be extended with a sharing of 50:50 by CSB and state, respectively. The total cost estimated is Rs.13.06 crore with a CSB share of Rs.6.56 crore.

#### b) Technical specifications/ operational guidelines:

- The cost of seed cocoons required to produce commercial seed shall be covered under the component.
- > The beneficiary shall produce the silkworm seed at optimum recovery and undertake sufficient number of production cycles per year required to avoid losses.
- > The stakeholder shall be a registered seed producer under the CSB Act 2006 with a valid certificate.
- The amount of revolving fund shall be recommended by the Joint Review Committee (JRC) comprising representatives of NSSO, CSB and state based on the seed production capacity of the RSP, crop cycle and number of crops taken per year and placed before the AMC for final decision.
- Utilization of revolving fund and its flow back shall be closely monitored by DOS.
- Non-erodable revolving fund utilization by the beneficiary has to be supported by adequate documentation and verified at regular intervals by DOS.

The activities and their cost break-up details required under the component are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

	State Category	CSB	State	Beneficiary
Sharing pattern	General category (Private and state grainages)	50%	50%	-
	Special category (Private and state grainages)	80%	20%	-

Zone	Unit Cost	Physical	Financial Projections (Rs. in cror			
20.10	(Rs.)	Target	CSB	State	Beneficiary	Total
Southern	300000 and 500000					
North-western	300000					
Central and western	300000	485 No.	6.56	6.50	-	13.06
Eastern	135000 and 270000					
North-eastern	135000					

## 4. Assistance for purchasing seed testing equipment for state grainages and private registered seed producers

#### a) Brief description:

Under the Seed Act, it is mandatory for all the grainages to supply only disease free layings for which the testing facilities shall have to be established in the grainages. In order to support them to establish this facility in the grainage, assistance shall be provided for modernizing/developing seed testing labs, procuring equipment, *etc.* A total of 310 grainages shall be supported during the XII Plan period at Rs. 1.75 lakh per grainage. The sharing pattern for state grainages shall be 50:50 between CSB and state, respectively and for private grainages, the sharing pattern shall be 40:40:20 among CSB, state and beneficiary, respectively. The total cost estimated is Rs.5.43 crore with a CSB share of Rs.2.42 crore.

#### b) Technical specifications / operational guidelines:

- Commercial seed producers shall be covered under the component.
- The beneficiary shall be a seed producer registered under the CSB Act 2006 with a valid certificate.
- RSPs producing a minimum of 2.50 lakh dfls in the preceding year shall merit consideration for support under this component.
- > Equipment shall be provided to the beneficiary as per the unit cost.

The activities and their cost break-up details required under the component are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and projections are given below:

G	Stat	e Category	CSB	State	Beneficiary
	General	Private grainages	40%	40%	20%
Sharing pattern	category	State grainages	50%	50%	-
	Special	Private grainages	80%	10%	10%
	category	State grainages	80%	20%	_

7	Unit Cost	Physical	al Financial Projections (Rs. in crore			
Zone	(Rs.)	Target	CSB	State	Beneficiary	Total
Southern	175000					
North-western	175000					
Central and western	175000	310 No.	2.42	1.99	1.02	5.43
Eastern	175000					
North-eastern	175000					

#### 5. Support to strengthen Basic Seed Farms (BSF) of states

#### a) Brief description:

Many BSFs under the state sector are obsolete for want of necessary resources and technical support. On the other hand, many others do not have the requisite facilities to undertake the complex job of basic seed multiplication. The Seed Act prescribes for adhering to certain quality norms in seed farms for ensuring disease freeness in the next multiplication level. Hence, the component has been proposed to strengthen the facilities of 35 state seed farms at Rs.5.00 lakh each with a sharing pattern of 50:50 between CSB and state, respectively. The total cost estimated is Rs.1.75 crore with the CSB share of Rs.1.03 crore.

#### b) Technical specifications / operational guidelines:

- > The government basic seed farms shall be covered under the component.
- The farm shall have been involved in multiplying the basic seeds for producing commercial silkworm hybrid seed.
- A joint verification committee shall select the unit and suggest the requirement after assessing the existing infrastructure, equipment and other facilities.
- > Equipment shall be provided to the beneficiary as per the unit cost.
- > DOS shall undertake to produce seed in these farms for a minimum period of 5 years.

The activities and their cost break-up details required under the component are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

	State Category	CSB	State	Beneficiary
Sharing pattern	General category	50%	50%	
	Special category	80%	20%	-

Zone	Unit Cost	Physical	Physical Financial Projections (Rs. in crore				
20110	(Rs.)	Target	CSB	State	Beneficiary	Total	
Southern	500000						
North-western	500000						
Central and western	500000	35 No.	1.03	0.72		1.75	
Eastern	500000						
North-eastern	500000						

#### 6. Support to upgrade state and private commercial seed production units

#### a) Brief description:

Under the Seed Act, there are strict norms for the production of commercial seed in all the seed production centres, including private units. However, it is observed that most of the grainages in state and private sectors are not logistically equipped to take this onerous task nor they have the resources to equip with additional facilities. Under these circumstances, it is proposed to support the state and private grainages to up-grade their facilities to produce seed in conformity with the quality norms prescribed under the CSB Act 2006.

The assistance shall be for up-gradation of infrastructure, procurement of equipment *etc*. A total of 310 grainages shall be supported at Rs.3.50 lakh per grainage. The sharing pattern for private grainages shall be 40:40:20 among CSB, state and private grainages, respectively. For the state grainages, the sharing pattern shall be 50:50 between CSB and state, respectively. The total cost estimated is Rs.10.85 crore with a CSB share of Rs.4.83 crore.

#### b) Technical specifications / operational guidelines:

- One-time-assistance shall be provided to the graineurs for recurring/modernizing the equipment as per the unit cost booklet on need basis.
- Support shall be extended only to the RSPs under the CSB Act, 2006
- The grainages shall undertake to produce seed in these farms for a minimum period of 5 years.
- > Equipment shall be provided to the beneficiary as per the unit cost. Testing equipment, however, is not included.
- RSPs producing a minimum of 2.50 lakh dfls in the preceding year shall merit consideration for support under this component.

The activities and their cost break-up details required under the component are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Sta General	e Category	CSB	State	Beneficiary	
	General	Private grainages	40%	40%	20%
Sharing pattern	category	State grainages	50%	50%	-
Sp	Special	Private grainages	80%	10%	10%
	category	State grainages	80%	20%	-

Zone	Unit Cost	Physical Financial Projections (Rs. in crore)			ore)	
200	(Rs.)	Target	CSB	State	Beneficiary	Total
Southern	350000					
North-western	350000					
Central and western	350000	310 No.	4.83	3.97	2.05	10.85
Eastern	350000					
North-eastern	350000					

#### Mulberry Cocoon (for Bivoltine and Improved Cross Breed only)

Production of quality raw silk depends upon the quantity and quality of mulberry leaves produced and in turn on cocoons produced. Even though cocoon production level in the country has increased to a great extent during the previous Plan period, still there exists a wide gap between the actual yield obtained by the rearers and the possible production level with the evolved technology. The gap is mainly attributed to bio-physical and socio-economic constraints (silkworm seed, rearing practices, soil and other constraints in production of good quality leaf, pests and diseases, input availability, separate rearing house, credit facilities, profitability, attitudes, traditions, risks involved, technical know-how, logistic facilities, marketing and other infrastructural facilities). The inability of the beneficiaries to take up the recommended practices due to financial and other constraints would cause a noticeable decline in output.

The major constraints noticed for getting higher yields are:

- Pests and diseases of silkworms.
- Non-availability of quality leaf.
- > Improper disinfection of the rearing house.
- Water scarcity and high temperature during summer.
- ➤ High cost of silkworm rearing equipment and difficulty in procuring rotary mountages.
- Lack of technical guidance by extension system.
- Non-availability of timely inputs and difficulty in obtaining dfls etc.

Thus, the following areas under mulberry sector have been identified under CDP to achieve the set goals during the Plan period:

- > Enriching the sources of availability of mulberry cuttings of improved varieties required for expansion of plantation area.
- Enhancing cocoon production by way of increasing mulberry wealth in form of tree plantation typical to northern parts of the country which do not support largely for raising bush plantation.
- Increasing the dfl uptake of farmers by increasing the quality leaf production through rejuvenation of existing mulberry tree plantation.
- Introduction of farm/rearing mechanization with labour reduction devices/equipment
- Enriching the source of availability of saplings of improved mulberry variety for quick replacement of old and low yielding mulberry varieties at farmers' level, besides expansion of area under mulberry plantation.
- Conservation and efficient management of water for its effective utility towards higher mulberry leaf production per unit area by adopting appropriate techniques/measures.
- Enhancing the productivity and assisting the sericulture beneficiaries for timely completion of various sericulture operations, besides conservation of energy by the way of providing silkworm rearing equipment and farm implements.
- Undertaking appropriate prophylactic measures to reduce the silkworm cocoon crop losses due to diseases.
- Enhancing cocoon quality and productivity by promoting adoption of recommended models of rearing houses.
- Ensuring the crop stability and cocoon yield by promoting well equipped and managed CRCs for scientific handling of silkworm eggs and rearing of young-age silkworms.
- Application of vermi-culture technology for recycling of sericulture wastes as manure for improvement of soil health and reduction of chemical fertilizer costs.
- > Providing assistance for installation of solar systems for basic lighting facility in respect of north-eastern states.

Based on the brainstorming discussions with states, CSB and stakeholders, it is proposed to continue the mulberry cocoon sector components in XII Plan with increased scope and by introducing certain additional/innovative sub-components. While there is a slight enhancement in CSB subsidy for disinfection, rearing houses and CRC applicable to general category states, the sharing pattern for Special Status states remains unchanged at 80:10:10 (CSB:state:beneficiary). CSB shall coordinate and implement this sector of components with the help of DOSs, CBOs, reputed NGOs, SHGs and cooperative societies.

Another important change proposed is the extending CDP benefits to the farmers who do not have cultivable land but undertake rearing activities by purchasing leaves or producing leaves from leased land. There are many such farmers associated with the sericulture industry. The beneficiaries shall be eligible for all benefits under various components of CDP like rearing house, equipment etc.; however, with certain specific terms and conditions to ensure full utilization of facilities within the prescribed time limit.

The following components are proposed under mulberry cocoon sector for Bivoltine and ICB silks only:

- 1. Support for mulberry plantation development.
- 2. Assistance for irrigation and other water conservation and usage techniques.
- 3. Supply of rearing appliances (including improved mountages)/farm equipment to farmers.
- 4. Supply of quality disinfecting materials and other crop protection measures.
- 5. Assistance for construction of rearing houses.
- 6. Assistance for maintenance of chawki gardens, construction of CRCs and procurement of chawki rearing equipment.
- 7. Production units for biological inputs/door-to-door service agents for disinfection, input supply and assistance for sericulture poly-clinics.
- 8. Support for development of kisan nurseries.
- 9. Maintenance cost for mulberry plantation raised during X and XI Plans for north-eastern and hilly states.
- 10. Support for construction of vermi-compost sheds.
- 11. Assistance for fencing of mulberry gardens in north-eastern states.
- 12. Assistance for expansion of rearing houses for construction of mounting halls in north-eastern states.
- 13. Support for increasing yield of existing rain-fed garden through water conservation techniques.

One beneficiary can avail the assistance up to two hectares for plantation development with supporting components under this sector.

The component-wise objectives, description, operational guidelines, physical targets and financial projections are indicated below:

#### 1. Support for mulberry plantation development

#### a) Brief description:

Among several factors that contribute to successful silkworm rearing such as temperature, humidity, disease free seed, hygiene etc., supply of nutritious mulberry leaves as feed is vital. Mulberry is a perennial crop and once it is properly established, it can come to full yielding capacity in the second or third year and last for 15 to 20 years, without significant reduction in leaf yield.

During XI Plan period, there has been decline in mulberry area in major sericulture producing states particularly in Karnataka due to various reasons such as fast urbanization, creation of Special Economic Zones (SEZ), depletion of water table, higher input costs, increase in labour wages, migration of youths from rural areas to urban areas etc. Further, in order to achieve the targeted production of 23,000 MT of mulberry raw silk at the end of XII Plan, with special focus on Bivoltine and ICB silk, the mulberry area has to be enhanced to 2.40 lakh ha from the present level of 1.81 lakh ha. Keeping this in view and considering the scope for mulberry development in other potential new areas of traditional as well as non-traditional states, the existing program is proposed to be continued during XII Plan, at least to support a

part of area expansion targets of XII Plan.

During XI Plan, the component for plantation development was implemented with the unit cost of Rs 9000 per acre. Since the input cost has increased in the recent years, the cost has been revised to Rs.14000 during XII Plan.

During XII Plan, the component supports development of 39000 ac of mulberry plantation with a unit cost of Rs.14000 per acre for raising plantation involving inputs such as chemical fertilizers, farm yard manure, pesticides, etc. Individual farmers can raise plantation in their land or public places like panchayat lands or vacant forest lands, etc. Raising of mulberry plantation is also proposed to be dovetailed with other similar programs taken up by other departments of GOI and states. The assistance shall be provided to raise new mulberry plantations or for replacement of old mulberry varieties with new varieties aimed at production of BV and ICB silks only. Beneficiaries can buy mulberry saplings from sources like kisan nursery or they themselves can develop plantation through cuttings.

Under this component, raising or maintenance of tree plantations, replacement of old mulberry varieties with new varieties etc. are envisaged. The assistance proposed to be provided shall depend upon the nature of plantation and its maintenance but well within the approved unit cost. During the XII Plan, for raising 39000 acres of mulberry plantation, the total amount required works out to Rs.54.60 crore (at Rs.14000 per acre), 50% subsidy of which is proposed to be provided by CSB (Rs.29.65 crore) and the rest 50% has to be equally borne by beneficiary and state (25:25). For special status states, the sharing pattern shall be 80:10:10 for CSB, state and beneficiary, respectively as in XI Plan.

#### b) Technical specifications / operational guidelines:

- The DOS shall identify the potential farmers who have preferably sources of water to raise mulberry plantation.
- The field officer concerned shall certify the works undertaken based on her/his visit before and after implementing the program. An undertaking shall be obtained from the farmers to the effect that sericulture occupation shall be continued for a minimum period of 3 years after availing subsidy under the program.
- In case of tree plantation, the assistance of Rs.14000 is provided for raising and maintenance of tree plantation for 300 trees. However, the subsidy amount shall be disbursed according to number of trees on pro-rata basis subject to a minimum number of 100 trees per beneficiary.
- In case, the plantation is raised through cuttings directly, the assistance of Rs.14000 shall cover the cost of seed cuttings (250 kg or 6000 cuttings), inputs (FYM, fertilizers, chemicals etc.), labour, transport and maintenance for 4 to 5 months.
- The assistance is provided to raise new mulberry plantations by replacement of old mulberry varieties. Only high yielding mulberry varieties shall be recommended for particular agro-climatic region for production of Bivoltine/ICB silk.
- Assistance is also provided for gap filling of existing mulberry plantation on pro-rata basis.
- Raising of plantation is also proposed to be dovetailed with similar programs taken up by other ministries or departments. DOSs may avail support of other programs like RKVY, MGNREGS etc., to reduce the burden on labour wages involved in plantation development, as per the actual plantation development cost.
- Depending upon the rearing capacity of the individual farmer and land availability, assistance can be extended further on pro-rata basis.
- DOs shall devise norms indicating minimum number of plants per unit area according to the plant spacing for providing subsidy to the farmers.
- Beneficiaries desiring to expand existing mulberry plantation (developed during XI Plan) are also eligible to avail support under the component.

The activities along with their cost break-up details required under the component are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

	State Category	CSB	State	Beneficiary
Sharing pattern	General category	50%	25%	25%
	Special category	80%	10%	10%

Zone	Unit Cost	Physical	Fina	Financial Projections (Rs. in crore)			
20110	(Rs.)	Target	CSB	State	Beneficiary	Total	
Southern	14000						
North-western	14000						
Central and western	14000	39000	29.65	12.48	12.47	54.60	
Eastern	14000	acres					
North-eastern	14000						

#### 2. Assistance for irrigation and other water conservation and usage techniques

#### a) Brief description:

Sericulture is practiced mostly by depending on groundwater as a source of irrigation. Growing demand for groundwater, substitution of labour intensive lifts by capital-intensive electrical pump sets, increase in well density and frequent failure of monsoon rains have resulted in reduction in ground water table and thereby put the farmers in distress condition. As mulberry is a water intensive plant, efficient use of water is imminent under the water scarcity conditions.

Considering the above facts, during XI Plan, the irrigation component was implemented, to cover all types of irrigation, such as drip, tube/open wells, shallow wells, ponds, farm ponds, surface tanks and similar water harvesting systems including ground level water storage tanks and soil moisture conservation methods.

The component was very popular in the field, particularly in southern states. The component was implemented with a unit cost of Rs.50,000 per ha of which CSB subsidy was Rs.25,000 per ha. The subsidy was given on pro-rata to cover up to one hectare of plantation according to the nature of irrigation system and also the area proposed to be covered with the irrigation system by the farmers. During XII Plan, the area limit has been made flexible in order to bring big farmers/rearers who have large area holding (more than one hectare) to practice sericulture.

The component shall cover all types of irrigation, such as drip, tube/open wells, shallow wells, ponds, farm ponds, surface tanks and similar water harvesting systems including ground level water storage tanks and soil moisture conservation methods for different types of structure for different sericulture zones. The subsidy is proposed to be given according to the nature of irrigation system and also the area proposed to be covered by the farmers. During XII Plan, it is proposed to cover 25,000 ac with various types of irrigation at a total cost of Rs.72.50 crore with unit costs ranging from Rs.25000 to Rs.30000 per acre in different sericulture zones, of which CSB share is Rs.37.68 crore. The sharing pattern is 50:25:25 and 80:10:10 for general and special category states, respectively.

#### b. Technical specifications/ operational guidelines:

- Under drip irrigation, only the recommended design of main and lateral drip lines shall be installed depending upon the type of mulberry plantation and nature of land.
- The most appropriate irrigation system (whether drip or any other irrigation system) shall be provided depending upon the zonal requirements.
- DOSs shall have to identify the beneficiaries and ensure that the beneficiaries bear their share. They may also arrange loans to the beneficiaries through banks or other financial institutions.

- The farmers shall be free to select the manufacturers/suppliers maintained by the state department for installing irrigation system of any kind. DOSs shall have to identify manufacturers for their state to commission the irrigation system desired at farmers' level.
- Beneficiaries possessing the basic requirements like water source for installation of irrigation facilities, like drip, sprinkler etc. shall be eligible. Assistance is also provided for digging of open wells, ponds etc.
- > Manufacturers shall provide detailed operational and maintenance manuals at the time of installation.
- DOSs shall ensure supply of good quality irrigation system having Bureau of Indian Standards (BIS) marking and proper after-sales service to the satisfaction of the farmers.
- Subsidy is limited for 2 ha only per beneficiary. Beyond this, the subsidy shall be restricted to 25% each by CSB and state, irrespective of the state category.
- Subsidy shall be given according to the nature of irrigation system, the cost of the system in the particular area and also the area proposed to be covered.
- The state/beneficiary shall certify to the effect that the subsidy of any nature for installation of water conservation techniques for mulberry has not been availed from any other government department.
- Assistance shall also be extended to the beneficiaries on common facility basis.

The activities along with their cost break-up details required under the component are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

	State Category	CSB	State	Beneficiary
Sharing pattern	General category	50%	25%	25%
	Special category	80%	10%	10%

Zone	Unit Cost	Physical	Financial Projections (Rs. in crore)			
	(Rs.)	Target	CSB	State	Beneficiary	Total
Southern	30000					
North-western	25000					
Central and western	25000	25000 acres	37.68	17.41	17.41	72.50
Eastern	25000	acies				
North-eastern	25000					

#### 3. Supply of rearing appliances (including improved mountages)/farm equipment to farmers

#### a. Brief description:

Various equipment and machineries are used in sericulture farming to enhance productivity and conserve energy required for various operations. The appliances used in silkworm rearing differ from place to place and also according to the system of rearing and mulberry harvest. The most common method of rearing in India is the shelf rearing as it facilitates the rearing of a large number of silkworms in a small space. Supply of rearing appliances is an important existing component in the mulberry cocoon production chain supporting sericulturists to train the plantation and to undertake silkworm rearing scientifically.

During X and XI Plans, the component gained momentum among the BV farmers encouraging the production of BV silk. Farmers were supported with modern rearing equipment such as farm machinery, shoot rearing racks, rotary mountages that are essential for Bivoltine sericulture. The unit cost approved for XI Plan was Rs.50,000 per farmer.

However, during XII Plan, keeping in view the overall development of sericulture and targets of Bivoltine and ICB silk production, it is proposed to cover majority of the farmers for production of Bivoltine and ICB farmers only. The unit costs ranging from Rs, 40,000 to Rs.70,000 per acre per farmer for different sericulture zones are proposed for this component in XII Plan taking into consideration the cost of rotary mountages, other rearing equipment and farm implements, respectively. The scheme shall also support labour saving farm appliances, rearing equipment and other devices to improve mechanization to promote family labour and reduce dependency on hired labour. It is proposed to cover 58,000 ac at a total cost of Rs.364.50 crore of which CSB share is Rs.194.68 crore.

#### b. Technical specifications/ operational guidelines:

- > DOSs shall identify the beneficiaries with the support of their field functionaries/Panchayat Raj Institutions (PRIs).
- DOSs shall constitute a State Level Purchase Committee (SLPC) with members drawn from CSB and state for procurement of equipment under this component by following transparent procedures. The purchase committee shall ensure procurement of equipment through the department or facilitate purchases made by approved bodies.
- The rearing appliances and farm implements (as per approved list) shall be supplied to the farmers as per their actual requirement within the unit costs.
- Flexibility is built-in to provide assistance for mechanization equipment like mini power tillers, matured silkworm seed separator, brush weed and branch cutter wherever necessary without affecting the main objective of the component and within the approved unit cost. This is more appropriate in community rearing.
- Landless and small farmers may also be supported with rearing equipment as per the requirement (5 rearing trays and 10 mountages to rear 15-20 dfls per batch) at a unit cost of Rs. 5,000 per beneficiary as approved for XI Plan.
- Subsidy shall be released on pro-rata basis subject to a maximum of Rs.70,000 for rearing 250 dfls per batch in southern India and 150 dfls per batch in east and north-eastern India keeping in view the unit costs approved for different zones. For zones other than south, the unit cost for rearing of 250 dfls per batch shall be Rs. 70,000.
- Solar lights are also included in the equipment list. Farmers from north-eastern and hilly states shall get priority for solar lights within the prescribed unit cost for the region (one solar panel and three lanterns)

The activities along with their cost break-up details required under the component are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

	State Category	CSB	State	Beneficiary
Sharing pattern	General category	50%	25%	25%
	Special category	80%	10%	10%

Zone	Unit Cost	Physical	Financial Projections (Rs. in crore)			
	(Rs.)	Target	CSB	State	Beneficiary	Total
Southern	70000					
North-western	40000	58000 acres				
Central and western	50000		194.68	84.91	84.91	364.50
Eastern	50000					
North-eastern	50000					

#### 4. Supply of quality disinfecting materials and other crop protection measures for farmers

#### a) Brief description:

Disinfection is an integral part of healthy and successful silkworm rearing. It aims at the total elimination of disease causing pathogens. Silkworms are infected by several diseases caused by bacteria, virus, fungi and protozoa. The curative methods are not economical for any of the silkworm diseases and as such, the silkworm diseases are best prevented than cured. The silkworm diseases are prevented by adoption of proper and effective methods of disinfection and step-wise maintenance of hygiene during rearing. Availability of quality disinfecting materials in appropriate pack is one of the key factors for effective disinfection and thereby ensuring crop stability for successful harvest of cocoon crops.

During the XI Plan, the component was implemented for Bivoltine seed farmers and the unit cost of the disinfectant pack was at Rs.3000 per farmer. The cost was to be shared by CSB, state and beneficiary at 25:25:50. The component has helped to improve the hygienic conditions in the rearing sheds and also raised the awareness among the seed rearers to maintain such conditions for better quality and productivity. The component has been very effective and accepted well among the farmers especially in non-traditional states.

Continuation of this component during XII Plan shall play a key role in increasing production and productivity of Bivoltine silk. During XII Plan, it is proposed to provide assistance for both seed and commercial Bivoltine and ICB cocoon farmers. While CSB provides size and composition of the disinfectant module and a list of approved suppliers to the farmers, disinfectants to be supplied by the concerned agencies shall be subjected to quality test either by the state or CSB. It is proposed to cover 50,000 farmers in 5 years of XII Plan with two unit costs, ie., Rs. 5,000 for southern and Rs. 4,000 for other zones, respectively. The proposed provision of Rs.24.00 crore includes CSB share of Rs.12.72 crore with a sharing pattern of 50:25:25.

#### b) Technical specifications/operational guidelines:

- CSB shall finalize zone/state-wise list of approved disinfectant suppliers and disinfection material module
- > The disinfectants shall be used as per the recommendations of the research institutes for the particular region.
- Subsidy shall be released on pro-rata basis subject to a maximum of Rs.5,000 or Rs.4,000 (as per zonal unit cost) per acre per year at Rs.1,000 or Rs.800 per crop for 5 crops. However, depending on the number of crops and rearing capacity, all zones can propose the maximum unit cost of Rs. 5,000.
- > The disinfectants shall be procured from list of approved suppliers/agencies and supplied to the farmers by the concerned agencies subject to quality test either by the state or CSB research institutes/laboratories.
- In case of *Navinya* for the control of root rot in mulberry, the subsidy shall be released on pro-rata basis subject to a maximum of Rs.3,000 per acre.
- The disinfectants supplied shall be well within expiry date.

The activities along with their cost break-up details required under the component are indicated in the unitcost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

	State Category	CSB	State	Beneficiary
Sharing pattern	General category	50%	25%	25%
	Special category	80%	10%	10%

Zone	Unit Cost	Physical	ysical Financial Projections (Rs. in crore)			
20116	(Rs.)	Target	CSB	State	Beneficiary	Total
Southern	5000					
North-western	4000	50000 farmers				
Central and western	4000		12.72	5.64	5.64	24.00
Eastern	4000					
North-eastern	4000					

#### 5. Assistance for construction of rearing houses

#### a) Brief description:

Against a target to support construction of 1,11,081 rearing houses in XI Plan, the achievement was only 61,587 rearing houses (55%). One of the reasons for not achieving the target was escalation in cost of the construction material and labour, low subsidy, especially in major sericulture states falling under general category. The beneficiaries were unable to meet their share of 50%. Therefore, keeping in view the suggestions made by states, the unit cost and subsidy are proposed to be slightly enhanced and rationalized during XII Plan to meet the escalation of construction cost and labour in different regions of the country.

- Considering the topography of different regions and rearing capacity of farmers in major states, it is proposed to extend the assistance for three models of rearing houses at Rs. 90,000, 1,75,000 and 2,75,000, respectively during XII Plan. Further, for the states who desire to support the farmers for construction of rearing houses with locally available materials, an assistance of Rs.30,000 shall be given to construct the low-cost rearing houses. The same shall be adjusted against the total number of rearing houses under the scheme and provisions have been proposed accordingly among the above three categories.
- It is proposed to assist 45,000 rearing houses at a total cost of Rs.571.50 crore with a CSB assistance of Rs.136.03 crore during XII Plan. Unlike the XI Plan, the sharing pattern for the new 4 models of rearing houses shall be varying on a sliding scale, as indicated below:

Model	Rearing house (Cost/Area/Capacity)	Sharing pattern (CSB:state: beneficiary)
Low cost	Rs. 30000 (225 sq.ft to rear 50 dfls/batch)	35:35:30
III	Rs. 90000 (225 sq.ft to rear 50 dfls/batch)	35:35:30
II	Rs. 175000 (600 sq.ft to rear 150 dfls/batch)	20:30:50
I	Rs. 275000 (1000 sq.ft to rear 250 dfls/batch)	10:20:70

This component shall also have scope for assisting farmers possessing mulberry plantation between 2 and 5 ha for construction of a second rearing house or for enlarging the existing rearing house sanctioned during X and XI Plan periods, for production of Bivoltine and ICB cocoons only. However, the central subsidy shall be limited to 25% irrespective of the model they are opting as a second rearing house during XII Plan, irrespective of the status of the state (general or special).

#### b) Technical specifications/ operational guidelines:

- Considering the topography of the region and rearing capacity, assistance shall be provided for three models of rearing houses, viz., 1,000 sq ft (250 dfls rearing capacity); 600 sq ft (150 dfls rearing capacity) and 225 sq ft (50 dfls rearing capacity) at a unit cost of Rs.2.75, 1.75 and 0.90 lakh, respectively.
- Though there are separate rearing house models with unit costs for different zones, depending on the rearing capacity of the farmer, plantation availability, number of crops per year etc, DOSs can propose the designs and models indicated for southern zone, with adequate justification.

- The rearing houses shall be constructed away from the dwelling houses as per the approved designs to avoid contamination of diseases.
- > The floor and inside walls shall be plastered. The rearing houses shall be compact for maintaining the temperature and humidity and for conducting effective disinfection. Provision shall also be made to make the rearing house air tight for proper disinfection
- Adequate ventilation facilities shall be provided.
- The rearing house shall accommodate three or four tiers of rearing racks.
- Since the type/design of rearing houses differs from region to region and also from plain to hilly areas within the state, the building shall be constructed as per the prescribed design/models proposed by DOSs.
- For constructing low cost rearing houses with locally available materials, the unit cost of Rs.30,000 shall be adopted. This shall have a capacity to rear 50 dfls per batch. However, DOSs may propose higher cost for this model, subject to a maximum of Rs. 50000 based on requirement of specific zone, availability of local materials, cost and justification with the approval of PMC.
- Even though the rearing house constructed by a farmer is not exactly as per the recommended model, the subsidy can be considered for release, if it meets the requirement of rearing of recommended quantity of dfls and justifying the cost involved, based on a joint inspection by CSB and DOS.
- Micro-finance or other financial institutions may be encouraged for providing loans to the beneficiaries in order to reduce their burden and ensure better construction of rearing sheds.
- The farmers shall give an undertaking that they shall undertake rearing for a minimum period of 5 years and the rearing house shall be utilized for the purpose for which it is intended, and not for any other purpose.

The activities along with their cost break-up details required under the component are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

	State Category	Model	CSB	State	Beneficiary	
	General category	Low cost	35%	35%	30%	
Sharing 	(For four models of rearing houses)		III	35%	35%	30%
pattern		II	20%	30%	50%	
		I	10%	20%	70%	
	Special category	All models	80%	10%	10%	

Zone	Model	<b>Unit Cost</b>	Physical	Finan	cial Projecti	ions (Rs. in cr	ore)
Zone	wodei	(Rs.)	Target	CSB	State	Beneficiary	Total
Southern	Low	30000					
	III	90000					
	II	175000					
	I	275000					
North-western	Low	30000	45000 No.	136.03	142.91	292.56	571.50
	III	75000					
	II	125000					
Central and	Low	30000					
western	III	75000					

Zone	Unit Cost		Physical	Financial Projections (Rs. in crore)			
	Model	(Rs.)	Target	CSB	State	Beneficiary	Total
Eastern	Low	30000					
	III	60000					
	Ш	120000					
	I	175000					
North-eastern	Low	30000					
	III	60000					
	II	120000					
	I	175000					

## 6. Assistance for maintenance of chawki garden, construction of chawki rearing centre and procurement of chawki rearing equipment

#### a) Brief description:

Chawki means the first two stages of silkworm rearing. It is the most crucial period of silkworm rearing that demands optimum temperature and humidity, hygienic conditions, good quality tender leaf, good rearing facilities and above all, technical skills. If the chawki worms are not reared properly, the silkworms become susceptible to diseases in later stages resulting in crop losses. As most of the sericulturists do not have such facilities, CRCs are established to ensure crop stability and high cocoon yields.

During XI Plan, the component was implemented particularly for Bivolitne sericulture development, with the unit cost of Rs.5.00 lakh per CRC and the subsidy was given to the extent of 50% shared equally by CSB and state (25:25), respectively and the rest 50% from the beneficiary. During XI Plan, 484 CRCs were supported as against 600 (81%). Although there has been a good progress during XI Plan, as observed by NPC study team, the concept of CRC is very low in the field and many of the commercial cocoon farmers in traditional sericulture belt undertake chawki rearing at their own rearing sheds, which is not advisable. Hence, it is felt that, the implementation of this component shall be continued more vigorously and more number of CRCs need to be established especially in southern states to boost the production of Bivoltine and ICB silk.

Therefore, it is proposed to continue the program during XII Plan to cover only Bivoltine and ICB rearers, with an additional sub-component to provide assistance for maintenance of chawki garden as in the case of XI Plan. The component is proposed to be extended to NGOs, SHGs, CBOs and individual farmers who are willing to establish CRCs on the lands owned by them or under lease basis for a minimum period of 5 years.

Due to cost escalation in construction and equipment, during XII Plan, the unit cost of CRCs is proposed to be enhanced up to Rs.6.00 lakh towards construction of CRC building, procurement of equipment and maintenance of chawki gardens. It is proposed to support setting up of 600 CRCs during XII Plan. Total cost proposed for this component is Rs. 31.00 crore, of which CSB share is Rs. 13.20 crore. The unit cost also includes the cost for maintenance of chawki garden. The proposed sharing pattern is 35:35:30 by CSB, state and beneficiary, respectively against the existing sharing pattern of 25:25:50.

#### b) Technical specifications/ operational guidelines:

- DOSs shall consider applications from the sericulture business enterprises, CBOs, SHGs or individuals willing to establish CRCs on the land owned by them or under possession on long term lease basis and send proposals with the recommendations.
- CRCs proposed to be set-up in identified cluster area for Bivoltine and ICB production shall have the priority for extending benefits under the component.
- > The beneficiary shall be possessing two acres of own or leased chawki garden with irrigation facilities for taking up the rearings of 1.50 to 1.60 lakh dfls of chawki worms worth 5,000 dfls per batch at an interval of 10 days (32 batches per annum). However, there shall be exceptions in those states where limited crops are taken in a year.

- Depending on the chawki rearing capacity, local needs, the number of farmers to be serviced by the CRC etc. the higher model of CRC with the unit cost of Rs.6.00 lakh proposed for southern zone can be opted by other zones with adequate justification.
- DOS shall have to bear the beneficiary share in addition to its matching share if it desires to set-up CRC in its farms.
- Micro-level CRCs in small clusters (covering 10 to 20 farmers) shall also be considered for an assistance of Rs.50,000 to Rs.100,000 for procurement of rearing equipment (like rearing trays and stands, hygrometer, humidifier, leaf chopping machine and compressor power sprayer etc.) with a unit cost of Rs.50,000 to Rs.100,000 or as per actual local needs.
- CRC shall be registered with CSB as per the Seed Act.
- DOS shall assist the entrepreneurs for getting the required loan from banks or other financial institutions to meet their share.
- Groups with at least 10 members shall be considered for assistance.
- > The beneficiary, who avails this component, shall be trained on chawki rearing technology at any of the training centres of CSB or state.
- Formal induction and refresher trainings shall be organized to keep the beneficiaries updated with technology and scientific management practices.
- > CRC shall be set up away from late age silkworm rearing building.
- > Type and design of CRC differ for regions from plains to hilly areas within the state. Accordingly, CRC shall be constructed as per the prescribed design for the region concerned.
- > SLPC constituted by DOS shall assist the units in procurement of equipment.
- > DOSs shall plan and finalize the targets for CRCs in such a way that adequate number of CRCs is established in all commercial cocoon clusters.
- CRC shall adopt the improved mulberry varieties and recommended technology packages suitable for chawki rearing.
- > CRC shall be operational for a minimum period of 5 years and shall maintain records for inspection by concerned authorities as per the Seed Act.

The activities along with their cost details required under the component are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Sharing pattern	State Category	CSB	State	Beneficiary
	General category	35%	35%	30%
	Special category	80%	10%	10%

Zone	Unit Cost	Physical	Finar	Financial Projections (Rs. in crore)			
Zone	(Rs.)	Target	CSB	State	Beneficiary	Total	
Southern	600000						
North-western	400000						
Central and western	400000	600 No.	13.20	9.55	8.25	31.00	
Eastern	400000						
North-eastern	400000						

# 7. Production units for biological inputs, door-to-door service agents for disinfection, input supply and assistance for sericulture poly-clinics

#### a) Brief description:

This component consists of three parts namely, i) Setting-up of production units for biological inputs; ii) Door-to-door service agents for disinfection and input supply and iii) Setting-up of sericulture poly-clinics. This was introduced newly during XI Plan and implemented as separate components. During XII Plan, it is proposed to combine these components and implement as an integrated unit, each one servicing a large area/cluster and can be linked to CRC also.

#### i) Setting-up of production units for biological inputs:

During XI Plan, the acceptance of this component was very low due to lack of technical know-how. Therefore, during XII Plan, it is planned that the research institutes of CSB shall provide training to the beneficiaries selected for setting-up the production units for biological inputs.

The research institutes have made a number of innovations where microbes have been isolated and cultured which can be used either to enrich the soil fertility (bio-fertilizers) or control the diseases (antagonistic microbes) or bio-pesticides or bio-control agents and other plant/animal products used in sericulture. It is proposed to commercialize these innovations through qualified entrepreneurs, if required through collaborative efforts.

The research institutes which have isolated or developed various inputs such as microbes, shall help the states to scrutinize applications received from the qualified graduates/post-graduates who have got the basic facilities like land, building etc. After approval of the projects, the funds shall be released to the entrepreneurs. The entrepreneurs shall pay the royalty to the technology developer, decided by a committee constituted during the course of the implementation of the scheme.

#### ii) Door-to-door service agents for disinfection and input supply:

During XI Plan, this component was quite useful and acceptable especially in traditional sericulture belts. During XII Plan, it is proposed to encourage private service agents to carry out the disinfection and supply of inputs to the farmers at their door steps. Interested unemployed youth, entrepreneurs or interested persons shall be identified through local panchayats or NGOs/SHGs/CBOs and/or other local bodies and shall be provided with a motor cycle or three wheelers to carry the disinfecting equipment like power sprayer, accessories and safety equipment etc. These door-to-door service agents shall provide disinfection service at the door steps of the farmers and charge for the same. They shall also supply the disinfectants and other inputs/utilities to the farmers at their door steps in the geographical area covered/served by a CRC.

#### iii) Setting-up of sericulture poly-clinics:

It is proposed to set up sericulture poly-clinics on the lines of agriculture, where the educated youth run the poly-clinics which serve as knowledge centers and provide necessary consultancy and inputs to the sericulturists. Qualified sericulture graduates and diploma holders having knowledge on testing procedures shall be considered for selection under the scheme through a transparent procedure. Training shall be imparted in the research laboratories or institutes on testing of soil, leaves or silkworms and in identifying the deficiencies and diseases to be groomed as entrepreneurs for testing soils, leaf samples, silkworms etc. The units shall serve as laboratories for problem identification, trouble shooting and act as consultancy centres. These sericulture polyclinics shall charge for testing, consultancy and other services and in addition, function as sales centers for disinfectants, chemicals, appliances and other devices used in sericulture.

The total fund proposed for implementation of the above three sub-components during XII Plan is Rs.9.94 crore to support 400 units of which CSB share is Rs.5.32 crore. The unit costs proposed for the 3 sub-components are Rs. 3.00 lakh for southern zone and Rs.1.50 lakh to Rs.1.84 lakh for other zones with a sharing pattern of 50:25:25 and 80:10:10 for CSB, state and beneficiary for general and special status states, respectively.

#### b) Technical specifications / operational guidelines:

- DOSs shall identify the eligible entrepreneurs, unemployed graduates, diploma holders with basic qualification in sericulture/agriculture/ horticulture/ bio-chemistry/zoology/animal husbandary or any other fields having knowledge of sericulture, technical and entrepreneurial skills.
- > The identified candidates for setting up of sericulture poly-clinics shall be assessed by a committee comprising senior scientists from CSB, two officers of DOS and bank officer, respectively, for consideration of assistance.
- The identified entrepreneurs/unemployed graduates shall be trained on the concerned activity in a research institute/training centre of the CSB before taking up the activity.
- The entrepreneurs/unemployed graduates who receive assistance shall be issued a certificate either from DOS/CSB as the authorized person to sell/distribute the biological control agents and other inputs.
- > Selected entrepreneurs shall be provided with equipment as per the unit cost book.
- > DOS shall support the production units for biological inputs for at least two years for marketing of the products to the farmers.
- DOS/CSB shall adopt a quality control system to ensure the quality of biological agents produced and distributed in the field.
- The component shall be linked to an existing or new CRC with a coverage of beneficiaries in the same jurisdictional cluster area for effective output and outcome of Bivoltine and ICB cocoons.
- It is not compulsory to implement all the 3 sub-components by a single entrepreneur. In such cases, the unit cost shall be restricted to the cost of particular sub-component(s).
- > The door-to-door service agents shall provide disinfection service, supply the disinfectants and other inputs at the door steps of the farmers and charge for the same.
- With regard to group activity, the benefits of all the three sub-components shall be availed for maximum coverage.
- The components shall be availed for implementation in the cluster project areas by the agencies involved in project implementation and monitoring, including CSB.

The activities and their cost break-up details required under the component are indicated in the unit cost (refer Unit Cost book) of the component

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Sharing pattern	State Category	CSB	State	Beneficiary
	General category	50%	25%	25%
	Special category	80%	10%	10%

_	Unit Cost	Physical	Financial Projections (Rs. in crore)			
Zone	(Rs.)	Target	CSB	State	Beneficiary	Total
Southern	300000					
North-western	150000					
Central and western	150000	400 No.	5.32	2.31	2.31	9.94
Eastern	184000					
North-eastern	150000					

#### 8. Support for development of kisan nurseries

#### a) Brief description:

Mulberry being a perennial plant, its initial establishment is important to ensure optimum growth for continuous yield of quality nutritious leaves over the years. Plantation through cuttings does not ensure good establishment and gap filling of failed pits in established garden is not successful practically, especially in closed system of intensive cultivation. Planting saplings has got many advantages like timely plantation, high survival rate due to existing root system scope for removal of weak and undesirable saplings at nursery stage, quick and better establishment, uniform development and successful establishment of the garden. The saplings are also used for replacement of old mulberry plantations and gap filling etc. It is, therefore, a viable proposition to raise saplings in large scale and make them commercially available to farmers as most of the farmers prefer saplings for plantation.

To facilitate large scale production of saplings on commercial scale as an economic enterprise, it is proposed to introduce this new component during XII Plan. Improved varieties of mulberry saplings are recommended for sustainable growth of the mulberry garden. As the DOSs are not having sufficient infrastructure and manpower to raise the required quantity of mulberry saplings to cover the target of more than about 1,00,000 acres of additional plantation in XII Plan, it is proposed to encourage private kisan nurseries on a Public Private Participation (PPP) model.

A farmer or an entrepreneur desirous to take up kisan nursery shall raise 1,28,000 saplings of high yielding and improved mulberry variety in one acre per year to support direct plantation in 25 acres. With a one time support for this activity, it is possible for the kisan nursery to sustain and continue the activity. However, DOSs and other implementing agencies shall have to support the kisan nurseries by procuring the saplings for distribution to the beneficiaries of identified project or cluster area by giving at least 4 months advance indents. It is proposed to develop kisan nurseries in 400 acres during XII Plan with a total cost of Rs.4.60 crore which includes Rs.2.50 crore as CSB share. A unit cost of Rs.1.15 lakh per kisan nursery is proposed. As such, 400 acres of kisan nurseries can support direct plantation in about 10,000 acres at 5,000-5,500 saplings per acre per year. The state may also replicate this model by availing funds from other sources to achieve the plantation targets of XII Plan.

#### b) Technical specifications/ operational guidelines:

- Assistance shall be provided to be beneficiaries having minimum one acre of irrigated land (owned/leased) with fertile soil suitable for sapling production.
- The soil of the identified garden shall be tested in a government soil testing laboratory.
- The nursery land shall be flat and elevated with adequate irrigation facilities. Submersible areas must be avoided.
- The land shall be inspected jointly by DOS and CSB and certified for taking up nursery for availing the assistance.
- Though mulberry saplings can be raised throughout the year, it is advisable to raise saplings three to four months before the planting season, *i.e.*, February to April, so that the saplings shall be ready for plantation by June August taking the advantage of monsoon rains.
- Saplings can be raised directly in nursery beds or in polythene bags of 23 to 25 cm height and 10 to 15 cm diameter, filled with mixture of soil, organic manure and sand. The polythene bags shall be provided with holes at the bottom to drain excess water. Saplings in polythene bags are easy to maintain and transport.
- Recommended mulberry varieties shall be used for raising the saplings. CSB/DOS shall arrange supply of cuttings of recommended improved mulberry varieties required for raising the nurseries.
- The subsidy amount shall be given according to number of acre of kisan nurseries on pro-rata basis subject to a maximum of 10 acres per entrepreneur.
- Despite of the ceiling limit, DOS can support more area depending on the capacity of the identified entrepreneur and potential in the area for sericulture development.
- > DOSs and other implementing agencies can also support the nurseries raised by the farmers.

The activities along with their cost break-up details required under the component are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

	State Category	CSB	State	Beneficiary
Sharing pattern	General category	50%	25%	25%
	Special category	80%	10%	10%

Zone	Unit Cost	Physical	Fina	Financial Projections (Rs. in crore)			
Zone	(Rs.)	Target	CSB	State	Beneficiary	Total	
Southern	115000						
North-western	115000						
Central and western	115000	400 acres	2.50	1.05	1.05	4.60	
Eastern	115000						
North-eastern	115000						

# 9. Maintenance cost for mulberry plantation raised during X and XI Plans (for Bivoltine and Improved Cross Breed only)

#### a) Brief description:

Maintenance of mulberry plantation is essential for healthy silkworm rearing. It involves various operations like annual bottom pruning, weeding and inter-cultivation, application of organic manure and chemical fertilizers etc. Since the farmers practicing mulberry sericulture in north-eastern states and other hilly areas mostly belong to the economically weaker section, they are unable to follow the schedules of systematic cultivation practices for the maintenance of rain-fed mulberry garden due to lack of man power and financial resources. This is one of the main reasons for decline in production and productivity in mulberry unlike tasar, eri and muga, for want of support to maintain these plantations. If such farmers are supported for maintenance of plantations developed during previous plan periods, there shall be improvement in production and productivity of Bivoltine and ICB cocoons.

During X and XI Plan period, support was extended to about 2,22,500 acres of mulberry plantation under CDP, which includes 13,650 acres in north-eastern region.

Therefore, in order to improve the production and productivity, this component is proposed to support such poor farmers for maintenance of the mulberry plantation developed during the earlier Plan periods, which would not only help them to reduce the mortality rate, but also improve the production and productivity of Bivoltine and ICB cocoons. During XII Plan, it is proposed to support maintenance of 5,000 acres of such plantations and a provision of Rs.2.25 crore including a central share of Rs 1.79 crore is proposed for north-eastern and other hilly regions of the country with a unit cost of Rs.4,500 per acre.

- DOSs shall select mulberry plantations raised during previous Plans aimed at production of Bivoltine and ICB cocoons only.
- Prescribed systematic schedule of cultivation practices for maintenance of rain-fed mulberry plantation (annual bottom pruning, weeding and inter-cultivation, application of bulk organic manure, chemical fertilizer etc.) shall be adopted for better production and productivity
- Assistance shall be provided for maintenance of old mulberry gardens in respect of north-eastern and other hilly regions in order to improve the production & productivity,
- Mulberry gardens developed in earlier Plans with a minimum number of 2,500 plants per acre are eligible for maintenance cost.
- In case of tree plantation, assistance of Rs.110 per tree shall be provided to a minimum of 100 plants on prorata basis.

The activities along with their cost break-up details required under the component are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

	State Category	CSB	State	Beneficiary
Sharing pattern	General category	50%	25%	25%
	Special category	80%	10%	10%

Zone	Unit Cost	Physical	Financial Projections (Rs. in crore)				
Zone	(in Rs.)	Target	CSB	State	Beneficiary	Total	
Southern	Not applicable						
North-western	4500	5000	1.79	0.23	0.23	2.25	
Central and western	Not applicable	acres					
Eastern	Not applicable						
North-eastern	4500						

#### 10. Support for construction of vermi-compost sheds

#### a) Brief description

Mulberry being a perennial plant requires a lot of soil nutrition for the production of quality mulberry leaf required for silkworm rearing. However, the soil fertility has been depleting over the years in the mulberry gardens due to continuous cultivation. In order to enrich the soil, sufficient quantity of organic manures should be added to the garden to maintain the soil health. Due to reduced availability and increased cost of organic manures such as FYM, poultry manure, tank silt *etc.*, the farmers are not in a position to apply the recommended quantity of organic manures for mulberry garden.

The sericulture wastes such as silkworm bed residues, left-over leaf, silkworm litter etc., generated during the activity can be effectively converted into nutrient rich organic manure (compost) and recycled for mulberry cultivation. Vermi-composting is an environmental friendly and effective technique for waste re-cycling and increasing fertility of the soil. Earthworms effectively convert organic wastes into vitamins, enzymes, antibiotics, protein-rich products and others organic compounds. Vermi-compost, besides being effective in improving nutrient content of land thereby saving fertilizer costs, promotes faster growth of plants, increases water-holding capacity of soil, reduces salinity and acidity, induces resistance to pest and disease attack, enhances soil productivity and increases crop yield with less irrigation resulting in better crop.

This component was approved by CSB as an additional input to CDP during the X Plan with a unit cost of Rs.14,000, was not continued in XI Plan. There has been a great demand for this component in X Plan and the states have repeatedly requested for re-introduction of the component. As such, it is proposed to implement this component during XII Plan with a unit cost of Rs.20,000 to cover 5,000 units at a total cost of Rs. 10.00 crore involving a central share of Rs.5.44 crore. One vermi-compost shed normally consists of 4 tanks and the initial investment of Rs.20,000 includes construction of tanks, thatched shed and cost of earth worms worth of 7 kg. The sale price of vermi-compost is approximately Rs.2,500 to Rs.3,500 per MT.

- Beneficiaries with a minimum one acre of mulberry garden are eligible for assistance.
- DOS shall ensure utilization of vermi-compost only for mulberry garden. In this regard, an undertaking shall be obtained from the beneficiary.

- The vermi-compost sheds shall be constructed as per the specifications to ensure treatment of 9-12 quintals of waste in a cycle of 40-45 days.
- > The supply of earthworm feed shall be ensured as recommended by the research institutes of CSB.
- The subsidy shall be provided only once to a beneficiary. The beneficiaries availing subsidy earlier under CDP or any other program for construction of vermi-compost shed are not eligible to avail the subsidy again under this component.
- > Only Bivoltine and ICB farmers are eligible for support of this component.
- DOSs shall also tap the avenues for dovetailing the component under similar programs of other ministries or departments. In such cases, assistance shall be reduced accordingly.
- DOSs shall certify and the beneficiary shall give an undertaking to the effect that they have not availed assistance for vermi-compost shed from any other department

The activities along with their cost break-up details required under the component are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

	State Category	CSB	State	Beneficiary
Sharing pattern	General category	50%	25%	25%
	Special category	80%	10%	10%

Zone	Unit Cost	Physical	Financial Projections (Rs. in crore)			
Zone	(Rs.)	Target	CSB	State	Beneficiary	Total
Southern	20000					
North-western	20000					
Central and western	20000	5000 No.	5.44	2.28	2.28 2.28	10.00
Eastern	20000					
North-eastern	20000					

#### 11. Assistance towards fencing of mulberry gardens in north-eastern states

#### a) Brief description:

There has been a continuous demand from north-eastern states for providing support to fence the mulberry garden to save the plantations from cattle grazing and destruction of mulberry plantation. Mostly, the mulberry plantations in north-eastern states are far away from the dwelling houses and regular watch and ward is not practical for the farmers. If support is provided for fencing of the mulberry plantation, it can sustain the plantation for higher leaf yield and increase in cocoon production. Therefore, it is proposed to support 5000 acres of mulberry plantation for fencing in XII Plan, including the surviving plantations of earlier Plan periods, with a unit cost of Rs.10,000 per acre. The total cost is proposed as Rs.5.00 crore with a CSB share of Rs.4.00 crore. This is applicable to north-eastern states only.

- Assistance under this component shall be provided to the beneficiaries having minimum of one acre mulberry plantation.
- The farmers shall go either for hedge fencing with vegetative crops or bamboo fencing.
- > The subsidy shall be provided to the farmers of north-eastern states only to protect the plantations meant for production of Bivoltine and ICB cocoons.

The state shall certify and the beneficiary shall give an undertaking to the effect that support was not taken for this component from any other department.

The activities along with their cost break-up details required under the component are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

	State Category	CSB	State	Beneficiary
Sharing pattern	Special category	80%	10%	10%

Zone	Unit Cost	Physical	Financial Projections (Rs. in crore)			
	(Rs.)	Target	CSB	State	Beneficiary	Total
Southern	Not applicable					
North-western	Not applicable					
Central and western	Not applicable	5000	4.00	0.50	0.50	5.00
Eastern	Not applicable	acres				
North-eastern	10000					

# 12. Assistance towards expansion of rearing houses for construction of mounting halls in north-eastern and hilly states

#### a) Brief description:

Mounting of silkworms is an essential activity of cocoon production. Improper use of mounting material and lack of care during mounting of mature silkworms are the causes for formation of defective cocoons which affects the reeling performance. Even though the silkworm larvae are healthy, it is estimated that the farmers loose about 5 to 8% of the larvae at the spinning stage due to improper mounting management.

Therefore there is a need to support this activity for increase in the production and productivity of cocoons, which is presently much below the national average in north-eastern and hilly region. Sericulture farmers from north-eastern and hilly areas have their plantations far from their dwelling houses. The rearing houses have been constructed nearer to the plantation without any facility for indoor mounting. Therefore, considering the need for increasing production and productivity of Bivoltine and ICB cocoons, and also as requested by DOSs of north-eastern and hilly states, it is proposed to support for construction of mounting hall for the existing rearing houses constructed in X and XI Plans as well as for new rearing houses to be constructed in XII Plan.

During X and XI Plans, about 15,000 rearing houses were supported in north-eastern and hilly states. It is proposed to support 5,000 mounting halls including the new rearing houses to be constructed in these places during XII Plan. The unit cost proposed for construction of one mounting hall is Rs.30,000. An amount of Rs.15.00 crore is proposed for this purpose which includes a CSB share of Rs.12.00 crore.

- Separate mounting hall (size : 20'x15'x12') with good ventilation is ideal for mounting of silkworms of 100 dfls.
- DOSs shall identify eligible farmers having stable plantation, functional rearing house and conducting regular rearing, for assistance for construction of mounting halls at a unit cost of Rs.30,000.
- Beneficiaries possessing more than one rearing house, supported by required area of plantation, shall also be considered for assistance and the subsidy shall be provided on pro-rata basis.

- Preference shall be given to the farmers in hilly regions, whose rearing houses are far from dwelling houses.
- The plan and sketch of the mounting hall with the details on mounting capacity, type of mounting hall alongwith details of floor, wall and roof shall be provided by the state, as per local needs

The activities along with their cost break-up details required under the component are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Sharing nattorn	State Category	CSB	State	Beneficiary
Sharing pattern	Special category	80%	10%	10%

Zone	Unit Cost	Physical Financial Projections (Rs. i			tions (Rs. in cro	re)
20110	(Rs.)	Target	Target CSB S		Beneficiary	Total
Southern	Not applicable					
North-western	30000					
Central and western	Not applicable	5000 No.	12.00	1.50	1.50	15.00
Eastern	Not applicable					
North-eastern	30000					

# 13. Support for increasing the yield of existing rain-fed mulberry garden through water conservation techniques

#### a) Brief description:

About 45% of the sericulture farmers in India cultivate mulberry in rain-fed conditions. True moisture stress is experienced in rain-fed areas only when annual rainfall is less than 1,000 mm with limited number of rainy days. Nearly one third of the mulberry area in southern and central states belong to this category. Generally, the yield and quality of leaf are poor under such conditions. Specific package of practices for mulberry cultivation to improve both yield and quality of leaf under such stress conditions is required to be adopted. Package of practices mainly involve use of high yielding mulberry varieties adopted to stress conditions, measures for better establishment during initial stages of plantation and suitable agronomical practices emphasizing soil moisture conservation and timely plant protection measures.

Therefore, with the increasing scarcity of water, it is necessary to introduce innovative technologies to enhance water conservation ability of the soil. Since mulberry is a perennial crop, such efforts shall have a greater impact in improving the leaf yield. The field studies undertaken by CSB and University of Agricultural Sciences (UAS), Bangalore have proved that the income from sericulture can be substantially improved by resorting to the water conservation methods in rain-fed gardens.

Considering the need for improving the productivity of rain-fed gardens, the farmers shall be supported to develop their existing rain-fed gardens by the recommended water conservation techniques. Under the program, in between rows of mulberry, biomass filled trenches shall be made along with planting live hedges. This vegetative bund cum trenches serve as water conservation structures and decomposing biomass shall provide necessary nutrition to the mulberry plantations in addition to absorbing maximum moisture, maintain humidity, increases soil fertility due to higher content of organic matter and also prevents soil erosion. Every trench acts as mini water harvesting tank and moisture retention pocket. Under the component, 5,000 acres shall be supported at Rs.10,000 per acre. The total cost estimated is Rs. 5.00 crore, out of which the CSB share is Rs.2.74 crore.

#### b) Technical specifications/ operational guidelines:

- The component shall be supported to farmers of rain-fed areas only who undertake Bivoltine and ICB rearing.
- Construction of bunds and formation of sub-plots of convenient size shall be identified and planned as per the slopes.
- > The trenches shall be filled with green biomass is filled in the trenches, in alternative layers of green biomass and compost/FYM in alternate layers uniformly in 3/4 depth of the trench. Remaining portion of trench to be filled with soil and closed.
- Leguminous crops to be grown between rows, to generate in situ green manure, which shall be later, ploughed back after harvesting.
- A water conserver of 1000 cuft capacity is to be set up at suitable location.
- Farmers with existing rainfed gardens of minimum two years old and up to 1 ha are eligible for assistance under this component. The farmers shall be identified by the field units of DOS, who must hold valid pass book given by DOS or any other document proving their identity as a sericulture farmer.
- > The field officer shall certify that the beneficiary has not availed any assistance for similar work from other programs of government or agency and also certify that the works undertaken are based on her/his visit before and after implementing the component.
- An undertaking shall be obtained from the beneficiary to the effect that sericulture activity shall be continued for a period of 3 years after availing the subsidy under the component.
- > Recommended mulberry varieties suitable for the zones shall be selected for new plantations.
- The leaf productivity of the supported beneficiaries shall be recorded for a minimum period of 3 years

The activities along with their cost break-up details required under the component are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

	State Category	CSB	State	Beneficiary
Sharing pattern	General category	50%	25%	25%
	Special category	80%	10%	10%

7	Unit Cost	Physical	Fina	ncial Projec	ctions (Rs. in cro	ore)
Zone	(Rs.)	Target	CSB	State	Beneficiary	Total
Southern	10000					
North-western	10000			2.74 1.13		5.00
Central and western	10000	5000 acres	2.74		1.13	
Eastern	10000					
North-eastern	10000					

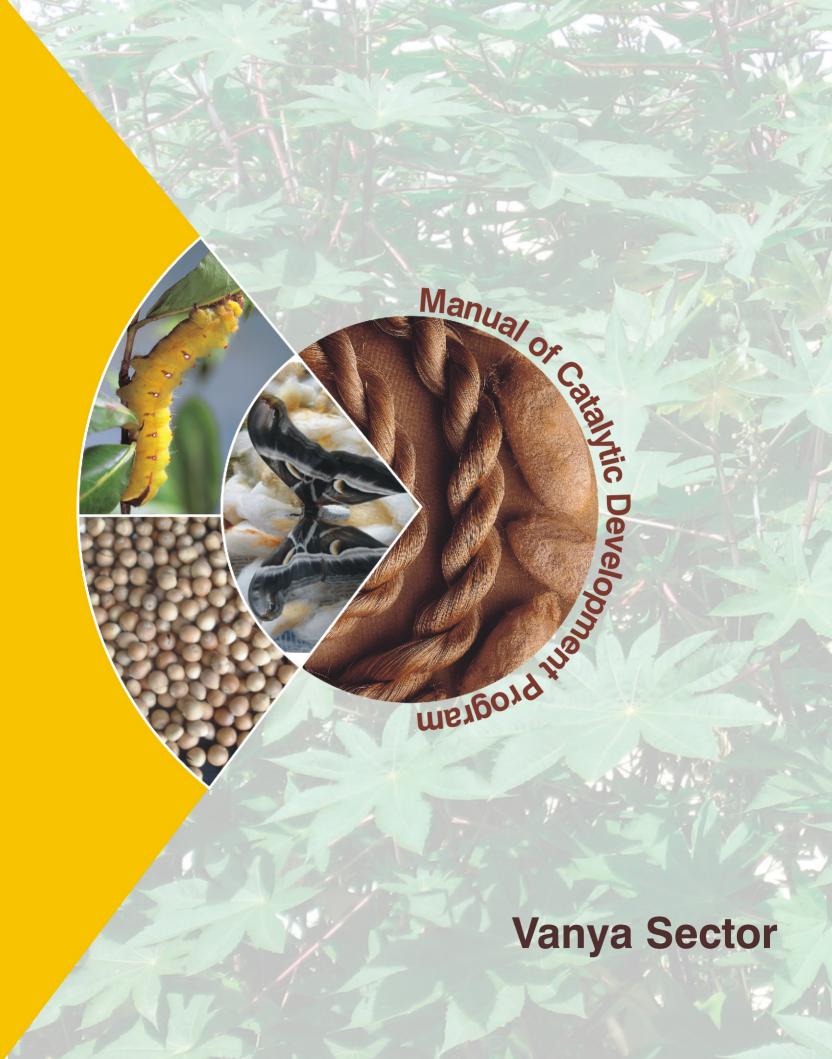
#### **Expected outcome**

The implementation of the program shall supplement the efforts of states resulting in production of 23,000 MT of mulberry raw silk (which includes 5,000 MT of 3A grade Bivoltine silk and 6,000 MT gradable ICB silk) by the end of XII Plan, *i.e.*, 2016-17. Implementation of the components under cocoon sector shall help to improve the quality and productivity because of the adoption of improved technologies. Besides, these components shall ensure production of

quality cocoons to bring a quantum jump in the production of high quality Bivoltine silk from the present level of around 1,685 MT to 5000 MT by the end of XII Plan. Substantial volume of Cross Breed cocoon production of the previous Plan period shall be upgraded to ICB production as per the strategy of XII Plan. This shall bring down the existing demand-supply gap. Because of CDP interventions and profitability of sericulture sector, there shall be an incremental increase of raw silk to about 4,728 MT over XI Plan supporting generation of additional employment of 16.80 lakh persons by the end of XII Plan. The income generated by implementation of components of mulberry cocoon sector shall help to improve the socio-economic conditions of the farmers. However, reduction in allocation may adversely affect in achieving the set targets.

Even though the envisaged mulberry silk production target for XII Plan is 23000 MT, the support proposed under mulberry sector components of CDP shall be mainly towards achieving the production target of 5000 MT of BV silk and 6060 MT of higher grade ICB silk (2A/3A grade) suitable for weaving in power looms aimed at reducing import dependence for high quality yarn. The remaining production of 12000 MT of Cross Breed or Multivoltine silk shall be achieved by marginally augmenting the support already provided under CDP till XI Plan by building-up proper linkages for their sustenance and maximizing benefits from the existing capacity through productivity improvement measures. However, seed support for the mulberry sector shall continue for all varieties in order to achieve overall production target as male parents of Bivoltine silkworms are required for Cross Breed silk production.





Catalytic Development Program (Centrally Sponsored Scheme)



# CHAPTER III VANYA SECTOR

#### Introduction

he *Vanya* raw silk production during XI Plan period has witnessed a remarkable growth. The production which was around 1,950 MT in 2006-07 (end of X Plan) has increased to 4,788 MT during 2011-12 (end of XI Plan). *Vanya* silk has significantly contributed to the overall Indian silk production (record increase from 11.33% in 2007-08 to 20.76% in 2011-12). Augmentation of *Vanya* food plants, adoption of improved seed production and rearing technologies by the *Vanya* silk growers of whom majority are tribals and improvement in productivity have contributed to this record growth. Considering the good growth rate on the production of *Vanya* silk during XI Plan period, the XII Plan envisages ambitious *Vanya* raw silk production target of 9,000 MT.

Planning and executing systematic *Vanya* seed organization has posed the biggest challenge during earlier Plan periods for production and supply of required quantity of quality *Vanya* commercial seed. Therefore, considering the *Vanya* silk production target set for the XII Plan, proportionate quantity of quality commercial silkworm seed shall be produced by knitting well organized seed production, multiplication and supply system by CSB with state production units and private graineurs and seed producers.

Year-wise and variety-wise *Vanya* raw silk target and the estimated *Vanya* commercial seed requirement during the XII Plan period are enumerated below:

	201	2-13	2013	2013-14 2014-15 2015-16 201		2014-15 2015-16		6-17		
Variety	Raw Silk (MT)	Dfls (Lakh No.)	Raw Silk (MT)	Dfls (Lakh No.)	Raw Silk (MT)	Dfls (Lakh No.)	Raw Silk (MT)	Dfls (Lakh No.)	Raw Silk (MT)	Dfls (Lakh No.)
Tasar	1830	439	2310	554	2785	668	3620	869	4562	1095
Muga	130	135	140	145	150	160	160	175	200	200
Eri	3160	496	3345	540	3590	586	3920	625	4238	662
Total	5120	1070	5795	1239	6525	1414	7700	1669	9000	1957

Nature has bestowed with enormous area of *Vanya* silkworm host plants. However, exploitation of natural food plant resources for commercial venture has not yielded desired results. The efficiency of the rearer shall yield better results when rearing is conducted in systematic plantation. Realizing the importance of raising systematic plantations, 20,441 ha of

tropical tasar, 538 ha of oak tasar, 46,351 acre of eri and 11,220 acre of muga silkworm host plants have been raised in farmers' own lands, forest reserve areas and government lands etc., during XI Plan period, which helped to increase the production. It is, therefore, necessary to continue all *Vanya* sector ongoing components during XII Plan also with necessary modifications.

Implementation of *Vanya* sector components during XI Plan has further emphasized need for proper intervention in critical areas for attaining better results. In order to achieve the desired results and optimum utilization of infrastructure already established during X and XI Plans, it is necessary to implement the innovative and proven technologies so as to achieve the ambitious target of 9,000 MT by the end of XII Plan. It is proposed to intervene and assist in the following areas to enhance the production:

- Enhancement of seed production and multiplication activities to cater to the need of increase in raw silk production target.
- Productivity improvement through maintenance of existing Vanya host plants and augmentation of new plantation by dovetailing programs under RKVY, MGNREGA, ATMA, Border Area Development Plan etc.
- Community building for the integrated development of Vanya silk by improving the group activity/capacity building.
- Disease monitoring and control through disinfection squads.
- > Conservation and utilization of tasar eco-races.
- Introduction of 4 tier seed multiplication system in eri sector.

The sector-wise component details are as follows:

#### I. Vanya seed

#### 1) Assistance to private tasar graineurs

#### a) Brief description:

Production of commercial tasar seed in private sector as a rural enterprise has been well received in the field for meeting the requirement of quality silkworm seed by the commercial rearers during X and XI Plan. The private graineur concept has been demonstrated successfully as a village level micro-enterprise model and as a financially viable and technically feasible activity in private sector through CDP scheme, UNDP project, special SGSY projects, NABARD assisted TDF projects etc. It helps in bridging the gap between demand and supply of tasar seed. Continuation of the scheme with necessary modifications during XII Plan helps in promotion of systematic tasar seed organization in the country. The focus of Basic Tasar Silkworm Seed Organization (BTSSO) has now been shifted towards supply of nucleus seed and steps are taken to encourage the DOSs/CBOs to produce tasar basic seed in tribal villages. Hence, the promotion of the private graineurs shall play a major role in tasar sector.

Under the component, unemployed tribal and rural youth shall be identified and trained on grainage technology to impart technical and managerial skills for production of commercial dfls as per the norms fixed by the research institutes of CSB. Beneficiary selection shall be made involving DOS, local CSB units and NGO, if any. The training shall be imparted by the Basic Seed Multiplication and Training Centres (BSMTC) of CSB, and the expenditure shall be charged to the training component. After the training, the graineurs shall be assisted with necessary technical support, construction of grainage building, procurement of grainage equipment, consumables and working capital for purchase of seed cocoons, insurance coverage, etc., to enable the graineurs to process 20,000 seed cocoons and produce 5,000 dfls per grainage operation. The scheme shall be flexible and the implementing agency shall have the choice to extend assistance covering any other desired item under the sub-component. The Project Monitoring Committee (PMC) shall decide the type of assistance required within the unit cost for the beneficiary depending upon the requirement of graineurs in a particular locality. Beneficiary share shall be met by contributing required land and locally available material and labour for construction of grainage building besides meeting the margin money requirement for availing the working capital.

#### b) Technical specifications/operational guidelines:

The component shall be extended only to the registered seed producers (private graineurs) who have tie-up with

seed rearers in isolated areas. It is mandatory to obtain training in cocoon processing, production of disease free layings and disease monitoring from BSMTCs, state units, NGOs, CBOs etc. The private graineurs shall provide an undertaking in the form of an agreement that the grainage activities shall be continued at least for a five year period.

- > The implementing agencies shall monitor maintenance of working capital in non-erodable form for sustenance of the activity, besides ensuring beneficiary share and credit mobilisation. Further, the details of assistance extended along with production particulars during each operation shall be entered in the beneficiary passbook provided to them and duly certified.
- Procurement of grainage equipment shall be made as per technical specifications from reputed firms with AMC on rate contract for the entire Plan period to avoid delay by constituting purchase committee at state or district level, as the case may be. The implementing agency shall meticulously follow the relevant points of general guidelines of CDP for XII Plan, while implementing the component.
- List of empanelled moth testers and Community Resource Persons (CRP) shall be provided by the implementing agency to the graineurs well in advance to avail their services.
- The resource persons shall obtain training through structured programs like Integrated Skill Development Scheme (ISDS) of CSB and those promoted under MORD/NABARD assisted projects.
- The performance of private graineurs shall be monitored by concerned BSMTCs and Pilot Project Centres (PPC) to ensure production of dfls as per norms fixed by CSB.

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Charina	State Category	CSB	State	Beneficiary
Sharing	General Category	60%	20%	20%
Pattern	Special Category	80%	10%	10%

7	<b>Unit Cost</b>	Physical	Financial Projections (Rs. in crore)			
Zone	(Rs.)	Target	CSB	State	Beneficiary	Total
Applicable to all zones	2,32,000	1,500 graineurs	25.52	4.64	4.64	34.80

## 1A) Assistance to existing tasar graineurs for up-gradation of seed production capacity

#### a) Brief description:

To meet the demand and supply of the most critical input in pre-cocoon sector, *viz.*, tasar silkworm seed and supplement the efforts of BSMTCs, BTSSO under CSB and PPCs under DOSs of tasar producing states, the private graineurs were promoted since X Plan under the CDP and UNDP assisted projects. It was, however, observed that only limited support was provided in the beginning. The private graineur concept could not be sustained due to lack of effective linkages, non-availability of working capital for purchase of seed cocoons, partial involvement of CBOs/NGOs and non-utilisation of infrastructure created under the component. Further, there was no provision of separate space for ovi-position, moth examination and egg washing in earlier Plans. Hence, focus shall be to provide the same during XII Plan period.

In order to utilise the expertise of the private graineurs and ensure optimum utilisation of infrastructure created during earlier Plan periods, it is proposed to extend financial assistance to the existing private tasar graineurs towards repair of grainage building, servicing/purchase of grainage equipment, besides working capital and hiring of moth testers during the peak period of the grainage operation. While provisions are indicative, the implementing agency may decide on the actual requirement based on the merit of each case, subject to approval by the designated committee.

besides meeting the margin money requirement for availing the working capital.

#### b) Technical specifications/operational guidelines:

- Based on the assessment of the joint inspection committee comprising members from CSB and state, assistance shall be extended to the RSPs (private graineurs) who are actively engaged in seed production for last three years and obtained assistance under CDP prior to XI Plan period. Assistance shall be provided to existing tasar private graineurs after obtaining an undertaking in the form of an agreement from the private graineurs to the effect that they would produce 5,000 dfls per operation and continue the grainage activity for at least five years period.
- > The implementing agency shall ensure the backward linkages with seed rearers for seed cocoon procurement. The DOS shall also organise refresher training to the private graineurs at BSMTCs/state units/NGOs, besides ensuring disposal of the commercial dfls produced.
- > The implementing agency, besides ensuring beneficiary share and credit mobilisation shall monitor maintenance of non-eroding working capital for sustenance of the activity and shall also enter the details of assistance extended along with production particulars during each operation in the beneficiary pass books provided to them and duly certify each of the entries.
- Procurement of grainage equipment shall be made as per technical specifications from reputed firms with AMC on rate contract for the entire Plan period to avoid delay by constituting purchase committee at state/district level, as the case may be. The implementing agency shall meticulously follow the relevant points of general guidelines of CDP for XII Plan while implementing the component.
- The implementing agency shall support the private graineurs in providing moth testers during the peak period of grainage and maintain the details of production, dfl recovery and performance of commercial dfls level etc., in beneficiary passbook to assess the performance and impact of the scheme.

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	60%	20%	20%
rattern	Special Category	80%	10%	10%

7	Unit Cost	Physical	Financial Projections (Rs. in crore)			
Zone	(Rs.)	Target	CSB	State	Beneficiary	Total
Applicable to all zones	42,000	1,000 graineurs	3.02	0.59	0.59	4.20

#### 2) Assistance for strengthening of tasar seed multiplication infrastructure (Tropical tasar)

#### a) Brief description:

BTSSO under CSB alone has been meeting the major requirement of tasar basic seed in the country for further production and supply of commercial dfls to the rearers. Due to initiation of ambitious tasar developmental plans by tasar producing states, and by attracting investments from other funding agencies, requirement of nucleus and basic seed has increased manifold. In order to broad base the supply source and augment the production of tasar basic seed to cater to its growing demand, there is a need to strengthen the state multiplication units to gear up the basic seed production under their control or through NGOs/societies, CBOs/SHGs, producer groups etc.

Under these circumstances, it is proposed to establish new units and also strengthen the existing tasar silkworm

seed multiplication infrastructure with DOSs. The component envisages provision for construction/renovation of existing building, supply of grainage equipment, grainage house, insurance, buildings, maintenance, etc., based on the report of a joint committee comprising DOS and BTSSO units in the state. Besides, lumpsum provision towards procurement of nucleus seed cocoons and operational cost for preservation of cocoons for over 6 months has been made under the component.

#### b) Technical specifications/operational guidelines:

- Assistance shall be provided to the PPCs or basic seed grainage units with a capacity to preserve 1.5 lakh cocoons and produce 25,000 tasar basic seed. The implementing agency shall ensure proper linkages with nucleus seed rearers, undertake joint disease monitoring involving CTR&TI/BTSSO/NGOs in the area during seed crop rearing, proper preservation and processing of seed cocoons during grainage operation.
- > Working capital and operational costs shall be deposited in separate special savings account with arrangements to flow back the sale proceeds of basic seed and pierced cocoons to keep it non-eroding and make the activity independent during subsequent years.
- The implementing agency shall undertake and furnish the performance report of the unit, status of the working capital and operational cost during the Plan period on yearly basis.
- > Though details of the unit cost are indicated, provisions are flexible and to be decided by a joint technical committee, except for working capital and operational cost.
- A joint survey team shall visit the unit and suggest the requirement after assessing available infrastructure, plantation, equipment etc.

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Charina	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	50%	50%	_
Pattern	Special Category	90%	10%	_

7	Unit Cost	Physical	Financial Projections (Rs. in crore)				
Zone	(Rs.)	Target	CSB	State	Beneficiary	Total	
Applicable to all zones	5,00,000	30 PPCs	1.11	0.39	-	1.50	

### 2A) Establishment of basic seed production unit (by SHGs/Co-operatives/NGOs)

#### a) Brief description:

In view of the increasing demand for tasar silkworm seed in the country, BTSSO, Central Silk Board had to shift its focus from production of tasar basic seed to augmentation of nucleus seed. Tasar producing states are yet to attain their capabilities to produce tasar basic seed despite support extended to strengthen their PPCs during X & XI Plan periods. It may be practically difficult for the states to meet the entire basic seed demand in view of the shortage in extension staff for managing longer preservation of seed cocoons during unfavourable climatic conditions and lack of mechanism for effective linkages.

In the mean time, CSB in collaboration with PRADAN, an NGO had successfully introduced nucleus seed rearing in tasar block plantations, established basic seed production units and organized production of quality basic seed involving CBOs under the special SGSY and NABARD-TDF projects in Bihar and Jharkhand during XI Plan period. Further, the effective linkages with ASRs for nucleus seed rearing and basic seed rearing in isolated patches helped these basic seed production units to sustain their activities beyond project period. As the MORD, Govt. of India and other agencies have been funding for establishment of such units under various projects including MKSP, to be

The beneficiary share shall be mainly towards locally available material and labour for repair of the grainage building implemented by NGOs involving Societies/CBOs/SHGs and producer groups, it is proposed to promote establishment of basic seed production unit by dovetailing funds from CDP with assistance however limited to 25% of the unit cost, with or without state share during XII Plan.

#### b) Technical specifications/operational guidelines:

- > Based on the assessment of the joint inspection committee comprising members from CSB and state, assistance shall be extended to the RSPs (private graineurs) who are actively engaged in seed production for last three years and obtained assistance under CDP prior to XI Plan period.
- Assistance shall be provided to existing tasar private graineurs after obtaining an undertaking in the form of an agreement from the private graineurs to the effect that they would produce 5,000 dfls per operation and continue the grainage activity for at least five years period.
- > The implementing agency shall ensure the backward linkages with seed rearers for seed cocoon procurement. The DOS shall also organise refresher training to the private graineurs at BSMTCs/state units/NGOs, besides ensuring disposal of the commercial dfls produced.
- The implementing agency, besides ensuring beneficiary share and credit mobilisation shall monitor maintenance of non-eroding working capital for sustenance of the activity and shall also enter the details of assistance extended along with production particulars during each operation in the beneficiary passbooks provided to them and duly certify each of the entries.
- Procurement of grainage equipment shall be made as per technical specifications from reputed firms with AMC on rate contract for the entire Plan period to avoid delay by constituting purchase committee at state/district level, as the case may be. The implementing agency shall meticulously follow the relevant points of general guidelines of CDP for XII Plan while implementing the component.
- > The implementing agency shall support the private graineur in providing moth testers during the peak period of grainage and maintain the details of production, dfl recovery and performance of commercial dfls level etc., in beneficiary passbook to assess the performance and impact of the scheme.

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Charing	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	60%	20%	20%
rattern	Special Category	80%	10%	10%

Zone	Unit Cost	Physical	Financia	Il Projections (Rs. in crore)			
	(Rs.)	Target	CSB	State	Beneficiary	Total	
		7	0.54	0.11	0.10	0.75	
Applicable		Seed		sistance			
to all zones	43,00,000*	production	MORD/NABARD/ TWC/RKVY	State	Beneficiary	Total	
	units	units	2.26	-	-	2.26	
	<b>Grand Total</b>		2.80	0.11	0.10	3.01	
+ O-1 - 050/ -4		-11	and worder ODD and area				

<sup>\*</sup> Only 25% of the unit cost shall be considered under CDP scheme.

#### 3) Assistance for strengthening of seed multiplication infrastructure (Oak tasar)

#### a) Brief description:

The absence of systematic seed organization and non-availability of quality/disease free silkworm seed are the major factors responsible for stagnancy in oak tasar silk production. The infrastructure and equipment for seed cocoon preservation and processing available with the states are quite old and obsolete. Further, such seed multiplication units could not create desired impact during the implementation of similar schemes during XI Plan mainly due to paucity of fund for procurement of seed cocoons, lack of modern seed testing facilities, erratic power supply and their location in the remote areas.

Considering the need for augmenting and streamlining the seed production in the states, it is proposed to establish/strengthen the existing oak tasar silkworm seed multiplication infrastructure with DOSs, NGOs, societies, SHGs etc., during XII Plan. Under the component, assistance shall be provided for construction/repair/extension of grainage building to accommodate facilities for seed cocoon preservation, coupling, oviposition, moth testing, incubation etc., along with running water supply, grainage equipment/consumables and standby source of power for seed production. Also one time assistance of Rs.1.5 lakh is proposed as working capital for procurement of seed cocoons during the first year of operation.

- Assistance shall be extended for construction/repair/extension of grainage buildings/equipment.
- The component shall be implemented on the following lines:
  - Selection of government farm/CBOs/NGOs by a joint inspection committee comprising officers from DOS and CSB.
  - State departments/NGOs/societies/SHGs of the oak tasar producing states of North-eastern and North-western regions are eligible for assistance. Existing seed production units may also avail assistance for specific work, like repair of existing building, extension of building and equipment on pro-rata basis.
  - Construction of grainage buildings measuring 40' x 25' with 6' verandah all sides, with brick cement walls, concrete floor and roof with CGI sheet/zinc sheet rested on wooden frame and false ceiling and electrification of building.
  - Facilities for seed cocoon preservation, coupling, oviposition, moth testing and incubation, etc.
  - Facilities for running water supply for grainage operation or alternate water sources, power supply and septic tank, etc.
  - Procurement and installation of equipment/appliances for seed cocoon preservation, processing and testing including Fujiwara method of pebrine detection as per specification given in unit cost.
  - Commissioning of the facility and utilization of installed capacity. Each unit to preserve 1.5 lakh seed cocoons and to produce 30,000 dfls/year.
- > The field officer of DOS concerned shall certify the works undertaken based on her/his visit before and after implementing the program. It shall also to be certified that the state/agency has not availed assistance for the same work from other programs of government or other agencies. States shall support backward and forward linkages for sourcing basic seed, seed rearers and commercial rearers.
- The NGOs/societies/SHGs availing support under CDP shall submit an undertaking to continue grainage activity for a minimum period of 5 years, failing which government shall have right to recover the subsidy disbursed to them. If any of the stakeholders fails to implement the scheme as per the scheme modalities or fail to utilize the funds provided by the CSB and DOS for the purpose for which it is intended, the government shall have the right to recover the subsidy/grant provided to him. DOSs shall develop a suitable recourse

- mechanism through legally valid agreements/MOUs to deal with such instances and make them essential part of the implementation for CDP.
- Working capital provided to stakeholders for seed cocoon purchase shall have to be maintained in a bank account and essentially be flowed back after completion of each cycle of the grainage activity to the account of stakeholder. States shall institute a monitoring mechanism to verify the flow of working capital and its utilization and maintenance for the purpose for which it is intended in the scheme on half-yearly/annual basis as deemed fit.
- The performance of the unit shall be monitored by DOS on regular basis as per yearly target and maintenance of records of seed production and supply.

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Charina	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	50%	50%	-
Falleili	Special Category	90%	10%	_

7	Unit Cost	Physical Financial Projections (Rs. in cror				
Zone	(Rs.)	Target	CSB	State	Beneficiary	Total
Applicable to all zones	15,00,000	6 grainages	0.81	0.09	-	0.90

#### 4) Assistance for tropical tasar rearers

#### a) Brief description:

Prior to X Plan period, most of the tasar silkworm rearing was conducted utilizing natural tasar host flora. However, considerable area was brought under block plantation during X and XI Plan periods with assistance from CDP, projects under special SGSY, NABARD-TDF, TWC, MGNREGS, RKVY etc. Further, as tasar plantations are raised in degraded waste lands under rain-fed conditions, soil treatment is required periodically to maintain soil health and moisture conservation for obtaining quality leaf. During XII Plan, the requirement of tasar basic seed has been much higher and as such, there is a need to utilize these plantations effectively for nucleus and basic seed rearing and obtain higher productivity. Also, some of the technologies evolved by CTR&TI, Ranchi need to be transferred to increase quality leaf yield and enhance cocoon productivity.

It is, therefore, proposed to assist both seed and commercial tasar rearers in general and seed rearers in particular with the necessary rearing equipment, fertilizer and technology inputs for host plant maintenance to produce quality seed cocoons, tasar silkworm rearing including prophylactic measures. The implementing agency shall ensure that utmost care be taken to cover tasar nucleus (during commercial crop season) and basic seed (during seed crop season) rearers linked to basic seed production units under the states, BSMTCs and NGOs/CBOs to strengthen seed augmentation efforts.

- Registered tasar seed rearers with 0.7 acres willing to take up 200 dfls rearing of nucleus and basic seed to supply seed cocoons to PPCs/BSM&TCs/basic seed production units, for a minimum period of three years shall be assisted. The implementing agency shall ensure entering into agreement to this effect. Details of assistance extended and the crop details are to be entered in the beneficiary passbook provided by the implementing agency.
- Commercial rearers with 1.0 ha block plantation of tasar silkworm host plants and rearing capacity of 400 dfls are eligible to receive all assistance except the cost of tasar silkworm dfls, which shall be given only to seed rearers. However, the priority shall be for seed rearers who have backward and forward linkages for

production of basic or commercial seed.

- Beneficiary share shall be met through supply of locally available material like bamboo and labour component.
- The implementing agency may arrange to supply a sprayer for a group of 10 tasar rearers or provide hiring charges of sprayer at individual level and shall also ensure that the beneficiaries continue the activity at least for a period of three years, besides devising operational modalities for using common assets like sprayer etc.
- The implementing agency shall meticulously follow the relevant points of general guidelines of CDP for XII Plan while implementing the component.
- > Care shall be taken for technology inputs as per recommendations of CTR&TI, Ranchi.
- While type and dosage of fertilizers can be based on soil type and cultural operations, the soil treatments shall include staggered trenches, 30'x40' models etc., based on soil slope.
- The implementing agency shall ensure supply of all required inputs at major production clusters to facilitate their procurement and usage.

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Charina	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	60%	20%	20%
Pattern	Special Category	80%	10%	10%

7	Unit Cost	Physical	Financial Projections (Rs. in crore)				
Zone	(Rs.)	Target	CSB	State	Beneficiary	Total	
Applicable to all zones	20,000	2,500 rearers	3.60	0.70	0.70	5.00	

#### 4A) Assistance for oak tasar seed rearers

#### a) Brief description:

Considering the oak tasar silk production target set for the XII Plan, there is a need to develop seed production chain by involving seed rearers for production of targeted quantity of commercial seed through state production units/CBOs/NGOs. Under the component, it is proposed to promote integrated package of seed crop rearing developed by the research institutes of CSB. The seed rearers shall be assisted with necessary rearing equipment and tools to produce quality seed cocoons required for commercial seed production.

- Assistance shall be provided to new and also existing seed rearers based on the actual assessment/needs of the seed rearers.
- The components shall be implemented on the following lines:
  - Eligible seed rearers selected by DOSs/NGOs/societies/SHGs of the oak tasar producing states of north-eastern and north-western regions for production of oak tasar seed cocoons.
  - Seed rearers having one hectare systematic plantation of Quercus serrata or with allotment order or permission to use natural plantation in forest shall be identified by the field units of DOSs/NGOs/societies.
  - Erection of poly house with four polythene sheets measuring 30'x18' for each rearing unit for the North-western zone to support rearing of 200 dfls/crop under semi-domesticated conditions.

- Erection of polythene/tarpaulin tent measuring 20' x 20' for storage of equipment during rearing season in north-western zone.
- DOS shall collect beneficiary share and procure the equipment as per specification given in the unit cost by following the due procedures in vogue in their department and supply to beneficiary.
- 50% shaded plastic nets shall be provided for aeration in the poly houses.
- Nylon net of 3 mm mesh size (15' x 15' x 9') for outdoor silkworm rearing for north-eastern zone to support rearing of 200 dfls/crop.
- Procurement of equipment and appliances shall be as per specifications indicated in the unit cost.
- The stakeholder shall get registered for certification towards seed cocoon production and to claim assistance.
- Each seed rearer shall rear 200 dfls (2 g each dfl) per crop and the productivity of seed cocoon shall be
  of 60 cocoons per dfl.
- DOSs shall coordinate backward and forward linkages for sourcing basic seed and supply to seed rearers and sale of seed cocoons to graineurs.
- > The field officer of concerned DOS shall certify the supply and use of equipment and also certify that the seed rearers have not availed assistance for the same equipment from other programs of government or other agencies.
- Equipment shall be supplied against an undertaking from the seed rearers /NGOs/societies/SHGs that the seed rearer shall produce seed cocoons for a period of 5 years after availing subsidy under the component. Failing to implement the scheme as per the scheme modalities or utilize the funds provided by the CSB and DOS for the purpose for which it is intended, the government shall have the right to recover the subsidy/grant provided to him. DOSs shall develop a suitable recourse mechanism through legally valid agreements/MOUs to deal with such instances and make them essential part of the implementation for CDP.
- The performance of the seed rearer shall be monitored by DOS on regular basis as per yearly target and maintain record of assistance provided and seed cocoon production/crop in the beneficiary passbook.

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Charing	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	60%	20%	20%
Pattern	Special Category	80%	10%	10%

7	<b>Unit Cost</b>	Physical Financial Projections (Rs. in crore)				
Zone	(Rs.)	Target	CSB	State	Beneficiary	Total
North-western	19,000	200	0.29	0.03	0.03	0.35
North-eastern	17,500	rearers	0.29	0.03	0.03	0.33

#### 4B) Assistance for mobile testing facility for disease monitoring and seed cocoon testing

#### a) Brief description:

During XII Plan, it is proposed to augment tasar silkworm seed multiplication involving various agencies viz., state PPCs, basic seed production units managed by NGOs/CBOs/SHGs/societies/producer groups/private graineurs. Further, successful efforts were also made by BTSSO to produce nucleus seed in isolated patches of block plantations involving CBOs/NGOs on pilot scale during XI Plan. Also, a joint disease monitoring team was constituted involving

representatives from CTR&TI, BTSSO, CBOs/NGOs and DOSs to ensure disease free tasar silkworm seed production. The initiative has in turn paved a way in containing the disease effectively in the production clusters. However, efforts were limited to the identified project areas and there exists no definite composition of monitoring team and schedule in other tasar growing areas where crop failures are noticed.

In view of the experience gained and shortcomings in the present system, it is proposed to have a uniform composition of disease monitoring team representing CTR&TI, BTSSO, DOS, NGOs/CBOs, producer groups etc., with clearly drawn schedules for quality Bivoltine/Trivoltine seed cocoon production. The joint disease monitoring team constituted shall visit the seed areas as per schedule to examine disease incidence during seed rearing, seed cocoon procurement/preservation/processing, seed production in the tasar producing states to contain disease incidence. This would mean improvement in commercial crop performance and enhancement of income among the tribals. To facilitate this activity, it is proposed to provide a mobile pick-up van for easy movement of disease monitoring team as per schedule without linking up to routine extension work.

#### b) Technical specifications/operational guidelines:

- Mobile van shall be under the ownership/control of BTSSO field unit in the concerned state. A log book with all particulars of the movement and maintenance shall be maintained regarding its utility.
- The mobile van and equipment shall be owned and maintained initially by BTSSO for 2 years to stabilize system establishment.
- On empowering the state agencies, the facilities with assets shall be transferred under an agreement for further maintenance and operation with an undertaking that the same shall be in force at least for a period of five years.
- Moth testers trained under ISDS or any other program shall be engaged from the local production clusters from the empanelled lists and the same composition shall continue for nucleus, basic and commercial seed production monitoring.
- The decision of joint disease monitoring team shall be final in ensuring the disease freeness and in continuing the effective seed processing.
- > BTSSO shall keep the balance funds after purchase of vehicle and testing equipment, if any in a separate bank account which can earn a higher interest for taking up the activity. Besides, BTSSO shall make necessary budgetary provisions towards engaging driver to meet fuel charges and maintenance, incidental charges etc., for the unit concerned.
- The implementing agency shall devise a mechanism to maintain the available funds towards fuel charges and maintenance as non-eroding corpus and may charge nominally for the services once the beneficiaries are educated on the importance of disease monitoring.
- The implementing agency shall meticulously follow the relevant points in general guidelines of CDP for XII Plan while implementing the component.

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Charina	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	50%	50%	-
Pattern	Special Category	90%	10%	_

7	Unit Cost	Physical Financial Projections (Rs. in crore)				
Zone	(Rs.)	Target	CSB	State	Beneficiary	Total
Applicable to all zones	6,10,000	20 No.	0.98	0.24	-	1.22

#### 5) Assistance to state departments for strengthening of eri farm-cum-grainages

#### a) Brief description:

Though required assistance has been provided towards strengthening of state owned seed multiplication infrastructure during X and XI Plan periods, the demand for eri basic and commercial seed has been consistently increasing over last one decade. The state departments are not equipped to meet the entire demand for want of sufficient facilities for seed crop rearing and grainage operations. The infrastructure and equipment required for preservation, processing and testing have become quite old and obsolete. Further, such seed multiplication units have paucity of funds for procurement of seed cocoons and are lacking modern tools for seed testing and alternate source of power for successful grainage operation successfully. Considering the need for augmenting and streamlining the seed production in the states, it is proposed to continue the existing scheme during XII Plan also. State eri farm-cumgrainage shall be strengthened with basic facilities/amenities like augmentation or replacement of old block plantations, construction of new buildings, repair/extension of rearing/grainage building to create desired facilities for seed cocoon preservation, coupling, oviposition, moth testing, incubation etc., along with running water supply, grainage equipment/consumables, standby power source and one time assistance of Rs.1.60 lakh is also proposed as revolving capital for procurement of seed cocoons during the first year of operation for seed production.

- Assistance shall be used for raising plantation, construction/repair/extension of grainage buildings/procurement of rearing, grainage and testing equipment.
- The component shall be implemented on the following lines:
  - Selection of government farm/CBOs/NGOs by a joint inspection committee comprising officers of DOS and CSB.
  - DOSs, NGOs, SHGs and societies associated with the multiplication of eri basic seed are eligible for assistance under the component. Existing seed production units may also avail assistance for specific works like repair of existing building, extension of building and additional essential equipments on prorata basis.
  - Construction of rearing-cum-grainage building (28' x 22') with 6' verandah all sides, with brick walls, concrete floor and roof with CGI sheet/zinc sheet rested on wooden frame and false ceiling.
  - Demarcation of facilities for seed cocoon preservation, coupling, oviposition, moth testing incubation and development of facilities for running water supply, generator, etc.
  - Procurement of equipment for seed cocoon preservation, processing and testing as per specification in the unit cost.
  - Institutionalization of facility for Fujiwara method of pebrine detection.
  - Each unit shall have an installed capacity to process 4.0 lakh seed cocoons for grainage to produce 100,000 dfls/year in four crops @ 25,000 dfls per crop.
- The field officer shall certify that the desired works have been undertaken as specified and the state/agency has not availed assistance for the same work from other programs of government or other agencies. DOSs shall coordinate for backward and forward linkages for sourcing basic seed, seed rearers and commercial rearers.
- The NGO/SHGs/societies availing support under CDP shall submit an undertaking to continue grainage activity for a minimum period of 5 years, failing which the government shall recover the subsidy disbursed to them. Similarly, if any of the stakeholders fails to implement the component or utilize the funds provided by the CSB and DOS for the purpose for which it is intended, the government shall have the right to recover the subsidy/grant provided to him. DOSs shall develop a suitable recourse mechanism through legally valid agreements/MOUs to deal with such instances and make them essential part of the implementation for CDP.
- Working capital provided to stakeholders for seed cocoon purchase shall have to be maintained in a bank

account and essentially be flowed back after completion of each cycle of the grainage activity to the account of stakeholder. DOS shall institute a monitoring mechanism to verify the flow of working capital and its utilization and maintenance for the purpose for which it is intended in the scheme on half-yearly/annual basis as deemed fit.

The performance of the unit shall be monitored by DOS on regular basis as per yearly target and maintain records of seed production and supply to the beneficiaries.

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Charina	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	50%	50%	-
Pattern	Special Category	90%	10%	_

7	<b>Unit Cost</b>	Physical	Financial Projections (Rs. in crore)				
Zone	(Rs.)	Target	CSB	State	Beneficiary	Total	
Applicable to all zones	12,48,000	12 farm-cum grainages	1.20	0.30	-	1.50	

#### 5A) Assistance to eri private graineurs

#### a) Brief description:

During XI Plan, the production and supply of eri silkworm seed was largely confined to state farm-cum-grainages, which were unable to cater to the entire requirement of quality commercial seed in the country. As a matter of fact the production of eri seed by a large number of farmers was unscientific and unhygienic. The practice had a bad impact on disease containment in the field and resulted in low productivity. It is, therefore, essential to involve private graineurs in the seed production chain to strengthen the eri seed multiplication system in the country.

The objective of the component is to organize the production of eri commercial seed by training and equipping the rural entrepreneurs to produce quality eri seed by following scientific procedure under the supervision of qualified and trained personnel of DOS/CBOs/NGOs. Eri private graineurs shall be linked with the adopted seed rearers for quality seed cocoons and the commercial cocoon producers for sale of F1 seed. The graineurs shall be assisted with necessary technical support, grainage building, improved moth testing facility (Fujiwara method) and consumables to produce 5,000 dfls/grainage operation.

- Assistance for setting up of eri private grainages shall be provided to the trained entrepreneurs in grainage activities.
- Eligible to trained entrepreneurs selected by DOSs/NGOs/societies/SHGs both in north-eastern and outside north-eastern regions.
- > The component shall be implemented on the following lines:
  - The grainage building of 30' x 12' with 5' verandah on two sides shall have walls built of local bricks and mortar, cemented floor, roof with thatched or zinc sheet material supported with false ceiling to maintain hygiene inside the grainage.
  - Building shall have a minimum of three rooms, one each for cocoon preservation, oviposition and microscopic examination with provision for egg washing and incubation. Equipment to preserve seed cocoons, coupling, oviposition, incubation, disinfection, microscopic examination etc., as per specification indicated in unit cost.
  - DOS shall collect beneficiary share and procure the equipment as per specifications given in the unit cost by following due procedures in vogue in their department and supply to beneficiary.

- The stakeholder shall get registered for certification towards seed production and to claim assistance.
- Purchase of seed cocoons from certified ASRs is a must as specified by the CSB (A) Act, 2006.
- One time assistance for working capital of Rs 8,000 shall be provided for purchase of seed cocoons from seed rearers.
- Each private graineur shall produce 5000 dfls/cycle and 20000 dfls/year with seed cocoon: dfl ratio of 4:1. The production shall reach the targeted level in the second year of commencement of assistance. The production and distribution shall be reported and monitored for each crop by a committee constituted by DOS.
- The field officer shall certify the development of infrastructure as per plan/specification, erection and use of equipment and shall also certify that the private graineur has not availed assistance for the same building/equipment from other programs of government or agencies. DOS shall support for backward and forward linkages for sourcing basic seed, generation of seed cocoons by seed rearers and supply of seed to commercial rearers.
- The NGO/SHGs, societies and stakeholders availing support under CDP shall submit an undertaking to continue grainage activity for a minimum period of 5 years, failing which government shall recover the element of subsidy disbursed to them. If any of the stakeholders fails to implement the scheme or utilize the funds provided by the CSB and DOS, the government shall have the right to recover the subsidy/grant provided to him. DOS shall develop a suitable recourse mechanism through legally valid agreements/MOUs to deal such instances and make them essential part of the implementation for CDP.
- Working capital provided to stakeholders for seed cocoon purchase shall have to be maintained in a bank account and essentially be flowed back after completion of each cycle of the grainage activity to the account of stakeholder. DOSs shall institute a monitoring mechanism to verify the flow of working capital and its utilization and maintenance for the purpose for which it is intended in the scheme on half yearly /annual basis as deemed fit.
- The performance of the private graineurs shall be monitored by DOS on regular basis as per yearly target and the records of assistance provided; seed production activities and the coverage of beneficiaries shall be maintained in the beneficiary passbook.

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Chavina	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	60%	20%	20%
railem	Special Category	80%	10%	10%

Zono	Unit Cost	Physical	Financial Projections (Rs. in crore)				
Zone	(Rs.)	Target	CSB	State	Beneficiary	Total	
Outside North-East	2,33,000	170 private	3.00	0.52	0.52	4.04	
North-East	2,40,000	graineurs	3.00	0.52	0.52	4.04	

#### 5B) Assistance to eri adopted seed rearers

#### a) Brief description:

The demand of eri silkworm seed has been increasing consistently. The seed multiplication infrastructure in the states alone is not sufficient to cater to the increasing demand for quality seed due to paucity of infrastructure, manpower and other resources. Under these conditions, farmers themselves are producing major quantity of the commercial seed in an unhygienic manner resulting in very low cocoon yield. Considering this, it is proposed to extend assistance to ASRs linking them with the state eri farm-cum-grainages and the private graineurs for supply of quality

seed cocoons. The involvement of adopted seed rearers in the seed production chain shall strengthen the three tier system of eri parental seed multiplication system in the country. Under the component, the seed rearers shall be assisted with necessary rearing equipments and tools to produce quality seed cocoons required for production of eri commercial seed.

#### b) Technical specifications/operational guidelines:

- Seed rearers supported by DOSs/NGOs/societies/SHGs both in north-eastern and outside north-eastern region are eligible for assistance. Rearers having systematic plantation of kesseru (450 plants/acre) or castor/tapioca (4000 plants/acre) shall be selected.
- Assistance shall be provided to the farmers selected in demarcated seed zones/areas only and linked with specific Eri farm-cum-grainages and the private graineurs for production of quality seed cocoons. The component shall be implemented on the following lines:
  - Maintenance of perennial plants for one acre in North-eastern region and castor/tapioca in nontraditional states with necessary inputs for maintenance of plantations to increase foliage yield.
  - DOS shall collect beneficiary share and procure the equipment as per specification given in the unit cost by following the due procedures in vogue in their department and supply to beneficiary.
  - Procurement of plastic trays (3'x 2' size) for incubation, black boxing and chawki rearing.
  - Erection of hooks and G.I. wire in rearing houses for adult stage bunch rearing in north-eastern states.
  - Procurement of equipment required for adult silkworm rearing of 50 dfls/crop in non-traditional states outside the North-eastern zone.
  - Regular disinfection and supply of bed disinfectants to minimize disease incidence and improve productivity.
  - Procurement of equipment and tools as per specifications in the unit cost.
  - The stakeholder shall get registered for certification towards seed cocoon production and to claim assistance.
  - Each seed rearer shall rear 50 dfls/crop.
- The field officer of DOS/implementing agency shall certify the utilization of plantations, supply and use of equipment after her/his visit to the beneficiary and also certify that the seed rearer has not availed assistance for the same equipment/purpose from other programs of government or other agencies.
- Equipment shall be supplied against an undertaking from the seed rearers/NGO/societies/SHGs about the continuation of seed cocoon production for a minimum period of 5 years after availing subsidy under the program failing which the government shall recover the subsidy disbursed to them. If any of the stakeholders fails to implement the scheme as per the scheme modalities or utilize the funds provided by the CSB/DOS for the purpose for which is intended, the government shall recover the subsidy/grant provided to him. DOSs shall deal with such instances legally through valid agreements/MOUs and make them essential part of the implementation for CDP.
- > The performance of the seed rearer shall be monitored by DOS on regular basis as per yearly target and record assistance provided, rearing conducted/seed cocoon produced/crop and the agencies to whom sold in the beneficiary passbook.

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Charina	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	60%	20%	20%
Falleili	Special Category	80%	10%	10%

<b>-</b>	Unit Cost	Physical	Fi	nancial Proj	rojections (Rs. in crore)			
Zone	(Rs.)	Target	t CSB State		Beneficiary	Total		
Applicable to all zones	16,000	2,000 rearers	2.46	0.37	0.37	3.20		

#### 5C) Up-gradation of state eri basic seed farm-cum-grainages

#### a) Brief description:

Systematic eri seed production and multiplication in the country can be achieved through involvement and upgrading of state units for the basic seed multiplication. Therefore, during XII Plan, it is proposed to upgrade some of the state farm-cum-grainages into full-fledged basic seed farm-cum-grainages (P2) to meet the much required P1 dfls. These units shall receive the nucleus seed (for rearing at P2 level) from CSB and undertake P1 seed production and supply to state farm-cum-grainages/ASRs for the generation of seed cocoons required for commercial (F1) seed production units like private graineurs. Considering the above, it is proposed to upgrade the existing state eri farm-cum-grainages to eri basic seed farm-cum-grainages (P2 level) with basic facilities like augmentation or replacement of old block plantations of food plants, repair/renovation /extension of rearing and grainage buildings equipped with facilities for seed cocoon preservation, coupling, oviposition, moth testing and incubation etc., along with running water supply, rearing and grainage equipments, consumables and standby source of power for basic seed production.

- Existing state eri farm-cum-grainages only are eligible. DOSs can avail support for all or any of the sub-components envisaged in the scheme as per need, based on the report of joint inspection committee having representatives from CSB and DOS.
- Assistance shall be extended for construction of new building/repair or extension of existing buildings/need based rearing/grainage equipment for up-gradation to basic seed farm-cum-grainages.
- The component shall be implemented on the following lines:
  - Raising of systematic plantation of eri food plants in 4 acres by following package of practices developed by research institutes of CSB.
  - Repairing/renovation of two rearing houses as per plan, each with a capacity to rear 100 P2 dfls/crop.
  - Renovation/extension of existing grainage houses as per Plan along with running water supply, generator room, septic tank, electricity etc., to process 40,000 seed cocoons/cycle and produce 8000 basic (P1) dfls/cycle.
  - Demarcation of facilities for seed cocoon preservation, coupling, oviposition, moth testing, incubation etc.
  - Creation of facility for Fujiwara method of pebrine detection for ensuring production and supply of disease free basic seed.
  - Procurement of rearing and grainage equipment/appliances/consumables as per specifications in unit cost.
  - Each unit shall have an installed capacity to rear 800 P2 dfls /year @ 200 P2 dfls/crop. Thus, each unit can produce 8000 to have installed capacity to produce 8000 P1 dfls/crop and 32000 dfls/year.
- > State shall develop backward and forward linkage for utilizing the services of the unit to cater to the requirement for P1 dfls of seed rearers linked to state farm-cum-grainages and private graineurs.
- The field officer shall certify that the works were undertaken as per the Plan/specification and also the state /agency has not availed assistance for the same work from other programs of government or other agencies.

- The NGO/societies/SHGs availing support under CDP shall submit an undertaking to continue grainage activity for a minimum period of 5 years, failing which government shall have right to recover the subsidy disbursed to them. If any of the stakeholders fails to implement the scheme as per the scheme modalities or utilize the funds provided by the CSB/DOS for the purpose for which is intended, the government shall recover the subsidy/grant provided to them. DOSs shall deal with such instances legally through valid agreements/MOUs and make them essential part of the implementation for CDP.
- The performance of the unit shall be monitored by DOS on regular basis as per yearly target and maintain records of seed production and supply to linked units/beneficiaries.

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Chavina	State Category	CSB	State	Beneficiary
Sharing	General Category	50%	50%	-
Pattern	Special Category	90%	10%	-

7	_ Unit Cost Physical				Financial Projections (Rs. in crore)				
Zone	(Rs.)	Target CSB		State	Beneficiary	Total			
Applicable to all zones	12,38,000	10 farm-cum grainages	0.97	0.27	-	1.24			

#### 5D) Assistance for establishment of self-help eri grainage (SHEG) units

#### a) Brief description:

A large quantity of eri silkworm seed is produced in private sector in an unhygienic manner resulting in low productivity. To develop organized eri seed supply system, it is proposed to utilize the skill of the rearers and organize them at village level into SHEGs. Each SHEG shall have 20 eri farmers and act as a local grainage facility. Such 20 SHEGs shall be linked to state eri seed farm-cum-grainages for training on technical support, disease monitoring and other assistance.

The development of SHEGs at village level shall strengthen the seed production network in the country. Each SHEG unit shall be assisted for group formation, capacity building, equipment, tools and working capital to produce 4000 dfls/year to cater to the annual requirement of seed for the group.

- Assistance shall be provided to the SHEGs only.
- > SHEGs selected and trained by DOSs/NGOs/societies/SHGs only are eligible for production of eri seed in North-eastern states.
- The component shall be implemented on the following lines:
  - Self Help Group formation of selected eri rearers to be done based on established model of NABARD quidelines.
  - Group of 20 eri rearers to form a SHEG as per norms to produce commercial seed to cater their requirement.
  - SHEG shall avail specific training for eri seed production under Beneficiary Empowerment Program or other similar training programs.
  - Equipment and tools shall be procured by SHEG as per specification in the unit cost under the direct supervision of local sericulture officer linked to SHEG.
  - State farm-cum-grainages/CBOs/NGOs shall support organization of SHEGs, train them in seed production processes, supply P1 seed/seed cocoons & grainage equipments and assist them in moth examination for disease monitoring.

- One time assistance of Rs. 2000 shall be extended to SHEG as working capital for purchase of seed cocoons from seed rearers. Account shall be maintained and monitored as per SHG guidelines.
- Each SHEG shall produce 1000 dfls /crop and 4000 dfls /annum to meet the requirement of the group members.
- DOS shall develop backward and forward linkage for utilizing the services of the SHEG to cater requirement for P1 dfls of seed rearers linked to SHEG and disease monitoring.
- > The field officer of DOS shall certify that supply and use of equipment has been done as per specification/guidelines and also shall certify that the SHEGs have not availed any assistance for the same purpose/equipment from other programs of government or other agencies.
- Support shall be extended against an undertaking from the SHEGs /NGO/societies for the continuation of commercial seed production for a minimum period of 5 years after availing subsidy under the program failing which government shall have right to recover the subsidy disbursed to them. If any of the SHEGs fails to implement the scheme as per the scheme modalities or fails to utilize the funds provided by the CSB/DOS for the purpose for which is intended, the government shall recover the subsidy/grant provided to them. DOSs shall deal with such instances legally through valid agreements/MOUs and make them essential part of the implementation for CDP.
- The performance of the SHEGs shall be monitored by linked state farm-cum-grainages on regular basis as per yearly target and maintain record of assistance provided, seed production/cycle and the utilization.

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Charina	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	60%	20%	20%
FaileIII	Special Category	80%	10%	10%

7	Unit Cost	Physical	Fi	nancial Proj	ections (Rs. in	crore)
Zone	(Rs.)	Target	CSB	State	Beneficiary	Total
Applicable to all zones	8,400	250 SHEGs	0.16	0.03	0.02	0.21

#### 5E) Mobile testing and certification units

#### a) Brief description:

Majority of the eri silkworm seed is produced in private sector. It is necessary to undertake surveillance of eri silkworm seed production to ensure disease freeness of seed cocoons and seed produced by them. To undertake this task, mobile testing and certification units shall be necessary for helping in disease surveillance and monitoring the existing grainage facilities in seed areas or likely to be established in the government/private sector both in the muga and eri sectors during XII Plan.

The mobile testing and certification units shall be operated by CBOs/NGOs trained for the purpose and shall function under the guidance and monitoring of the muga/eri silkworm seed organization (MSSO/ESSO). The units shall be supported with a customized pick-up van having all necessary equipment/facilities for disease management and identification using Fujiwara method of testing.

- The mobile van and equipment shall be owned and maintained initially by MSSO/ESSO for 2 years to stabilize system establishment.
- > On empowering the state agencies, the facilities with assets shall be transferred under an agreement for

further maintenance and operation for a minimum period of 5 years.

- > CBOs/NGOs selected and trained by DOS/MSSO only are eligible.
- The component shall be implemented on the following lines:
  - CBOs/NGOs shall be intensively trained by the MSSO/ESSO in disease management and identification.
  - Pick-up van shall be purchased and customized to accommodate all testing equipment/consumables along with sitting arrangement (four seater) as per specification in unit cost. Testing equipment, chemicals, glass ware, consumables etc., shall be procured in line with basic seed production units (BSPU).
  - DOSs/CBOs/NGOs shall select moth testers and train them at MSSO units under beneficiary empowerment program or others.
  - Fuel charges, maintenance and incidental charges (engaging driver) shall be borne from the seed organization component of MSSO/ESSO.
  - MSSO units shall guide and regulate use of mobile testing and certification units for disease monitoring based on the on-going programs for seed crop rearing and grainage operations in the field in association with respective DOSs.
  - The joint monitoring team comprising representatives from MSSO, CMERTI, DOSs shall inspect the assistance and functioning.
- The field officers of DOS and MSSO shall certify that the supply and use of mobile testing and certification units is undertaken as per the specification/guidelines and shall also certify that the CBOs/NGOs have not availed assistance for the same purpose/equipment from other programs of government or other agencies.
- Mobile testing and certification units shall be handed over to selected NGO/CBOs against an undertaking for the continuation of disease surveillance/monitoring for a minimum period of 5 years failing which government shall have right to recover the subsidy disbursed to them. If any of the stakeholders fails to implement the scheme as per the scheme modalities or utilize the funds provided by the CSB/DOS for the purpose for which is intended, the government shall recover the subsidy/grant provided to him. DOSs shall deal with such instances legally through valid agreements/MOUs and make them essential part of the implementation for CDP.
- The performance of the mobile testing and certification units shall be monitored by MSSO/DOS on regular basis during seed crops and grainage operations and the record of samples collected and tested shall be maintained.

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Charina	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	60%	20%	20%
Pattern	Special Category	80%	10%	10%

7	Unit Cost	Physical	Fit	nancial Proj	ections (Rs. in	crore)
Zone	(Rs.)	Target	CSB	State	Beneficiary	Total
Applicable to all zones	6,70,000	23 No.	1.24	0.15	0.15	1.54

#### 6) Assistance to muga private graineurs

#### a) Brief description:

Global warming resulted in climate variation and increased level of pollution has posed the toughest challenge in the process of muga seed multiplication. Hence there is a need for focused approach in muga seed multiplication to achieve the desired quality and quantity of muga seed in time so as to reach the XII Plan target of 200 MT. Muga seed production is basically an entrepreneurial activity with over 1782 private graineurs and the overall production capacity is 133.65 lakh dfls/year. With the present production less than 120 lakh dfls/year and is running at 85% of envisaged target with production of 115 lakh dfls/year. Increased seed demand of 200 lakh/year and need for quality and disease free seed production has been addressed through quality inputs like well planned building, equipment and support facilities including working capital.

During XII Plan, it is proposed to continue the scheme with a prime objective to produce quality and disease free seed under private sector. The component proposes to enhance the production base of muga seed in the organized sector to additional 25 lakh dfls/year at 10000 dfls/unit as a major step towards expanding the seed multiplication network under quality multiplication system in a phased manner. Emphasis has been made to provide the latest testing and certification tools for commercial seed producers backed by training and follow-up for checking pebrine disease.

- Identification of stakeholders for assistance shall be solely need based and location specific and suitability shall be decided by a committee comprising officers of MSSO and CMERTI on pre-determined conditions based on demand and production capacity in the region where commercial seed is required and facilities for quality and disease free seed cocoon generation is available.
- The stakeholder shall get registered for certification towards seed production and to claim assistance.
- Preference shall be given to an experienced ASRs with good record of successful rearing performance and Pebrine freeness. Few private sector farms like CBO/SHGs may be considered for assistance subject to meeting all the requirements.
- Selected beneficiary shall ensure hassle free seed production in the needy commercial season which is mandatory.
- Water supply, electricity connection shall be ensured by the beneficiary.
- Construction of the building shall be the responsibility of the seed producer as per the design and specifications.
- Beneficiaries shall have to purchase the seed cocoons from certified ASRs adhering to all the conditions as specified by the CSB (A) Act, 2006.
- Working capital shall be provided through banks only and book of accounts shall be maintained and produced when demanded.
- An action plan for seed cocoon generation, seed production and distribution shall be in place at the time of seeking assistance.
- Any post-cocoon activity like reeling and weaving or other sector (mulberry, eri and tasar) activity shall not be taken up in the vicinity or premises.
- > Equipment status and additional needs shall be supported as per the list.
- DOS shall collect beneficiary share and procure the equipment as per specification given in the unit cost by following the due procedures in vogue in their department and supply to beneficiary.
- Working capital provided to stakeholders for seed cocoon purchase shall have to be maintained in a bank account and essentially be flowed back after completion of each cycle of the grainage activity to the account of stakeholder. DOSs shall institute a monitoring mechanism to verify the flow of working capital and its utilization and maintenance for the purpose for which it is intended in the scheme on half-yearly/annual basis as deemed fit.

- Maintenance of hygiene and quality food plant shall get top priority.
- From the second year of commencement of assistance, the production shall reach the targeted level. Production and distribution shall be reported and monitored for each crop by a committee.
- All types of assistance shall be extended after executing tripartite agreement/MOU where the rights of assets and materials supplied shall be vested with the government till such time as specified by the committee

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Charina	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	60%	20%	20%
Pattern	Special Category	80%	10%	10%

Zone	Unit Cost (Rs.)	Physical Target	Financial Projections (Rs. in crore)			
			CSB	State	Beneficiary	Total
Applicable to all zones	2,55,000	140 graineurs	2.79	0.39	0.39	3.57

# 6A) Assistance to existing muga private graineurs for up-gradation of seed production capacity

#### a) Brief description:

Muga culture is unique and pride of India; however, there is a serious threat to continuance of this exclusive culture. Variation in climate and increased level of pollution have posed the toughest challenge in the process of muga seed multiplication. Hence there is a need for focused approach in muga seed multiplication to achieve the desired quality and quantity of muga seed in time so as to reach the XII Plan target of 200 MT. Muga seed production is basically an entrepreneur activity with over 1782 private graineurs in the field with CDP assistance and the overall production capacity is 133.65 lakh dfls/year. The present seed production is operating at 85% of envisaged target with the production of 115-120 lakh dfls/year.

Due to increased demand for seed at 200 lakh per year by the end of XII Plan, there is a need to ensure enhanced production of quality and disease free seed and to ensure production to full capacity. These requirements have been addressed through quality inputs for up-keeping the building with need based modifications, testing and certification equipment and support facilities including working capital.

This innovative scheme is aimed to assist private sector to produce quality and disease free certified seed. The component proposes to improve quality of muga seed in the organized sector by optimizing seed production to full capacity by assisting 350 units as a major step towards expanding the seed multiplication network under quality multiplication system in a phased manner. Emphasis has been made to provide the latest testing and certification tools for commercial seed producers backed by training and follow-up for checking Pebrine disease.

- Identification of graineurs for assistance/strengthening shall be based on 'active seed production and distribution' records and certified by the respective local officers followed by endorsement from an independent committee constituted for the purpose.
- > The beneficiary shall get registered for seed production certification and for claiming the assistance.
- Preference shall be given to experienced seed producer who has undergone training in the latest seed production techniques and certification methodology.
- Selected beneficiary shall ensure hassle free seed production in the needy commercial season.

- Water supply and electricity connection shall be ensured by the beneficiary.
- Construction/modification of the building shall be the responsibility of the seed producer as per the approved design and specifications.
- Purchase of seed cocoons must be from certified ASRs adhering to all the conditions as specified by the CSB (A) Act, 2006. Working capital shall be provided through banks only and subject to proper maintenance of accounts.
- Working capital provided to stakeholders for seed cocoon purchase shall be maintained in a bank account and essentially be flowed back after completion of each cycle of the grainage activity to the account of stakeholder. States shall institute a monitoring mechanism to verify the flow of working capital and its utilization and maintenance for the purpose for which it is intended in the scheme on half-yearly/annual basis as deemed fit.
- An action plan for seed cocoon generation, seed production and distribution shall be in place for verification at the time of seeking assistance.
- Any post-cocoon activity like reeling and weaving or other sector (mulberry, eri and tasar) activity shall not be taken up in the vicinity or premises.
- Equipment status and additional needs as per the list only shall be supported.
- DOS shall collect beneficiary share and procure the equipment as per specification given in the unit cost by following the due procedures in vogue in their department and supply to beneficiary.
- Hygiene and quality shall get top priority.
- From second year of commencement of assistance, the production shall reach the targeted level. Production and distribution list shall have to be submitted for monitoring by a committee.
- All types of assistance extended after executing a tripartite agreement /MOU where the rights of assets and materials supplied shall be vested with the government till such time as specified by the committee.

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Sharing Pattern	State Category	CSB	State	Beneficiary
	General Category	60%	20%	20%
	Special Category	80%	10%	10%

Zone	<b>Unit Cost</b>	Physical Target	Financial Projections (Rs. in crore)			
	(Rs.)		CSB	State	Beneficiary	Total
Applicable to all zones	82,000	225 graineurs	1.41	0.22	0.22	1.85

# 7) Assistance to state departments for strengthening of muga seed multiplication infrastructure (P2)

#### a) Brief description:

Muga culture is unique and pride of India; however, there is a serious threat for continuance of this exclusive culture. Muga seed multiplication is passing through the toughest challenge of the century with climate change and pollution being the main factors. Therefore, there is a need for a focused approach to get the desired quality seed. P2 level rearings in summer (Aherua: June - July) are severely affected due to high temperature and high humidity and in winter seasons (Jarua: November - January) due to extreme low temperature. Hence, there is a need to focus on the controlled rearings in selected locations by improving overall infrastructure. P2 level basic seed rearing is the vital link

which meets the basic seed requirement by the end of XII Plan period. It is proposed to continue this component with a renewed specific mandate of rearing P2 level crops. The scheme is aimed to produce P1 dfls for summer link (Bhodia) and winter link (Chotua). The component aims to enhance production of P1 basic seed from organized government sector to at least 9.00 lakh dfls at 60000/unit as a major initiative towards bringing the basic seed multiplication under quality multiplication system.

Considering the dire necessity for infrastructure improvements in state government farms, the component is planning to provide overall support to improve the farm plantation for rearing including new plantation/replacement with high yielding variety. Support is also extended to meet the additional facilities for the basic seed production, equipment and also one time capital assistance.

# b) Technical specifications/operational guidelines:

- Identification of farm/unit for assistance/strengthening shall be solely based on ideal location to ensure successful summer and winter P2 crops and decided by a committee comprising representatives of MSSO, CMERTI, DOS and a lead ASR with vast experience in muga rearing. In exceptional cases, private sector units like CBO shall be considered for assistance.
- Present status of plantation, past rearing performance, seed production activity, disease freeness and details of future expansion/development of surrounding areas that may cause pollution shall be the criteria for selection of farm for assistance.
- DOS shall ensure posting of required staff and supporting workers for continuing the activity.
- Minimum 4 acre muga food plantation and sufficient place for construction of operational buildings shall be ensured. Farm shall have the capacity to rear 800 P2 dfls (from MSSO), to produce 50000 cocoons and to process 40000 seed cocoons.
- Additional requirement of 1.1 lakh seed cocoons for full capacity (1.5 lakh) season production shall be sourced from nearby selected ASRs to whom the CDP support shall be extended under ASR assistance component. An action plan for seed cocoon generation, seed production and distribution shall be in place at the time of seeking assistance.
- Any post-cocoon activity like reeling and weaving or other sector (mulberry, eri and tasar) activity shall be discontinued before identification.
- Present status of operational buildings, their repairs, need for new buildings (as per the minimal requirement) and estimated cost shall be vetted by the committee.
- > Equipment status and additional needs as per the list only shall be supported.
- > P2 rearing and subsequent P1 seed production only shall be taken up.
- Water and power supply shall be ensured by the DOS.
- From third year of commencement of assistance, the production shall reach the targeted level. Production and quality shall be reported and monitored by a committee.

The activities required under the component along with its cost break-up details are indicated in the (refer Unit Cost book) of the component.

#### C) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Charing	States Category	CSB	State	Beneficiary
Sharing Pattern	General Category	50%	50%	_
Fattern	Special Category	90%	10%	_

7	Unit Cost	Physical	ections (Rs. in	crore)		
Zone	(Rs.)	Target	CSB	State	Beneficiary	Total
Applicable to all zones	30,99,000	10 farm-cum grainages	2.54	0.56	-	3.10

# 7A) Assistance for establishment of muga P3 basic seed production units

# a) Brief description:

Muga seed multiplication is facing the toughest challenges with variation in climate and pollution being the main factors, thus requiring a focused approach to get the desired quality seed in time. With increased silk production target of 200 MT envisaged for XII Plan, quantum of P3 dfls rearing has increased. MSSO which was taking till today full responsibility to rear P3 and produce the required P2 dfls, has now felt that there is a need to shift the responsibility partially to other players *viz.*, state government and selected farmer consortiums etc., to meet the demand.

The innovative scheme is aimed to produce quality P2 dfls for summer link (Aherua) and winter link (Jarua) and supply to selected P2 centres and ASRs. Selected state farms/private farmers shall be elevated to P3 level basic seed rearing. The assistance to few farms is to meet the basic seed production by the end of XII Plan period. This component is proposed with a specific mandate for rearing P3 level crops to produce quality and disease free P2 seed. The component aims to enhance production of P2 basic seed in the organized government sector to at least 2 lakh dfls at 20000/unit as a major step towards expanding the basic seed multiplication network under quality multiplication system in a phased manner.

Considering the need for infrastructure improvements in selected state farms, the component is to provide overall support to improve the farm plantation and rearing including new plantation/replacement with high yielding variety. Support is also extended to meet the additional basic seed production facilities, equipment for quality seed production.

- > Assistance shall be extended to state farms and selected farmer consortiums.
- The farmer consortium shall have own land with required plantation. Identification of farms/unit for assistance/strengthening shall be solely based on successful P3 crops and suitability shall be decided by a committee comprising officers of MSSO, CMERTI and respective state representative on predetermined factors for quality and disease free seed cocoon generation. Few private sector farms like CBO units may be considered for assistance subject to meeting all the requirements.
- An undertaking shall be executed among DOS, farmer consortium and CSB on rearing and seed production as per the plan of action of MSSO.
- Only good record of successful rearing performance and pebrine free record is mandatory.
- Present status of plantation, past rearing performance, seed production activity, disease freeness and details of future expansion/development of surrounding areas that may cause pollution shall be the criteria for selection of farm for assistance.
- DOS shall ensure posting of required staff and supporting workers for continuing the activity. Complete protection, water and electricity supply etc., shall be ensured by the DOS.
- Minimum of 2 acre good muga food plantation and sufficient place for construction of operational buildings shall be ensured. Farms shall have to rear 500 P3 dfls/crop (from MSSO) to produce 30000 cocoons and select 20000 for production of 5000 P2 seed. Annual production shall be 10000 P2 dfls/unit.
- An action plan for seed cocoon generation, seed production and distribution shall be in place at the time of seeking assistance.
- Any post-cocoon activity like reeling and weaving or other sector (mulberry, eri and tasar) activity shall not be taken up in the near vicinity.
- Plantation needs limiting to Rs.31,000/acre shall be accessed and recommended by the committee based on request from DOS.
- Present status of operational buildings, repairs, need for new buildings and estimated cost shall be vetted by the committee.
- Equipment status and additional needs shall be supported as per the list.

Beneficiary

- P3 rearing and subsequent P2 seed production only shall be taken up. No commercial and miscellaneous activities shall be introduced in between.
- > Hygiene and quality food plant maintenance shall be of top priority.
- From 3rd year of commencement of assistance, the production shall reach the targeted level. Production and quality shall be reported and monitored for each crop by a committee.

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

State

## c) Physical targets and financial projections:

**State Category** 

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

CSB

P3 units

Pattern	General (	Category	/	60%	20%	20%		
Pattern	Special C	Category	•	80%	10%	10%		
7	Unit	Cost	Physi	ical	Fi	nancial Proj	ections (Rs. in	crore)
Zone	(R	ls.)	Targ	jet	CSB	State	Beneficiary	Total
Applicable to	20,3	5,000	6	-ita	0.90	0.16	0.16	1.22

# 7B) Assistance to muga adopted seed rearers

# a) Brief description:

all zones

Muga seed multiplication is passing through the toughest challenge of the century with climate change and pollution. These are the main factors in disarraying the seed mechanism and thus there is a need for focused approach to get the desired quality seed in time. With increased silk production target of 200 MT envisaged for XII Plan, muga seed production is dependent on private graineurs and the overall production quality of seed is not meeting the required standards. The basic input, *i.e.*, seed cocoon and its proper linkage and coordination with seed crop rearer and seed producer needs to be strengthened.

The need for quality seed cocoon can be ensured by carefully identifying the seed crop rearer and supporting the core needs such as inputs, facilities and right linkage to seed producer. The need for quality and disease free seed cocoon production can be addressed through quality inputs like well planned mounting hall to ensure proper protection and ideal spinning, equipment for securing rearing, farm inputs and disinfectant support.

The component during XII Plan is innovative aiming at assisting large number of ASRs, enhancing production base of muga seed cocoon covering an area of 4500 acres rearing of 18.00 lakh basic seed and generating 180-200 lakh dfls; a major step towards expanding the seed multiplication network under quality multiplication system in one go.

- Identification of stakeholder for assistance shall be solely need based and location specific and eligibility decided by a committee comprising MSSO and CMERTI on predetermined conditions based on demand and production capacity in the region where commercial seed is required and where facilities for quality and disease free seed cocoon generation is available.
- The stake holder shall get registered for certification towards seed production and to claim assistance.
- Preference shall be given to experienced ASR with good record of successful rearing performance and Pebrine freeness. Few private sector farms like CBO/SHGs may be considered for assistance subject to meeting all the requirements.
- Selected beneficiary shall ensure hassle free seed production in the needy commercial season which is mandatory.
- Water supply, electricity connection shall be ensured by the beneficiary.

- Construction of the building shall be the responsibility of the seed producer as per the design and specifications.
- > The seed cocoons shall have to be purchased from certified ASRs adhering to all the conditions as specified by the CSB (A) Act, 2006. Working capital shall be provided through banks only and books of account shall be maintained and produced when demanded.
- An Action Plan for seed cocoon generation, seed production and distribution shall be in place at the time of seeking assistance.
- Any post-cocoon activity like reeling and weaving or other sector (mulberry, eri and tasar) activity shall not be taken up in the vicinity.
- > Equipment status and additional needs shall be supported as per the list.
- DOS shall collect beneficiary share and procure the equipments as per specification given in the unit cost by following the due procedures in vogue in their department and supply to beneficiary
- > Hygiene and quality food plant maintenance shall get top priority.
- From 2nd year of commencement of assistance, the production shall reach the targeted level. Production and distribution list shall be reported and monitored for each crop by a committee.
- All types of assistance extended after executing tripartite agreement /MOU where the rights of assets and materials supplied shall be vested with the government till such time as specified by the committee.

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical Targets and financial projections

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Charina	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	60%	20%	20%
Pattern	Special Category	80%	10%	10%

7	Unit Cost	Physical	ections (Rs. in	crore)		
Zone	(Rs.)	Target	CSB	State	Beneficiary	Total
Applicable to all zones	74,500	2,900 rearers	16.98	2.32	2.31	21.61

# II Vanya cocoon

# 1) Support to rearers for augmentation of tasar host plantation

#### a) Brief description:

Augmentation of tasar host plants is a major tool to increase the productivity and it has been found that the efficiency of rearer in block plantation rearing shall lead to better results. The program of raising block plantation for tasar host plants in private and govt. waste lands and its successful demonstration during XI Plan through CDP and other development initiatives *viz.*, Special SGSY, NABARD-TDF, and TWC projects has promoted the tribal areas to take up tasar rearing with remunerative returns. The augmentation of tasar host plantation has helped to conduct seed rearing in isolated clusters thereby augmenting tasar silkworm seed production too. The successful raising and maintenance of systematic tasar block plantation by the tribals when compared to their dependency on natural plantation has motivated more tribal youth to involve in tasar culture.

Besides the individual tasar rearers, SHGs, women groups, VSSs, TVSs etc., shall also be encouraged to raise 1.0 ha of new systematic plantation of food plants for tasar silkworms in private and govt. waste lands with 10% area reserved for chawki rearing to improve the cocoon yield. When systematic plantations are raised in forest lands, joint forest management group shall be involved in decision-making. Under the component, each beneficiary or SHG

shall be assisted with supply of seedlings, cost for plantation development, inputs, soil conservation measures etc. It has been found that 10' x 6' or 8' x 8' spacing shall facilitate intercultural operations with power tiller or tractor and also intercropping shall improve soil health besides additional income during the gestation period of tasar food plants. Application of inputs *viz.*, vermi-compost, soil moisture conservation through staggered trenching and adoption of 30' x 40' models and protecting plantation by digging cattle proof trenches as also engaging cattle guard shall result in improving the leaf quality.

# b) Technical specifications/operational guidelines:

- Assistance shall be extended preferably to the tasar rearers with more than 1.0 ha land and implementing agency shall take care to select rearers so as to raise plantations in contiguous patches of at least 12-15 ha. As for as possible, the rearers shall be member/s of SHG to build in maintenance modalities effectively.
- The implementing agencies shall have the flexibility of selecting rearers with more than 0.75 ha and up to 1.50 ha in order to raise block plantations in clusters of about 25 ha to suit requirement of seed rearing. Utmost care needs to be taken by the implementing agency for raising seedlings in nearby area to reduce the transplantation loss and transportation costs. The agency may decide on the composition of fertilizers based on soil analysis and quality, besides raising suitable intercrop as per the recommendations of CTR&TI, Ranchi.
- Assistance shall be extended under the scheme subject to undertaking from the identified tasar rearers that they shall take up silkworm rearing as per the requirement (either seed or commercial seed) at least for five years. Beneficiary share shall be their labour contribution in the activity.
- The implementing agency shall make all entries related to the assistance extended, crop particulars, production, productivity, returns etc in the beneficiary passbooks provided by them to the beneficiary from time to time.
- The implementing agency shall meticulously follow the relevant points of general guidelines of CDP for XII Plan while implementing the component. The implementing agency shall also coordinate with the relevant line departments *viz.*, soil conservation, agriculture to introduce intercropping and soil treatments etc, to sustain the rearer's interest on during the gestation period.

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

# c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Charing	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	60%	20%	20%
rattern	Special Category	80%	10%	10%

7	Unit Cost Physical Financial Projections (Rs. in cro					crore)
Zone	(Rs.)	Target	CSB	State	Beneficiary	Total
Applicable to all zones	40,000	12,000 ha	34.56	6.72	6.72	48.00

# 1A) Assistance to beneficiaries for raising tasar food plant seedlings (kisan nurseries)

# a) Brief description:

While CDP scheme and other development initiatives *viz.*, special SGSY, NABARD-TDF, TWC projects helped to raise block plantation of tasar host plants in private and govt. waste lands, no specific system is employed to raise the seedlings of tasar host plants following the recommended technologies, which would have helped better survival and reduction in gestation period. Further, as raising seedlings of tasar host plants at individual level may not be

economical, the same needs to be raised at cluster level to make it an independent and manageable enterprise. At the same time, care needs to be taken that cost of transportation of seedlings is kept to the minimum.

In view of the successful interventions on pilot scale by some tribal youth under special SGSY and NABARD-TDF projects in raising seedlings on mass scale, it is proposed to replicate similar models during XII Plan with CDP assistance. For the purpose, interested tasar rearers, SHGs, women groups, VSSs, TVSs etc., shall be encouraged to plant about 70,000 seeds in 100 beds, to raise about 55,000 seedlings. Since it is envisaged to raise block plantations in clusters so as to utilize the same for rearing seed crops, 55000 seedlings would be sufficient to raise 25 ha at 3.0 m x 1.8 m spacing including 10% mortality during transplantation and establishment.

#### b) Technical specifications/operational guidelines:

- Each nursery unit shall be raised in the area of coverage for all the related activities.
- Priority shall be to identify unemployed, educated tribal youth or women SHGs or TVSs for the said activity. They shall contribute the beneficiary share mainly through meeting locally available material and also the labour.
- > The implementing agency shall make all entries related to the assistance extended, crop particulars, production, productivity, returns etc., in the beneficiary passbooks provided by them to the beneficiary from time to time.
- The implementing agency shall meticulously follow the relevant points of general guidelines of CDP for XII Plan while implementing the component.
- The implementing agencies shall ensure selection of sites with irrigation facility to water seedlings as per schedule. The implementing agency shall take necessary care for raising seedlings at suitable locations so as to reduce the transplantation loss and transportation costs. Assistance shall be extended subject to undertaking from the beneficiary to the effect that the activity shall be undertaken for the entire Plan period of 5 years, with one time assistance. However, implementing agency shall ensure sale of seedlings by linking it with augmentation of tasar host plants under various schemes including CDP.
- Implementation agency shall also ensure that the beneficiary shall follow the requirements of growing medium, collection of seed from plus trees, minimum 80% germination, provisions for gap filling, so as to achieve optimum survival after transplantation.

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

# c) Physical targets and financial projection:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Charina	State Category	CSB	State	Beneficiary
Sharing	General Category	60%	20%	20%
Pattern	Special Category	80%	10%	10%

_	Unit Cost	Physical	Fit	nancial Proj	ections (Rs. in	crore)
Zone	(Rs.)	Target	CSB	State	Beneficiary	Total
Applicable to all zones	80,000	300 nursery units	1.73	0.33	0.34	2.40

# 1B) Assistance to tasar commercial rearers for development of chawki garden

#### a) Brief description:

Though raising block plantation of tasar host plants in private and govt. waste lands was taken up to cater needs of seed rearings partially, commercial rearers have to however depend on natural host flora in the fringe forest areas or in the rejuvenated patches or on the bund trees in the paddy field. In these areas, tasar silkworm rearing is carried mostly on trees of 12-15' height or more. Though these plantations are suitable for late age rearing, the leaf quality may not be suitable to young age silkworm rearing. Further, these plantations are mostly away from the dwellings of tasar

rearers and rearing from brushing onwards shall involve more labour besides larval mortality. In addition, block plantations also raised under other schemes/projects *viz.*, MGNREGS, RKVY etc., in few states with wider spacing is suitable for late age silkworm rearing. Based on recommendations of CTR&TI, Ranchi it is advisable to rear young age tasar silkworms in exclusive chawki garden under nylon nets for better ERR, cocoon quality and rearing management.

It is, therefore, proposed to assist tasar commercial rearers to establish chawki gardens at 0.1 ha per rearer with 1.8 m x 1.8 m spacing suitable for young age silkworm rearing under nylon nets. Chawki gardens shall be raised together by a group of farmers in govt. waste land or community land close to natural host flora. This shall facilitate young age rearing in chawki gardens followed by late age rearing in grown up trees. Besides the individual tasar rearers, SHGs, women groups, VSSs, TVSs etc., shall be encouraged for taking up the activity with necessary linkages.

When systematic plantations are raised in forest lands, the joint forest management group shall be involved in decision making. Each beneficiary or SHG shall be assisted with supply of seedlings, cost for plantation development, inputs, soil conservation measures etc. Intercropping to improve soil health and to earn additional income during the gestation period shall also be part of the component. Other practices, as in case of block plantations shall be followed while raising chawki gardens.

# b) Technical specifications/operational guidelines:

- The implementing agencies shall have the flexibility of selecting land belonging to individual rearers, community land, govt. waste land or forest land based on the requirement near to the vicinity of natural host flora. The implementing agency shall take care to select rearers so as to raise plantations in contiguous patches of at least 2-4 ha. As far as possible, the rearers shall be member/s of SHG to build in maintenance modalities effectively.
- The implementing agency shall ensure raising of seedlings in nearby area of natural plantation to reduce the transplantation loss and transportation costs. They shall also ensure adherence to the recommendations of CSB regarding package of practices.
- Each unit of chawki garden shall support young age silkworm rearing of 300 dfls. Beneficiary share shall be their labour contribution in the activity.
- The implementing agency shall make all entries related to the assistance extended, crop particulars, production, productivity, returns etc., in the beneficiary passbooks provided by them to the beneficiary from time to time.
- The implementing agency shall meticulously follow the relevant points of general guidelines of CDP for XII Plan while implementing the component.

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

#### Physical Targets and financial projections

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Charina	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	60%	20%	20%
Pattern	Special Category	80%	10%	10%

7	Unit Cost	Physical	Fit	nancial Proj	ections (Rs. in	crore)
Zone	(Rs.)	Target	CSB	State	Beneficiary	Total
Applicable to all zones	6,300	4,000 rearers	1.81	0.36	0.35	2.52

# 1C) Assistance to tasar rearers for maintenance of existing chawki plantation

#### a) Brief description:

Chawki gardens of tasar host plants were raised in private and govt. waste lands under CDP scheme during XI Plan and also under other development initiatives. These chawki gardens shall help in better utilization of natural host

flora during late age rearing besides improving quality and cocoon yield. Rearing on these chawki gardens attain importance more in case of seed crop rearings. However, these chawki gardens need to be maintained as per recommended package of practices and also technology inputs from CTR&TI, Ranchi for better results.

In view of shortage of farm yard manure in tribal area and preference of low lands for tasar plantations, provision has been made to undertake intercultural and soil conservation operations, supply of vermi-compost, inputs for managing termites and fungal attack on host plants besides application of required fertilizers, neem based insecticides and other technology inputs like Leaf Surface Microbes recommended by CTR&TI, Ranchi, to educate tasar rearers the importance of this package for better chawki garden management.

# b) Technical specifications/operational guidelines:

- Assistance under the scheme shall be extended to block plantations raised during earlier Plan periods and also during XII Plan shall be assisted for maintenance for a maximum of two years. The implementing agency shall extend assistance subject to number of plants survived and brushing capacity assessed by a suitable joint technical committee.
- Soil conservation methods shall include correction of cattle proof trenches and staggered trenches for better soil and moisture conservation.
- Priority shall be given to the tasar rearers taking up seed rearing. The implementing agency shall make all entries related to the assistance extended, crop particulars, production, productivity, returns etc., in the beneficiary passbooks provided by them to the beneficiary from time to time.
- The implementing agency shall meticulously follow the relevant points of general guidelines of CDP for XII Plan while implementing the component.
- The implementing agency shall decide on the composition of fertilizers based on soil analysis and quality, besides the suitable intercrop based on the recommendations of CTR&TI, Ranchi.
- Assistance shall be extended under the scheme subject to undertaking from the tasar rearers that they shall take up silkworm rearing at least for five years.

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

# c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Charina	State Category	CSB	State	Beneficiary
Sharing	General Category	60%	20%	20%
Pattern	Special Category	80%	10%	10%

7	<b>Unit Cost</b>	Physical	Fi	nancial Proj	ections (Rs. in	crore)
Zone	(Rs.)	(Rs.) Target		State	Beneficiary	Total
Applicable to all zones	1,400	2,400 rearers	0.24	0.05	0.05	0.34

# 1D) Assistance to tasar rearers for maintenance of existing tasar plantation

#### a) Brief description:

Block plantations of tasar host plants was raised in private and govt. waste lands under CDP Scheme during XI Plan and also under other development initiatives *viz.*, special SGSY, NABARD-TDF, TWC projects etc. These block plantations are very handy for taking up seed crop rearings, in view of increased demand for tasar silkworm seed. However, these block plantations need to be maintained as per recommended package of practices of CTR&TI, Ranchi for better results. Also, soil conservation methods need to be practiced as the tasar block plantations are rain-fed.

Since there is only one commercial/seed crop per year practiced by the rearers in tasar sector, rearers tend to apply farm yard manure generated by them mostly for paddy cultivation. Hence, in order to educate them, the

importance of maintenance of plantations following package of practices and soil conservation methods, provision has been made to undertake intercultural operations, supply of vermi-compost, inputs for managing termites and fungal attack on host plants besides application of required fertilizers, neem based insecticides and other technology inputs as recommended by CTR&TI, Ranchi.

#### b) Technical specifications/operational guidelines:

- Assistance under the component shall be extended to block plantations raised during earlier Plan periods and also during XII Plan towards maintenance for maximum of two years for better survival. The implementing agency shall not extend similar assistance to the same beneficiary under different components viz., assistance to tasar rearers (both seed and commercial rearers).
- The implementing agency shall extend assistance based on number of plants survived and brushing capacity assessed by a technical committee.
- Soil conservation practices include correcting cattle proof trench and staggered trenches for better soil and moisture conservation.
- Priority shall be given to the tasar seed rearers. The implementing agencies shall have the flexibility of selecting beneficiaries possessing land of 0.75 ha up to 1.50 ha to form clusters of about 10 ha each to suit requirements of seed rearing, though it is not mandatory. The implementing agency shall make all entries related to the assistance extended, crop particulars, production, productivity, returns etc in the beneficiary passbooks provided by them to the beneficiary from time to time.
- The implementing agency shall meticulously follow the relevant points of general guidelines of CDP for XII Plan while implementing the component.
- The implementing agency shall decide on the composition of fertilizers based on soil analysis and quality, besides raising of suitable intercrop on the recommendations of CTR&TI, Ranchi.
- Assistance shall be extended under the scheme subject to undertaking from the tasar rearers that they shall take up silkworm rearing at least for five years.

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

# c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Charing	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	60%	20%	20%
rattern	Special Category	80%	10%	10%

7	Unit Cost	Physical	Fi	nancial Proj	ections (Rs. in	crore)
Zone	(Rs.)	Rs.) Target		State	Beneficiary	Total
Applicable to all zones	17,000	1,200 ha	1.47	0.29	0.28	2.04

# 1E) Conservation and utilization of sal based tasar eco-races

# a) Brief description:

Though, the country has focused on the conservation of several wild species, the economic silk insect is yet to attain its focus in spite of its known role in alleviating the rural/tribal poverty and employment generation potential. The promising sal (*Shorea robusta*) based eco-races of tropical tasar silkworm are available in Chhattisgarh (Raily), Odisha (Modal) and Jharkhand (Laria, Sarihan, Modia). Though farmers are utilizing some of the local eco-races mostly for commercial crop, their populations in nature are decreasing day by day. For their optimal proliferation and sustainable utilization of the races, they need to be conserved, as the characters of these eco-races deteriorate drastically under ex situ under laboratory condition.

Under this backdrop and to focus the need of silk insect conservation, its potential economic value and income generation, it is proposed to take up conservation program of local eco-races by sustainable utilization of available sal flora in the tasar producing states. It is proposed to generate 108 MT of tasar raw silk through the conservation program by the fifth year of XII Plan period (2016-17). The year-wise break-up of the targets and conservation clusters required to be set up are given below.

Components	2012 -13	2013-14	2014-15	2015-16	2016-17
Cumulative raw silk production (MT)@ 2 MT/cluster	20	44	72	108	108
Cumulative cocoon production /collection (crores)@ 0.2 crore/cluster	2	4.4	7.2	10.8	10.8
No. of conservation clusters (cumulative)	10	22	36	54	54
No. of locations @10 locations/cluster (cumulative)	100	220	360	540	540
Tentative budget (Crore Rs.) @ Rs.17.24 lakh per cluster	3.17	5.21	6.13	7.69	2.54
CSB share (25%)	0.79	1.30	1.53	1.92	0.63
State share (75%)	2.38	3.91	4.60	5.76	1.90

# b) Technical specifications/operational guidelines:

- An area of 50' x 25' of existing sal plantation in the selected forest area shall be covered under conservation net. A total of 20 nets are to be raised as one unit to accommodate a quantity of 100 dfls of eco-race for their optimal proliferation under net in the natural habitat. Thus, each conservation cluster would accommodate 10 such units. To facilitate quick availability of the nets, the respective DOS would develop local entrepreneur(s) to manufacture the nets.
- Support shall be provided to the groups as far as possible. Green shed shall be developed in the land provided by forest department or in the land owned by the group.
- The implementing agency shall make all entries related to the assistance extended, crop particulars, production, productivity, returns etc in the beneficiary passbooks provided by them to the beneficiary from time to time.
- The implementing agency shall meticulously follow the relevant points of general guidelines of CDP for XII Plan while implementing the component.

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

# c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Charing	State Category	CSB	State	Beneficiary
Sharing	General Category	25%	75%	-
Pattern	Special Category	25%	75%	-

7	<b>Unit Cost</b>	Physical	Fi	nancial Proj	ections (Rs. in	crore)
Zone	(Rs.)	Target	CSB	State	Beneficiary	Total
Applicable to all zones	4,58,300	350 camps	4.01	12.03	-	16.4

# 2) Assistance for raising and maintenance of systematic oak tasar plantation

#### a) Brief description:

The natural plantations of oak tasar silkworm food plants in forestland of mountain regions are generally high and remained un-maintained. Conducting silkworm rearing in such plantations is cumbersome and cocoon yield is also very low. The concept of raising systematic plantations introduced during XI Plan is found to be very suitable for maintenance and to enhance the cocoon production and productivity. Hence, it is proposed to continue the scheme during XII Plan. Under the component, it is proposed to promote integrated package for plantation development developed by the research institutes of CSB. The scheme envisages assisting the individual rearer, SHGs, women groups, VSSs, etc, to raise systematic plantation of food plants at 1.8 m x 1.8 m spacing in private/community lands besides fostering cooperation with the forest department to facilitate utilization of forest waste lands. Each beneficiary or SHG shall be assisted with supply of seedlings, land development, cost of plantation development, inputs, plantation maintenance, etc. On completion of augmentation of plantation for seed rearers, there shall be enough seed availability for which the oak tasar commercial rearers require support from local or state plans for dovetailing the said component with other schemes

# b) Technical specifications/operational guidelines:

- Assistance shall be provided to new farmers having one hectare of their own land as well as to government farms/ NGOs /societies/SHGs for raising systematic plantation on community land, govt. land, forest waste land etc.
- The activities shall be undertaken on the following lines:
  - Land husbandry and preparation of selected land. Digging of 3090 pits of 1' x 1' x1' size /ha at 1.8m x
     1.8m spacing, anti-termite treatment and application of vermi-compost in the pits.
  - Procurement of quality seedlings from kisan nurseries of entrepreneurial groups and supply @ 3400 seedlings/hectare to each farmer for raising of plantation. This includes 10% transportation and transplantation mortality.
  - Planting of 3090 seedlings at 1.8 m x 1.8 m spacing in one hectare of land, cultural operation at regular intervals and maintenance.
  - Gap fillings and maintenance of plantations with improved package of practices developed by the research institutes of CSB and ensure 100% survival in systematic plantations.
  - Maintenance for two years in 2nd and 3rd year at Rs 3.0 per plant/year after verification of survival and maintenance of plants.
  - Farmer to conduct rearing of 250 dfls of 2 g each/year from 4th year onwards.
- Farmers supported by DOSs/NGOs/societies/SHGs of the oak tasar producing states of North-eastern and North-western regions only are eligible. Farmers having their own land, agencies obtained permission to use community/forest or govt. lands shall be identified by the field units of DOS/NGOs/societies.
- The field officer shall certify the completion of activity as per the component and also shall certify that the farmers have not availed assistance for the same purpose from other programs of government or other agencies. The implementing agency shall make all entries related to the assistance extended, crop particulars, production, productivity, returns etc in the beneficiary passbooks provided by them to the beneficiary from time to time.
- The implementing agency shall meticulously follow the relevant points of general guidelines of CDP for XII Plan while implementing the component.
- Maintenance assistance shall be released against inspection and satisfactory survival and maintenance of the systematic plantation.

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

### C) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Charing	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	60%	20%	20%
Pattern	Special Category	80%	10%	10%

7	Unit Cost	Physical	Fi	nancial Proj	ections (Rs. in	crore)
Zone	(Rs.)	Target	CSB	State	Beneficiary	Total
Applicable to all zones	49,000	200 ha	0.78	0.10	0.10	0.98

# 3) Assistance for construction of cocoon storage houses in tasar sector

# a) Brief description:

Tasar rearers shall harvest only two commercial crops during the commercial rearing seasons. During the harvest seasons due to arrival of huge quantity of reeling cocoons, the prices fall down. Non-existence of organized marketing system often leads to exploitation by the mahajans who procure the cocoons at cheaper prices and the tribals are forced to sell their produce lesser than the market value. Since the reeling activity in tasar sector can be undertaken throughout the year, there is always demand for the tasar cocoons by the reelers.

The tasar cocoons are sold to the reelers at higher prices during the non-commercial seasons due to high demand. Since the tasar cocoons undergo long diapause for about 6 months the cocoons can be stored without stifling. Realizing the nature of the industry, a scheme component on the component was implemented during the XI Plan period. The component has been well received in the field and is therefore proposed to continue in all tasar producing states during XII Plan.

The temporary storage facilities in production clusters would help tasar rearers to preserve the reeling cocoons for at least 3-4 months after harvest of commercial crop, thereby avoid temporary glut and distress sale. The storage facility shall have a capacity to store around 50,000 cocoons and would ensure that the tasar rearers get remunerative price for their produce. The cocoon storage house is used as a common facility by the tasar rearers group.

#### b) Technical specifications/ operational guidelines:

- Land required for the construction of storage house would be provided by the tasar rearers, but would be property of the SHG/CBO. The implementing agency shall ensure that the cocoon storage house shall be maintained for at least five years and thereafter the facility may be utilized for organizing training programs etc. SHG/CBO shall collect nominal charges from tasar rearers for managing the storage and marketing of cocoons, which can be utilized for maintaining the storage house, in subsequent years.
- Cocoon storage houses shall be constructed in major production clusters, where rearers shall store at least of 50% of their produce for 3-4 months after commercial crop harvest, besides managing the stock till it is marketed. As far as possible, the SHG may be motivated and trained to manage the entire gamut of activities.
- The implementing agency shall make all entries related to the assistance extended, crop particulars, production, productivity, returns etc., in the beneficiary passbooks provided by them to the beneficiary from time to time.
- The implementing agency shall meticulously follow the relevant points of general guidelines of CDP for XII Plan while implementing the component.
- The implementing agencies shall nurture CBOs to help SHGs in managing the storage and marketing of cocoons besides establishing linkages with yarn producer groups or master weavers, as the case may be.

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Charina	State Category	CSB	State	Beneficiary
Sharing	General Category	35%	35%	30%
Pattern	Special Category	80%	10%	10%

7	Unit Cost	Physical	Fi	Financial Projections (Rs. in crore)				
Zone	(Rs.) Target		CSB	State	Beneficiary	Total		
Applicable to all zones	1,00,000	100 No.	0.69	0.16	0.15	1.00		

# 3A) Assistance for construction of cocoon storage and stifling facilities for tasar rearers

# a) Brief description of the component

Due to absence of organized marketing system, arrival of reeling cocoons in large quantities immediately after the harvest of the commercial crops results in glut in the market and distress sale among the poor tribal tasar rearers. The local mahajans exploit this situation to their advantage by advancing meager amounts during the commercial rearing and procure the entire lot of reeling cocoons at throw away prices. Though reeling cocoons are produced only during commercial crop seasons, reeling activity can be undertaken throughout the year. This resulted drastic fall in cocoon prices immediately after the commercial crop harvest. The subsequent demand for reeling cocoons paves the way for higher prices after 3-4 months of commercial crop harvest, depriving poor reelers of procuring reeling cocoons periodically. This cycle neither helps the poor tribal cocoon producers nor the reelers. Though pupal diapause of over six months helps preservation of reeling cocoons without stifling, their stifling would help the farmers to preserve the cocoons for longer periods so as to sustain the reeling activity.

In order to arrest exploitation by middleman and to increase producers' share in the tasar value chain, conversion of cocoons to yarn was introduced in the production clusters under special SGSY and NABARD-TDF projects during XI Plan. This important forward integration has produced encouraging results like women participation in yarn conversion, increasing family income, and assured marketing of cocoons at remunerative prices locally, empowerment of tribal women thereby improvement in socio-economic conditions. NGOs/societies/CBOs/SHGs, producer groups etc. shall be involved in establishing the linkages with commercial rearers, reelers, reeler groups and master weavers in the locality. It is proposed to promote such cocoon storage and stifling facilities for tasar rearers by dovetailing funds from CDP involving 25% share from CSB, especially with respect of projects assisted under MoRD, NABARD, TWC, RKVY etc.

- Land in a suitable area shall be procured/gifted from the locals. The ownership shall be transferred in the name of CBO/co-operatives/SHG/producer groups.
- The implementing agency shall establish cocoon and storage facilities in major production clusters with required building on the land procured with ownership of CBO/Society/NGO. The proposed facility shall be provided with storage racks and material for training, as these facilities can also be utilised for conducting training under various programs including ISDS, MKSP etc. A joint committee comprising NGO, CTR&TI/DOS shall monitor record of the operation-wise details of source-wise cocoons procured, supply details, recover, damage during the storage, incidental charges collected, reeling performance etc., maintained by the NGO/society.
- An tripartite undertaking shall be executed between DOS, CBO and CSB that the entire infrastructure shall be maintained and used for the purpose for which the assistance provided besides the activity shall be carried out by the CBO/Co-operatives/SHG/producer groups. An NGO, if involved, shall only facilitate the establishment of the unit under CBO/Co-operatives/SHG/producer groups. Assistance provided towards working capital shall be maintained in a separate savings accounts with arrangements made to keep it noneroding.

- The implementing agency shall ensure proper linkages with commercial rearers, reelers/reeler groups for procurement of cocoons, besides encouraging tribal women in reeling pockets to take up reeling and shall ensure that the activities are carried for a minimum period of five years and also submit periodical reports.
- The implementing agency shall meticulously follow the relevant points of general guidelines of CDP for XII Plan while implementing the component.
- The implementing agency shall undertake to furnish the performance report of the unit and that the facilities shall work minimum for a period of five years.

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

## c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Charina	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	35%	35%	30%
rattern	Special Category	80%	10%	10%

Zone	Unit Cost (Rs.)	Physical Target	Financial Projections (Rs. in crore)				
			CSB	State	Beneficiary	Total	
			1.22	0.22	0.22	1.66	
Applicable			Other Assistance				
to all zones	22,20,000*	30 No.	MORD/NABARD/ TWC/RKVY	State	Beneficiary	Total	
			5.00	-	-	5.00	
Grand Total		6.22	0.22	0.22	0.66		
* Only 05%	* Only 250/ of the unit cost shall be considered under CDB scheme						

<sup>\*</sup> Only 25% of the unit cost shall be considered under CDP scheme.

# 4) Support for castor/tapioca cultivators with start-up tools

#### a) Brief description:

Castor and tapioca is cultivated by large number of farmers for production of castor beans/tubers respectively as a regular agriculture crop in the states of Andhra Pradesh, Bihar, Gujarat, Karnataka, Kerala, Maharashtra, Madhya Pradesh, Rajasthan, Tamil Nadu, Uttar Pradesh, Uttarakhand, etc. It is well established that utilization of up to 30 % foliage of castor/tapioca plants for eri silkworm rearing does not affect the regular production. Hence, such farmers can earn additional income by practicing eri culture at regular intervals.

This concept was found to be very useful for enhancing the production of eri silk during XI Plan especially in non-traditional states. Keeping this in mind, it is proposed to continue the component during XII Plan. Under the component, it is proposed to support such castor/tapioca cultivators with land development, cost of castor seed, inputs and start-up tools.

- Assistance shall be provided to farmers practicing castor/tapioca cultivation in 1.0 acre land of their own.
- The sequence of activities shall be undertaken on the following lines:
  - Identification of farmers practicing castor/tapioca cultivation as regular agricultural crop.
  - Training for judicious utilization of foliage (up to 30% of total foliage) for eri silkworm rearing.
  - Supply of rearing appliances/start-up tools procurement of quality silkworm seed and conduct of rearing.
  - Each farmer shall rear 50 dfls/crop using the foliage for 3-4 times a year.

- Farmers identified by DOSs/NGOs/societies/SHGs of castor/tapioca producing states are eligible. Farmers/government farms/agencies/CBOs/NGOs having their own land, or obtained permission to use community/forest or govt. wastelands are to be identified by the field units of DOS.
- Beneficiary shall maintain plantation and use by following with improved package of practices developed by the research institutes of CSB.
- The Field Officer shall certify the completion of activity as per the component and also certify that the farmers/agencies have not availed assistance for the same purpose from other programs of government or other agencies. The implementing agency shall make all entries related to the assistance extended, crop particulars, production, productivity, returns etc in the beneficiary passbooks provided by them to the beneficiary from time to time.
- The implementing agency shall meticulously follow the relevant points of general guidelines of CDP for XII Plan while implementing the component.
- > The performance of the beneficiaries shall be monitored on a regular basis and the record of dfls brushed/ cocoons produced shall be maintained.

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

# c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Charina	State Category	CSB	State	Beneficiary
Sharing	General Category	60%	20%	20%
Pattern	Special Category	80%	10%	10%

7	Unit Cost	Physical	Fi	nancial Proj	ections (Rs. in	crore)
Zone	(Rs.)	Target	CSB	State	Beneficiary	Total
Applicable to all zones	12,500	5,000 acres	4.69	0.78	0.78	6.25

# 5) Augmentation of perennial eri food plants with supply of start- up tools

# a) Brief description:

Raising of systematic plantations of perennial eri silkworm food plants in traditional eri producing states has been successfully implemented during X and XI Plans. The plantation raised by following improved technologies has enhanced the income of traditional poor eri silkworm rearers, thereby the production and productivity of eri silk has increased during the past decade. It is therefore proposed to continue the component during XII Plan.

Under the component, support shall be extended to develop systematic perennial plantation by following integrated package developed by the research institutes of CSB. Under the scheme, farmers shall be assisted for raising one acre of systematic plantation of perennial food plants like Kesseru /Payam /Ailenthus and their maintenance to support rearing of 400 dfls/year in the fourth year of establishment. Each farmer shall be assisted with cost towards land development, cost of seedlings including 10% mortality, inputs, start-up tools and maintenance for 2nd and 3rd year.

- Assistance shall be provided to farmers with one acre of own land identified government agencies, NGOs/ Societies/SHGs and also in community land, government land, forest waste land etc which can be utilized by farmers
- The sequence of activities shall be undertaken on the following lines:
  - Land husbandry and preparation of land, digging of cattle proof trench around the plot.
  - Digging of 450 pits of 1' x 1' x1' size /acre at 3 m x 3 m spacing and application of FYM /vermi-compost in the pits.

- Procurement of quality seedlings from kisan nurseries of entrepreneurial groups and supply @ 500 seedlings/acre to each farmer for raising of plantation. This includes 10% transportation and transplantation mortality.
- Undertaking plantation of 450 seedlings in 1.0 acre of land, cultural operation at regular intervals and maintenance.
- Plantation of Castor as intercrop during gestation period to start silkworm rearing and earn income from the first year itself. Undertaking the gap filling with seedlings of perennial food plants to ensure 100% survivability.
- Maintenance of plantation in 2nd and 3rd year @ Rs 3.0 per plant/year basing on verification of survivability.
- Farmer to conduct rearing of 400 dfls/year from the 4th year onwards.
- Farmers supported by DOSs/NGOs/societies/SHGs in the North-eastern region only are eligible. Farmers/government farms/agencies/CBOs/NGOs having their own land, or with written permission to use community/forest or wastelands shall be identified by the field units of DOS/NGOs/societies.
- Farmers shall raise and maintain plantation with improved package of practices developed by the research institutes of CSB to ensure 100% survivability in systematic plantations.
- The field officer shall certify the completion of activity based on the component and shall also certify that the farmers/agencies have not availed assistance for the same purpose from other programs of government or other agencies. The implementing agency shall make all entries related to the assistance extended, crop particulars, production, productivity, returns etc in the beneficiary passbooks provided by them to the beneficiary from time to time.
- The implementing agency shall meticulously follow the relevant points of general guidelines of CDP for XII Plan while implementing the component.
- The performance of the beneficiaries shall be monitored on a regular basis and maintain record of dfls brushed/cocoons produced.

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Chaving	Stae Category	CSB	State	Beneficiary
Sharing Pattern	General Category	60%	20%	20%
rattern	Special Category	80%	10%	10%

7	Unit Cost	Physical Financial Projections (Rs. in cro				
Zone	(Rs.)	Target	CSB	State	Beneficiary	Total
Applicable to all zones	31,000	7,000 acres	16.26	2.72	2.72	21.70

# 5A) Assistance for raising kesseru food plant nursery

# a) Brief description:

During earlier Plan periods, the program on raising of systematic plantations of perennial food plants in traditional eri producing states has been demonstrated successfully. The concept of raising block plantations of perennial eri host plants is a major tool for augmenting the food plant base. However, to increase the survival rate of the plantations, it is necessary to raise the eri food plants nursery by following improved technologies recommended by research institutes of CSB with adequate care. The government farm shall alone not be in a position to produce the large quantity of quality seedlings required during XII Plan period owing to multiple supervisory roles they have to play and limited resources

available with them. It is therefore proposed to involve rural entrepreneurs for raising nurseries of perennial eri silkworm food plants (*i.ex.*, *K*esseru). Under the component, assistance is extended towards cost of FYM, chemicals, tools and other inputs for raising the nursery sufficient for developing 40 acres of systematic plantation.

# b) Technical specifications/operational guidelines:

- A nursery unit shall be raised covering an area of one acre consists of 27 beds (each measuring about 6m x 1.2m size). Assistance shall be provided to progressive farmers, entrepreneurs, SHGs, NGOs/CBOs etc.
- > The sequence of activities shall be undertaken on the following lines:-
  - Land husbandry and preparation. Preparation of 27 beds, each of 6m x 1.2m size.
  - Application of FYM/vermi-compost in the beds.
  - Selection of seed, pre-conditioning of seed and sowing in the beds at a spacing of 15 cm x 10 cm.
  - Erection of shade roofs on the beds for protection from sun light.
  - Cultural operations, watering and maintenance.
  - Preparation of growing medium, filling of poly-bags (8" x 6" size) with media and transplantation of seedlings.
  - Cultural operations, watering and maintenance of seedlings for 6 to 9 months.
  - Production of 20,000 healthy seedlings in poly-bags per farmer or entrepreneur.
- Progressive farmers, entrepreneurs, SHGs, NGOs/CBOs etc., identified by the field units of DOS are eligible.
- Beneficiary shall raise and maintain nurseries with improved package of practices recommended by the research institutes of CSB to ensure 90% survivability.
- The field officer shall certify the completion of activity based on the component and shall also certify that the farmers, entrepreneurs/agencies have not availed assistance for the same purpose from other programs of government or other agencies. The implementing agency shall make all entries related to the assistance on nursery planting material produced and distribution in the beneficiary passbooks provided by them to the beneficiary from time to time.
- The implementing agency shall meticulously follow the relevant points of general guidelines of CDP for XII Plan while implementing the component.
- The performance of the beneficiaries shall be monitored on a regular basis and the record of seedlings produced and supplied to different farmers/agencies shall be maintained.

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

# C) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Ole a silva si	State Category	CSB	State	Beneficiary
Sharing	General Category	60%	20%	20%
Pattern	Special Category	80%	10%	10%

7	Unit Cost	Physical	Fi	nancial Proj	ections (Rs. in	crore)
Zone	(Rs.)	(Rs.) Target	CSB	State	Beneficiary	Total
Applicable to all zones	51,000	150 nursery units	0.57	0.10	0.10	0.77

# 6) Assistance for construction of eri rearing house

#### a) Brief description:

Eri culture has been gaining popularity in many states because of the rising demand for good quality eri yarn for production of diversified products. Farmers have started adopting new technologies and modern practices as the returns are good. Construction of separate rearing house is very essential to ensure hygienic conditions, prevent contamination during eri silkworm rearing and to increase production and productivity.

A separate rearing house with adequate rearing space and sufficient ventilation can significantly improve the cocoon productivity. Since there has been a very good response for this component from the states and also to increase the cocoon production, it is proposed to continue the program during XII Plan, with enhanced budgetary support to cover many eri culture farmers. Assistance shall be provided to the beneficiaries who have raised the required plantation. In case of castor/tapioca cultivators, assistance for rearing house shall be provided with an agreement that they shall continue eri culture for a minimum period of 5 years.

- Assistance shall be provided to farmers who have raised the required plantation of Kesseru/Castor/Tapioca in one acre of their land.
- The sequence of activities shall be undertaken on the following lines:
  - Identification of farmers after inspection of plantation. The beneficiaries shall not have availed any assistance for construction of rearing houses in earlier Plan periods.
  - Selection of location for construction of rearing houses and digging of plinth as per size 15' x 25' (including 5' verandah on two sides).
  - Plinth construction with brick, stones and cement for 2.5' height, followed by earth filling. Construction of 10' height wall with 3.5" brick width and cement: sand mortar and fixation of door/windows frames.
  - Construction of posts with RCC/brick for strength to walls. Beneficiary may choose wider walls also
    well within the unit cost. Erection of roof with CGI sheet/zinc sheet/stone (2' x 2'), thatching grass/hay
    or other similar material rested on wooden /bamboo frames in line with the locally available materials.
  - False ceiling of bamboo mesh/foam supported with wire mesh or asbestos on wooden/bamboo frame. Plastering of walls and cementing of floor for maintaining good hygiene and fixing of door (6' x 3.5') and windows (4' x 3').
  - Rearing house to have capacity of rearing 100 dfls per crop.
- Farmers having one acre of own plantation and sufficient land for construction of rearing houses both in traditional and non-traditional states shall be selected by the implementing agency.
- > Beneficiaries desiring to construct bigger size of rearing house or wish to use better quality of material shall do so from their own share. The assistance shall not exceed the unit cost.
- Assistance for construction rearing house shall be provided to castor/tapioca cultivators with an agreement that they shall continue silkworm rearing for a minimum period of 5 years.
- The field officer shall certify the construction of rearing houses as per the component and shall also certify that the farmers have not availed assistance for the same purpose from other programs of government or other agencies.
- The implementing agency shall make all entries related to the assistance extended, crop particulars, production, productivity, returns etc., in the beneficiary passbooks provided by them to the beneficiary from time to time.
- The implementing agency shall meticulously follow the relevant points of general guidelines of CDP for XII Plan while implementing the component.
- The utilization of rearing houses shall be monitored on a regular basis and the record of dfls brushed/cocoons produced by the beneficiary shall be maintained.

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

# c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Charina	State Category	CSB	State	Beneficiary
Sharing	General Category	35%	35%	30%
Pattern	Special Category	80%	10%	10%

7	Unit Cost	Physical	Fit	nancial Proj	ections (Rs. in	crore)
Zone	(Rs.)	Target	CSB	State	Beneficiary	Total
Applicable to all zones	1,00,000	11,600 No.	81.10	18.10	16.80	116.00

# 7) Augmentation and maintenance of muga food plants with start-up tools

# a) Brief description:

Muga, the golden yellow silk endemic to North-eastern region has been passing through the toughest challenge of the century with urbanization, climate change and pollution. And, thus there is a need for a multifaceted approach to reach the desired cocoon production. Production of muga silk withstanding the nature's fury every time is a daunting task and there is need to optimize the augmentation of muga food plantation in North-eastern region and other suitable locations of the country to maintain the present status of 125 MT of muga cocoon production and phase-wise production Plan to reach the XII Plan target of 200 MT.

This is a continued component with more focus on augmentation of muga food plants with a requirement for promotion of integrated package for muga plantation development concept recommended by research institute of CSB with intercropping plans during initial period of establishment. Raising of systematic plantation of muga food plants shall result in cocoon productivity to achieve 200 MT by end of XII Plan.

#### b) Technical specifications/operational guidelines:

- Identification of beneficiaries for assistance shall be solely based on potential locations. Assistance shall be extended to individual beneficiaries but Cluster Mode Approach shall be given priority. Proposals for CBO groups under cluster mode approach shall be preferred for assistance.
- > Accessibility, communication and transport facilities, present status of surrounding areas shall be considered for selection of beneficiaries.
- DOS shall link the proposal in project mode approach for area expansion ensuring posting of required staff and supporting workers for continued activity. Maximum 2 acres of muga food plantation per family ensuring sufficient space for construction of operational buildings shall be considered. Action Plan for seed production and distribution shall be in place at the time of seeking assistance. DOS shall ensure the arrangements for seed supply (government or private sector) to the beneficiaries.
- Agreement shall be executed to the effect that the plantation shall be put to use for muga silkworm rearing at least for a period of 5 years. The implementing agency shall make all entries related to the assistance extended, crop particulars, production, productivity, returns etc in the beneficiary passbooks provided by them to the beneficiary from time to time.
- The implementing agency shall meticulously follow the relevant points of general guidelines of CDP for XII Plan while implementing the component.
- Muga cocoon production shall reach the targeted level from fourth year of assistance and activity continued and monitored by a committee.

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

### c) Physical targets and financial projections

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Charina	State Category	CSB	State	Beneficiary
Sharing	General Category	60%	20%	20%
Pattern	Special Category	80%	10%	10%

<b>7</b>	Unit Cost	Physical	Fil	ections (Rs. in crore)		
Zone	(Rs.)	Target	CSB	State	Beneficiary	Total
Applicable to all zones	31,000	6,000 acres	14.51	2.05	2.04	18.60

# 7A) Assistance for raising muga food plant nursery

# a) Brief description:

Establishment of a systematic muga food plantation is very much essential for conducting muga silkworm rearing as a sustainable economic activity. muga silkworm rearing requires only som and soalu plants. Som is the most preferred food plant. All efforts are needed to ensure expansion of muga food plantation base and sustainable economic entrepreneurship. One such basic step is the timely supply of nutritious and high yielding planting material/variety. During XII Plan, it is proposed to popularize the muga cultivation phase-wise in North-eastern region and other suitable locations of the country to achieve the targeted production of 200 MT. This is an innovative component with more focus on ensured supply of required seedlings of food plant in the nearby vicinity. Each unit ensures supply of planting material to nearly 40-45 acres and can be either a government venture or an entrepreneur activity.

# b) Technical specifications / operational guidelines:

- A nursery unit shall be raised covering an area of one acre consists of 27 beds (each measuring about 6m x 1.2m size).
- > Beneficiary selection shall be done in potential locations with forward linkage to the component support under augmentation of muga plantation. Proposals for CBO groups under 'Cluster Mode Approach' shall be preferred for assistance.
- ldentification of beneficiary farm/unit for assistance shall be based on ideal location towards ensuring successful raising of muga food plantation.
- Accessibility, communication and transport facilities, present status of surrounding areas that may come for pollution hazards shall be considered for selection of farm.
- > DOS shall ensure linking of the proposal with project mode approach for area expansion.
- Beneficiaries shall be well trained in scientific raising of saplings/seedlings.
- > The beneficiary shall use the seed material organized by DOS.
- An agreement shall be in place from the beneficiary to the effect that all the facilities provided to him shall be put to use in raising of muga food plants and muga cocoon production activities are continued for at least 3 years.
- The implementing agency shall make all entries related to the assistance on nursery planting material produced and distribution in the beneficiary passbooks provided by them to the beneficiary from time to time.
- The implementing agency shall meticulously follow the relevant points of general guidelines of CDP for XII Plan while implementing the component.

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Charing	State Category	CSB	State	Beneficiary
Sharing	General Category	60%	20%	20%
Pattern	Special Category	80%	10%	10%

7	Unit Cost	Physical	Physical Financial Projections (Rs. in			crore)
Zone	(Rs.)	Target	CSB	State	Beneficiary	Total
Applicable to all zones	52,500	120 nursery units	0.47	0.08	0.08	0.63

# 7B) Assistance for maintenance of existing muga food plantation

#### a) Brief description:

Muga silk sector is passing through the challenge of the century with people practicing muga cultivation looking for other avenues for their livelihood. Lacking of interest in the younger generation, urbanization, change in climate and pollution are the main factors for stagnancy in muga culture and thus, there is need for a multi-faceted approach to get the desired cocoon production. Production of muga silk from existing food plantations raised without any assistance or from the plantations raised with assistance extended earlier in initial years of establishment which have become neglected for various reasons without replenishing the nutrients and timely care for optimizing leaf yield and quality. The component has been proposed to provide required fertilizer inputs, and plant protection measures for pest and disease prevention in food plant maintenance. It is also proposed to assist for water conservation techniques including cattle proof trenching and rain water harvesting for increasing soil moisture during non-rainy seasons of the year.

#### b) Technical specifications / operational guidelines:

- Assistance shall be extended to the beneficiaries assisted in X Plan or before or non-assisted potential muga reariers for ensuring successful muga rearing. Farmers showing interest in revival of muga rearing and those having poor yield history shall be selected.
- > Based on recommendations of technical committee, the assistance shall be extended towards maintenance/revival.
- A system for ensuing the effective utilization of inputs during rearing activity and reporting progress shall be put in place by respective DOSs. Effect of inputs/assistance on improvement in quantity and quality shall be documented and reported to CSB.
- Necessary technical guidance shall be ensured. The implementing agency shall make all entries related to the assistance extended, crop particulars, production, productivity, returns etc in the beneficiary passbooks provided by them to the beneficiary from time to time.
- The implementing agency shall meticulously follow the relevant points of general guidelines of CDP for XII Plan while implementing the component.

The activities required under the component along with its cost break-up details are indicated in the unit cost (refer Unit Cost book) of the component.

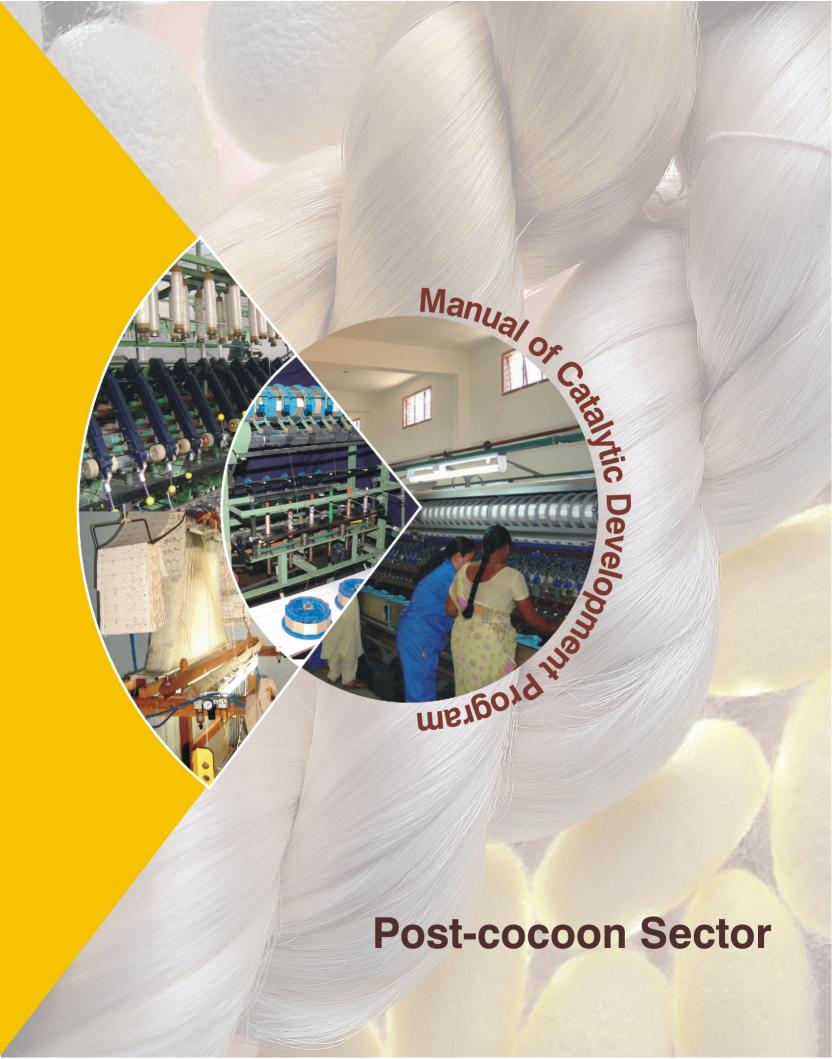
#### c) Physical Targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Charina	State Category	CSB	State	Beneficiary
Sharing	General Category	60%	20%	20%
Pattern	Special Category	80%	10%	10%

Zone	Unit Cost	Physical	Fit	nancial Proj	ections (Rs. in	crore)
	(Rs.)	Target	CSB	State	Beneficiary	Total
Applicable to all zones	9,500	3000 acres	2.22	0.32	0.31	2.85





# Catalytic Development Program (Centrally Sponsored Scheme)

# CHAPTER IV POST-COCOON SECTOR

# Introduction

ericulture. is not just restricted to the agricultural activities of mulberry cultivation, silkworm rearing and seed production, but opens up into the industrial sector covering the activities of silk reeling, twisting, weaving, dyeing, printing and garment manufacturing. These activities, in turn, support the ancillary enterprises of machine manufacture and by-product utilization including spun silk and dupion yarn manufacture, thus providing employment for the skilled and unskilled labour force and nurture the entrepreneurship right across the country.

The equipment used in the silk industry (post-cocoon sector) are primitive and less capital intensive. This leads to three important consequences, *viz.*, low value addition, heavy dependence on manual skill and attention and negligible economy of scale and scope. These features create a situation where the industry becomes less competitive, very risky and inhabited by many small firms.

The research efforts in silk technology have focused on various dimensions of problems of the industry with due cognizance of the associated constraints so as to bring about the desired changes in the industry and addressed the process of standardization, design and development of appropriate machinery, process and quality control gadgets, energy conservation, water and effluent management and design development. The Catalytic Development Programme (CDP) has provided a unique opportunity for transferring the developed technologies to the field. The components implemented under CDP during IX, X and XI Plan periods for the post-cocoon sector focused on quality and productivity improvement, removal of drudgery and improving working conditions. The response for these components from the stakeholders was quite encouraging and the visible impact made by these components could be seen in the field. It is therefore, proposed to continue to extend the support to the sector during the XII Plan period also. The course of action proposed under CDP of XII Plan is based on the experiences gained during the previous plan periods and the feedback received from the industry. The post-cocoon components are categorized into three sub-sectors, *viz.*, silk reeling and spinning, post-yarn and marketing support sectors.

# I. Reeling and spinning

Reeling forms a vital link in converting the farm produce, the cocoons, into an industrial product, the yarn. Reeling involves a series of intricate processes while converting the cocoons into raw silk. The reeling sector in India is cottage based and highly decentralized, employing a variety of reeling devices (traditional to modern), *viz.*, charkha, cottage or domestic basins, multi-end reeling and lately, automatic reeling machines.

Silk reeling is generally regarded as the weakest link in terms of returns or margin in the entire value-chain. The raw material, *i.e.*, silkworm cocoon constitutes around 80% of the cost of production resulting in low value addition. The reeling sector is not able to bring in any substantial investment in view of the fact that credits from financial institutions have been extremely low. Therefore, there is a need to provide a major thrust to the sector for better returns with increased value addition at the reeler level focusing on technology adoption through the following components:

# A. Mulberry

- 1. Support for construction of reeling sheds.
- 2. Support for motorized charkhas to dissuade child labour.
- 3. Support for establishment of improved cottage basin reeling units.
- 4. Support for establishment of multi-end reeling units.
- 5. Support for establishment of automatic reeling units.
- 6. Support for establishment of automatic dupion reeling units (142 ends).
- 7. Support for establishment of twisting units (480 spindles).
- 8. Interest subsidy on working capital loan sanctioned by banks to reeling units.
- 9. Incentive for production of Bivoltine silk.

#### B. Vanya

- 10. Support for Vanya reeling and spinning
  - a) Reeling-cum-twisting machines.
  - b) Wet reeling machines (2 basins of 6 ends each).
  - c) Two-in-one reeling-cum-twisting machines.
  - d) Tasar cocoon sorting machines.
  - e) Motorized / pedal operated spinning machines.
  - f) Solar operated spinning machines.

#### C. General (Mulberry and Vanya)

11. Providing services of master reelers and technicians.

# II. Post-yarn (Mulberry and Vanya)

Silk weaving is conducted on both hand looms and power looms in India. About 70% of raw silk is consumed by hand looms, while power looms consume the remaining 30% of raw silk produced in India. Indian silk fabrics are predominantly used for exquisite and rich in design saris. Weaving activities are mainly concentrated in the major weaving clusters of the country *viz.*, Kancheepuram, Kumbakonam and Arni in Tamil Nadu; Mysore, Bangalore, Guledagudda and Molkalamuru in Karnataka; Dharmavaram, Hindupur, Pochampalli and Proddatur in Andhra Pradesh; Champa and Raigarh in Chhattisgarh; Varanasi and Mubarakpur in Uttar Pradesh; Chowk Islampur (Murshidabad), Shantipur (Nadia) and Gaganpur (Birbhum) in West Bengal; Nuapatna and Sonepur in Orissa; Chanderi and Maheshwari in Madhya Pradesh, Patan in Gujarat; Yeola and Paithan in Maharastra and Sualkuchi in Assam.

Each of these clusters/regions is engaged in weaving distinct designs and textures of infinite variety but with small fabric lengths. The handlooms used in the silk industry are region specific in terms of technology and gadgets. The technology used for designing involves manual labour for design creation, card punching and card lacing. The power looms are usually plain looms with drop-box mechanism. A small portion of silk fabrics is being woven on shuttle-less looms, mainly for the export market. As of now, the strength of Indian silk weaving sector appears to lie in its decentralized nature and its ability to produce limitless varieties of fabrics, particularly saris, in small quantities with rich designs. This strength has helped to expand silk consumption amongst varied income groups in the country.

Processing activities of silk like degumming, bleaching and dyeing of yarns and fabric, printing and finishing of fabric, by and large are carried out adopting traditional technology. In contrast to most silk producing countries, nearly 75% of the silk fabrics produced in India are of yarn-dyed variety and only 25% are piece dyed. The operations are mostly manual and adoption of the technological developments is poor. The use of hard water, poor quality dye stuff and chemicals and incorrect work practices are prevalent in many places resulting in poor colour fastness properties. The effluents are discharged without any treatment. In order to address these problems, support was provided under the X and XI Plan CDP, which has brought visible changes in the sector.

For better returns with increased value addition at the weaving/processing units, it is proposed to continue the support to the sector through the following components:

- 12. Support for handloom sector
  - a) Loom upgradation through jacquards and other equipment developed by CSTRI.
  - b) Pneumatic lifting mechanism for handlooms developed by CSTRI.
- 13. Support for setting up of CFC for yarn dyeing and fabric processing (special technology package developed by CSTRI)
- 14. Providing services of master weavers, designers, dyers and technicians.

# III. Market support

There is no organized market system in most of the non-traditional states. The farmers in these states are often exploited by middlemen and are deprived of getting remunerative prices for their produce. Even in the traditional states, where cocoon markets/ silk exchanges are available, quality linked pricing system is not in operation. Such system is essential to ensure the remunerative prices to farmers and reelers for their produces. Marketing of *Vanya* silks in domestic and overseas markets also needs streamlining. It is, therefore, proposed to support the development of marketing sector through the components detailed below:

- 15. Support to states for creating / upgrading marketing infrastructure for cocoons and raw silk.
- 16. Support for setting up of hot air driers.
- 17. Vanya Silk Marketing Promotion (VSMP).

While the brief description of the above components is given below, the details of equipments / package of equipments, unit cost, technical norms etc, are given in the "Unit Cost Booklet". The general implementation / operational modalities for the components of reeling and spinning and post-yarn sectors are indicated under a separate heading "Operational Modalities", whereas the component specific implementation modalities are mentioned under the respective components.

# Brief description of the components

# 1. Support for construction of reeling sheds

The reeling units are usually situated in a building, sometimes a part of the dwelling houses. This is not advisable from the working environment point of view. With a view to support establishment of reeling units in a separate building in an identified reeling park/industrial area to be created by the state government or as a unit separate from dwelling house, it is proposed to extend subsidy for construction of reeling sheds for establishment of cottage basin and multi-end reeling units. The reeling park/complex shall have all the common facilities like power, water, and common effluent treatment.

Support shall not be provided, if the reeling shed is constructed as an attachment to the dwelling unit. It is proposed to provide subsidy for construction of reeling sheds based on the standard area required for each unit, specifications and rate for construction of industrial sheds. Support for construction of reeling sheds in respect of *Vanya* reeling can also be considered, if the reeling units are set up as separate units from dwelling houses. The support shall be calculated on the basis of standard area required and construction cost of the reeling sheds under mulberry sector.

The sharing pattern, unit cost, physical targets and financial projections are given below:

	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	25%	25%	50%
	Special Category	80%	10%	10%

	Unit Cost Physical		Financial Projections (Rs. in crore)						
Unit Description	(Rs. in lakh)	Target (No.)	CSB	State	Beneficiary	Total			
Improved Cottage Basin Unit									
36 ends	5.40	35	0.92	0.35	0.62	1.89			
48 ends	5.40	15	0.29	0.18	0.34	0.81			
Multi-end Reeling Unit									
6 basins	5.40	25	0.46	0.31	0.58	1.35			
10 basins	7.20	200	4.67	3.31	6.42	14.40			
Total	-	-	6.34	4.15	7.96	18.45			
Note: Unit cost is commo	on for all the zone	es							

# 2. Support for establishment of motorized charkhas to dissuade child labour

Charka reeling device is a crude contrivance for producing silk with minimum mechanization and practically there is no gadget for quality control. Generally in charkha, inferior cocoons are used to produce bulky silk yarn for a specific end use, mainly as weft in sarees. In these units, child labour is engaged for rotating charkha. In order to discourage employment of child labour and improve the working conditions of charkha units, this component which envisages support for establishment of motor driven twin charkha units with required driving arrangements, is proposed. Productivity in charkha is 1.00 kg per shift of 8 hours. To assist motorization of charkhas in the field, the component was implemented during XI Plan and is proposed to continue during the XII Plan also.

The sharing pattern, unit cost, physical targets and financial projections are given below:

	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	50%	25%	25%
	Special Category	80%	10%	10%

Zone	Unit Cost (Rs. in lakh)		Physical	Fina	ancial Proje	ections (Rs. in c	rore)
	Single Unit	Twin Charkha	Target (No.)	CSB	State	Beneficiary	Total
Southern	0.13	0.26					
Central and western	0.13	0.26	1000				
North-western	0.13	0.26	(single	0. 73	0.29	0.29	1.31
Eastern	0.13	0.26	units)				
North-eastern	0.14	0.27					

The subsidy shall be provided for twin charkha unit with common shaft run by a single 0.5 HP electric motor (single phase) as per unit cost mentioned above.

# 3. Support for establishment of improved cottage basin reeling units

Of the total raw silk produced in the country, a significant quantity of raw silk is produced on cottage basin reeling units spread across the country. The cottage basin system of reeling is an improved technology over charkha and provides better quality silk. But due to non-availability of required machineries, equipments and gadgets in the existing reeling units,

production of quality raw silk is not possible. CSB has developed cottage basin reeling technology package for achieving better quality silk and for improving the working conditions and extended support for setting up of this new cottage basin package in the field under X and XI Plans. Based on the feedback, it is proposed to continue the component during XII Plan also. The component envisages support for setting up of improved cottage basin reeling units in non-traditional states besides the non-traditional areas of traditional states. The component envisages support for setting up of 36 end (6 basins of 6 ends each) and 48 end units (6 basins of 8 ends each). The productivity of 36 end and 48 end units is about 4.8 kg and 9 kg per shift of 8 hours, respectively.

The sharing pattern, unit cost, physical targets and financial projections are given below:

Sharing Pattern	State Category	CSB	State	Beneficiary
	General Category	50%	25%	25%
	Special Category	80%	10%	10%

Unit Description /	Unit Cost	Physical			ancial Projections (Rs. in crore)			
zone	(Rs. in lakh)	Target (No.)	CSB	State	Beneficiary	Total		
36-end unit								
Southern	3.54							
Central and western	3.57							
North-western	3.61	35	0.79	0.23	0.23	1.25		
Eastern	3.64							
North-eastern	3.68							
48-end unit								
Southern	3.93							
Central and western	3.96							
North-western	4.00	15	0.34	0.13	0.13	0.60		
Eastern	4.04							
North-eastern	4.08							
Total		50	1.13	0.36	0.36	1.85		

# 4. Support for establishment of multi-end reeling units

CSB has developed a multi-end reeling machinery package for production of international grade raw silk using quality Multi-bi and Bivoltine cocoons available in the country. A component to assist the existing reelers and also new entrepreneurs to set up the multi-end reeling machinery package was implemented during the IX, X and XI Plans, with a view to encourage production of gradable raw silk. Based on the good response received during the previous Plan periods and in view of the thrust for Bivoltine cocoon production in the country, it is proposed to continue the component with modifications.

The component envisages support for setting up of 6 basin and 10 basin units. The units can be established by individual entrepreneurs or by a group in SPV mode. The productivity per basin is 1 kg per shift of 8 hours. The proposal for the establishment of multi-end reeling units shall be sent by the respective state sericulture department through the state level PMC. The proposal received from the state shall be placed before the AMC. The central share of subsidy is released to the state or CSTRI only after approval of AMC. A committee with representatives from state and CSTRI identifies and selects the beneficiaries. On selection, an agreement is executed in connection with establishment of the unit. The subsidy is released after the successful commissioning of the unit.

Wherever the existing beneficiaries of multi-end reeling units are going for creating additional capacity, the beneficiaries may be allowed to choose only those equipments of the package required for creating additional capacity,

subject to the condition that the concerned sub-unit of CSTRI/ CSTRI justifies the same. In such cases, central subsidy shall be limited to only that equipment.

Some of the existing multi-end units supported earlier are running without the equipment like boiler and generator, as these equipment was optional under IX and X Plan CDP component. As there is a demand for such multi-end units now, it is proposed to support procurement of this equipment as per the individual equipment unit cost and sharing pattern. Further, in order to improve the condition of the existing units, it is also proposed to support for re-conditioning of equipment with a lump sum of Rs.1.00 lakh, provided such requests are recommended by a technical committee comprising officials from CSB and DOS.

The sharing pattern, unit cost, physical targets and financial projections are given below:

	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	50%	25%	25%
	Special Category	80%	10%	10%

Unit Description /	Unit cost	Physical	Financial Projections (Rs. in crore)					
Zone	(Rs. in lakh)	Target (No.)	CSB	State	Beneficiary	Total		
6 basin units								
Southern	11.05							
Central and western	11.16							
North-western	11.27	25	1.52	0.63	0.63	2.78		
Eastern	11.38							
North-eastern	11.49							
10 basin units								
Southern	14.05		15.27	6.47	6.47			
Central and western	14.19							
North-western	14.33	200				28.21		
Eastern	14.47							
North-eastern	14.61							
Support for existing r	multi-end units for	r procurement	of additional	equipment an	d re-conditionin	g		
Southern	3.64							
Central and western	3.66							
North-western	3.69	50	0.97	0.43	0.43	1.83		
Eastern	3.71							
North-eastern	3.74							
Total	-	-	17.76	7.53	7.53	32.82		

# 5. Support for establishment of automatic reeling units

With a view to produce international quality raw silk from Bivoltine cocoons produced in the country, support for establishment of automatic reeling units was introduced during the X and XI Plans. The component envisages establishment of 400 end capacity automatic reeling unit with latest technology for cocoon drying, cooking etc, with a capacity to produce around 34 MT of raw silk per annum. The units established have started commercial production and are consistently

producing raw silk of 2A grade and above. In view of the thrust for Bivoltine cocoon production in the country and due to the demand for gradable raw silk yarn in the domestic as well as overseas markets, it is proposed to continue the component during XII Plan also. As the investment for 400 end automatic reeling units is quite high, it is also proposed to support establishment of 200 end automatic reeling units also, in order to meet the demand of small and marginal reelers. 200 end automatic reeling unit shall have an option of procuring 2 units of 100 kg capacity drier. The units can be established by individual entrepreneurs or by a group in Special Purpose Vehicle (SPV) mode. The ARM units are working on an average two shifts per day to make them economically viable. The productivity of 200 end and 400 end automatic reeling unit is 56 kg and 112 kg per day of two shifts, respectively.

The sharing pattern, unit cost, physical targets and financial projections are given below:

	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	50%	25%	25%
	Special Category	80%	10%	10%

	Unit Cost	Physical -	Financial Projections (Rs. in crore)				
Unit Description	(Rs. in lakh)	larget (No.)	Target (No.) CSB		Beneficiary	Total	
200 ends unit	72.97	5	2.26	0.69	0.70	3.65	
400 ends unit	135.00	15	10.13	5.06	5.06	20.25	
Total	-	20	12.39	5.75	5.76	23.90	
Note: Unit cost is common for all the zones							

#### Component specific implementation guidelines:

As the subsidy support provided towards establishment of automatic reeling unit is quite high, implementation guidelines need to be specific for this component. The individual entrepreneur/SPV shall have the technical and financial capability to establish and run the automatic reeling unit and the SPV shall preferably have sericulture farmers as members. The beneficiary shall have a clear tie-up with sericulture farmer group for supply of cocoons to the unit based on a quality linked pricing formula. In case of SPV, each member shall not have more than 10% of the equity. Interested individuals/SPVs shall apply for establishment of automatic reeling unit to the respective DOS, which in turn forwards the proposal to CSB with their comments. A committee constituted by CSB selects the beneficiary for establishment of automatic reeling unit by following the scoring criteria giving due weightage to reeling experience, financial capability, availability of land, building and other infrastructure, tie-up arrangement for cocoon supply etc. On selection by the committee, a detailed proposal shall be placed before AMC. Based on the approval of AMC, selection letter shall be issued to the selected beneficiary. On acceptance of the offer by the beneficiary, a tripartite agreement shall be executed among CSB, DOS and the beneficiary clearly defining the roles of parties concerned. The beneficiary shall be advised to open a Letter of Credit (LC) with a reliable machinery manufacturer for import of automatic reeling machinery. The central share of subsidy shall be routed through DOS or deposited directly with the bank as the case may be, and shall be utilized to meet the commitment of import LC. The beneficiary shall ensure commissioning of the unit within a reasonable time frame. The beneficiary shall purchase the cocoons from the identified farmer groups based on quality linked pricing formula. A technical committee shall assist the beneficiary in fixing the price of the cocoon supplied to the unit based on cocoon quality and prevailing market rate for raw silk. CSB and its units shall provide required technical support and closely monitor the whole process of establishment of these units.

# 6. Support for establishment of automatic dupion reeling units (142 ends)

The double cocoons and inferior quality cocoons are converted in to dupion silk yarn on a dupion reeling machine. The Indian dupion yarn, which is manufactured on charkha, is characterized by the presence of prominent slubs and is used for manufacturing of fabrics on handlooms for domestic and export markets. Good quality dupion yarn reeled on automatic dupion reeling machine is of great demand for export fabric production. With a view to provide better value addition to inferior quality cocoons, support was given for establishment of automatic dupion silk reeling units with imported machinery under

XI Plan and is proposed to continue the component during XII Plan also. The units can be established by individual entrepreneurs or by a group in SPV mode. The productivity of this unit is 190 kg per day working on two shift basis.

The sharing pattern, unit cost, physical targets and financial projections are given below:

	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	50%	25%	25%
	Special Category	80%	10%	10%

<b>Unit Cost</b>	Physical	Financial Projections (Rs. in crore)					
(Rs. In lakh)	Target (No.)	CSB State Beneficiary Total					
85.00	3	1.28 0.64 0.63 2.55					
Note: Unit cost is common for all the zones							

Component specific implementation guidelines are same as mentioned in Scheme No.5.

# 7. Support for establishment of twisting units (480 spindles)

The reelers usually sell their produce *i.e.*, raw silk in the market. Subsequently, the raw silk gets twisted by the twister and then reaches the weaver. The objective of this component is to enhance profit margin of the multi-end reelers by adding a twisting unit so that the reeler can go for value addition by way of selling their produce in the form of twisted silk. This component provides support for establishment of twisting units of 480 spindles along with winding and doubling machines. The productivity of such unit is 6.144 kg per shift of 8 hours. The component implemented during XI Plan was well received by a number of multi-end reeling units and quality twisted silk is being supplied to the weaving sector. Thus, it is proposed to continue the component during XII Plan also to support the existing and new multi-end reeling units. However, priority shall be given to those beneficiaries who have availed lesser support under CDP so far.

The sharing pattern, unit cost, physical targets and financial projections are given below:

	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	75%	0%	25%
	Special Category	80%	10%	10%

	Unit Cost	Physical Financial Projections (Rs. in cro				crore)
Zone	(Rs. in lakh)	Target (No.)	CSB	State	Beneficiary	Total
Southern	7.86					
Central and western	7.94					
North-western	8.02	125	7.45	0.09	2.33	9.87
Eastern	8.10					
North-eastern	8.17					

# 8. Interest subsidy on working capital loan sanctioned by banks to reeling units

Reeling is the weakest link in the entire production process of silk finished goods. The cost of the raw material *i.e.*, cocoons constitutes around 80-90% of reeled silk making the working capital requirement, the most critical aspect in reeling activity. Added to this, there is relatively a poor credit flow from banks or financial institutions to the silk reeling sector. In order to meet the working capital requirement of the reelers and encourage credit flow to the reeling sector, it is proposed to provide a maximum of 5% interest subsidy on the working capital loan sanctioned to reeling units by the scheduled commercial banks. The interest subsidy shall be shared between centre and state. The balance interest shall be borne by the reelers. The reeling units proposed for support, their working capital requirement, working capital ceiling and eligible interest subvention are indicated below:

(Rs. in lakh)

Unit Description		Working Capital Requirement	Working Capital Ceiling for Interest Subsidy	Interest Subsidy @ 5% per annum
Multi-cropping states (All	states except	t J&K, Uttarakhan	d and Himachal Pra	desh)
Cottage basin units	36 ends	3.35	3.00	0.150
	48 ends	4.23	4.00	0.200
Multi-end reeling units	6 basins	4.96	4.50	0.225
	10 basins	8.18	7.50	0.375
	20 basins	16.36	15.00	0.750
Automatic reeling units	200 ends	44.63	25.00	1.250
	400 ends	89.27	50.00	2.500
Automatic dupion reeling u	nits 92.60	50.00	2.500	
Spun silk mills		9.66	7.50	0.375
Bi-annual cropping (J&K,	Uttarakhand	and HP) / Vanya s	silk producing states	5
Cottage basin units	36 ends	14.04	10.00	0.500
	48 ends	17.73	15.00	0.750
Multi-end reeling units	6 basins	21.46	18.00	0.900
	10 basins	35.33	25.00	1.250
	20 basins	70.67	50.00	2.500
Automatic reeling units - 20	0 ends	70.67	50.00	2.500
Wet reeling units		3.56	3.00	0.150
Two-in-one reeling-cum-twi	sting units	1.85	1.50	0.075

The quantum of interest subvention indicated above against each unit is common for all the sericulture zones.

The interest subvention shall be limited to the amount indicated above against each type/ capacity of reeling unit (interest on working capital ceiling at 5% per annum) or the interest amount actually paid on the working capital loan availed, whichever is lower.

The sharing pattern of interest subsidy, unit cost, physical targets and financial projections are given below:

	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	50%	50 %	-
	Special Category	90%	10%	-

Reeling Units	Unit Cost for 2 years	Physical Target	Financial Projections (Rs.in c			s.in crore)
	(Rs.in lakh)		CSB	State	Beneficiary	Total
As indicated above	0.30 to 5.00	295	1.84	1.01	-	2.85
Note: Unit cost is common for all the zones						

# Component specific implementation guidelines:

- Existing and new reeling units of following description are eligible for interest subsidy.
  - a) Improved cottage basins of 36 end and 48 end units and multi-end units of 6 basin, 10 basin and 20 basins.

- b) Automatic reeling, dupion reeling units and spun silk mills.
- c) Vanya sector: Wet reeling machines and two-in-one reeling-cum-twisting machines.
- 2. Reeling units shall avail working capital loan from the scheduled commercial banks and state financial corporations.
- Reeling units functioning with the working capital support from the banks shall be eligible for interest subsidy.
- 4. Reeling units which availed working capital loan from the banks/ financial Institutions prior to April 1, 2012 are also eligible for interest subvention. However, interest subvention shall be provided only for the interest payable by the reeling units of the above description from the financial year 2012-13.
- 5. Reeling units shall claim interest subvention on yearly basis in a prescribed application format through DOS. On receipt of such claims from DOSs, the central share of interest subsidy shall be released to DOSs to facilitate them for releasing of interest subsidy along with their matching share to the respective banks with a request to credit the same to the working capital loan account of the reeler. Alternately, on receipt of the claims, DOS shall also release the eligible interest subsidy amount to the beneficiaries and seek reimbursement of central share later.
- 6. CSB/DOS shall not be responsible for recovery of working capital loan sanctioned by the bank and loan recovery shall be the responsibility of the bank.

# 9. Incentive for production of Bivoltine silk

The component on incentive for production of Bivoltine silk was implemented during X Plan In order to provide a thrust to Bivoltine sericulture through better value realization for Bivoltine cocoons and encourage the farmers to produce quality Bivoltine cocoons. With the establishment of automatic reeling units there is an increasing demand for quality Bivoltine cocoons in the country. Thus, the component was continued during XI Plan and is proposed to continue during XII Plan also. The quality parameters of Bivoltine silk eligible for incentive and quantum of incentive proposed under the component are indicated below:

Reeling unit	Basins	Quality of silk eligible for incentive	Quantity of Bivoltine silk restricted for incentive (kg/day)	Incentive per kg (Rs.)
Multi-end reeling units	6 basins 10 basins 20 basins	Gradable Bivoltine raw silk	9 15 30	100.00
Automatic reeling units	200 ends 400 ends	2A grade and above Bivoltine raw silk	56 112	150.00

Automatic reeling units can produce quality Bivoltine raw silk of 2A grade and above. Therefore, incentive of Rs.150 per kg is proposed for 2A grade and above. In case, they produce below 2A grade, only A grade silk produced on these units shall be eligible for incentive of Rs.100 per kg and below A grade is not eligible for any incentive.

Quality of raw silk greatly depends on the quality of cocoons and ideally the Bivolitine incentive paid to the reelers is passed on to the farmers through better price for quality cocoons produced by them. This flow of benefit to the farmers shall encourage farmers to take up Bivoltine sericulture and motivate them to produce quality cocoons.

The sharing pattern, unit cost, physical targets and financial projections are given below:

	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	50%	50%	-
	Special Category	90%	10%	-

	Incentive Amount	Physical	Financial Projections (Rs. in crore)				
Description	(Rs. In lakh / MT)	Target (MT)	CSB	State	Beneficiary	Total	
Multi-end reeling units	1.00	1,000	5.58	4.42	-	10.00	
Automatic reeling units	1.50	1,000	7.80	7.20	-	15.00	
Total	-	2,000	13.38	11.62	-	25.00	
Note: The incentive amount indicated above is common for all zones.							

#### Component specific implementation guidelines:

The reeling units shall submit their claims to DOS on quarterly basis indicating date-wise quantity of Bivoltine cocoons purchased and quantity of Bivoltine silk reeled. The claims shall be supported with necessary documents like copies of invoices, bills, bidding slip etc, towards purchase of Bivoltine cocoons and selling of raw silk as a proof towards production of Bivoltine silk in his/her unit.

In general, the concerned DOS shall implement this component at its level and claim CSB share subsequently. In cases, where the DOSs are unable to implement the component due to budgetary problems or other reasons, the units of CSTRI in the area, can implement the component and submit claims for release of CSB share. In such cases, CSB share shall be released directly to CSTRI to implement the component.

DOS/CSTRI shall submit a proposal seeking release of CSB share on quarterly basis in the prescribed format. Similarly, on receipt of claims from DOS/CSTRI, CSB share shall be released to DOS/CSTRI as the case may be. After disbursement of the eligible incentive to the reeling units, DOS/CSTRI shall furnish utilization certificate to the effect, as per GFR Format.

# 10. Support for Vanya reeling / spinning sector

# (A) Reeling-cum-twisting machine

CSB has designed and developed a reeling-cum-twisting machine for both tasar and muga reeling. The mechanization of reeling and twisting in one single operation has some definite advantages *viz.*, higher productivity, reduced labour, removal of drudgery and importantly generating better quality twisted yarn. The productivity of this unit is 350 g per shift of 8 hours. The concept of using twisted yarn in *Vanya* sector is new and in this device, yarn is twisted during reeling process simultaneously. Use of twisted yarn not only ensures better preparatory and weaving performance, but also better fabric quality associated with visual, tactual and comfort characteristics. The silk reeled on the machine is now being used as warp.

Similarly, the demand base for the machine reeled muga yarn is gaining momentum. The support provided during the IX, X and XI Plans for promoting this technology have made a good impact in the field. Therefore, it is proposed to continue the component during XII Plan also. Apart from CSTRI model, machines developed by different agencies shall also be promoted under this component based on the acceptance of the machine model by the reelers in the field subject to the condition that the same is recommended by the CSTRI.

The sharing pattern, unit cost, physical targets and financial projections are given below:

Sharing Pattern	State Category	CSB	State	Beneficiary
	General Category	50%	25%	25%
	Special Category	80%	10%	10%

Zone	Unit cost	Physical	Financial Projections (Rs. in crore)			
Zone	(Rs. in lakh)	Target (No.)	CSB	State	Beneficiary	Total
Southern	0.45					
Central and western	0.45					
North-western	0.46	3,000	9.71	2.10	2.10	13.91
Eastern	0.46					
North-eastern	0.47					

# B) Wet reeling machines (2 basins of 6 ends each)

Tasar reeling is predominantly a dry reeling activity. CSB has developed a wet reeling machine and technology package for production of better quality tasar yarn. The productivity of this unit for 60 denier yarn is 600 g per basin per shift of 8 hours (1.2 kg per unit). Wet reeling aims at producing superior quality tasar raw silk from good quality cocoons. It is proposed to promote this tasar reeling package as a component under the XII Plan period. Apart from CSTRI model, machines developed by different agencies shall also be promoted under this component based on the acceptance of the machine model by the reelers in the field subject to the condition that the same is recommended by the CSTRI.

The sharing pattern, unit cost, physical targets and financial projections are given below:

, , , , , , , , , , , , , , , , , , ,	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	50%	25%	25%
	Special Category	80%	10%	10%

Zone	Unit cost	Physical	Financial Projections (Rs. in crore)			
	(Rs. in lakh)	Target (No.)	CSB	State	Beneficiary	Total
Southern	0.46					
Central and western	0.46	100		0.06	0.06	0.48
North-western	0.47		0.36			
Eastern	0.47					
North-eastern	0.48					

# C) Two-in-one reeling-cum-twisting machine

This machine provides facilities for both wet reeling and twisting on a single machine as independent activities. The productivity of this unit is 600 g for reeling and 250 g for twisting per shift of 8 hours. This component is proposed to be implemented during the XII Plan period.

The sharing pattern, unit cost, physical targets and financial projections are given below.

	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	50%	25%	25%
	Special Category	80%	10%	10%

Zone	Unit Cost	Physical Target (No.)	Financial Projections (Rs. in crore)			
	(Rs. in lakh)		CSB	State	Beneficiary	Total
Southern	0.64	100				0.66
Central and western	0.65					
North-western	0.65		0.50	0.08	0.08	
Eastern	0.66					
North-eastern	0.67					

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## D) Tasar cocoon sorting machine

The manual sorting of tasar cocoon, which is being practiced in the field since long, is a cumbersome process. To overcome this, CSTRI has developed a mechanical device to separate the tasar cocoons based on the size. Two persons per machine are required to operate this device. In the traditional process, a person can manually sort around 10,000 cocoons per day, whereas with CSTRI device two persons can sort around 3.3 to 3.5 lakh cocoons per day. As this device is cost effective, it is proposed to promote this device in tasar producing state on a pilot basis during the XII Plan.

The sharing pattern, unit cost, physical targets and financial projections are given below.

	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	50%	25%	25%
	Special Category	80%	10%	10%

Zone	Unit cost	Physical	Financial Projections (F		ections (Rs. in c	s. in crore)	
20110	(Rs. in lakh)	Target (No.)	CSB	State	Beneficiary	Total	
Southern	0.51	10	0.03	0.01	0.01	0.05	
Central and western	0.51						
North-western	0.52						
Eastern	0.52						
North-eastern	0.53						

## E) Motorized-cum-pedal operated spinning machine

The response to the development of motorized spinning wheel designed for spinning yarn from eri cocoon and silk waste was overwhelming. The productivity of this device is 200 g per day. The traditional spinners of major eri, tasar and muga silk producing states of the country use mostly takli for spinning of hand spun silk yarn form cocoon shell and silk waste. The productivity of the takli spinning is hardly 40 g per day. To improve the productivity and quality of hand spun silk yarn, CSTRI has developed motorized-cum-pedal operated spinning machine to enhance the earnings of the spinning artisans. This component has made a considerable impact in the field under earlier Plan periods. It is proposed to continue the said component under XII Plan period also. Apart from CSTRI model, machines developed by different agencies shall also be promoted under this component based on the acceptance of the machine by the reelers in the field subject to the condition that the same is recommended by the CSTRI.

The sharing pattern, unit cost, physical targets and financial projections are given below:

	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	50%	25%	25%
	Special Category	80%	10%	10%

Unit cost	Physical	Financial Projections (Rs. in crore)			
(Rs. in lakh)	Target (No.)	CSB	State	Beneficiary	Total
0.07	4,500	2.13	0.51	0.51	3.15
Note: Unit cost is common for all the zones					

## F) Solar operated spinning machines

CSTRI has developed a spinning machine, which is driven by the solar energy, to address the requirement of artisan of remote villages where availability of electricity is scarce. The productivity of this device is around 200 g per day. This component is proposed to be implemented during the XII Plan period. The sharing pattern, unit cost, physical Targets and financial Projections are given below.

	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	50%	25%	25%
	Special Category`	80%	10%	10%

Unit cost	Physical	Financial Projections (Rs. in crore)			
(Rs. in lakh)	Target (No.)	CSB	State	Beneficiary	Total
0.19	100	0.14	0.02	0.03	0.19
Note: Unit cost is common for all the zones					

## 11. Providing services of master reelers and technicians

One of the major constraints for sustaining silk reeling industry in non-traditional states and non-traditional areas of traditional states is the absence of skilled reelers. To overcome this problem, under X and XI Plans, master reelers were deputed to existing silk reeling units identified by the CSTRI sub-units and DOSs to train the workers engaged in the units and to develop confidence among reelers to manage and run the units satisfactorily. Considering the good feed back, demand and request from DOSs, it is proposed to continue the component during XII Plan also with a modification to provide services of master technicians to attend the repair and other maintenance work of reeling units, with unit cost of Rs.1.44 lakh as indicated below.

#	Wages / allowances	Per Month(Rs.)	Per Year(Rs.)
1	Wages at Rs.250 per day	7,500	90,000
2	House rent allowance (lump sum)	2,000	24,000
3	Medical allowance (lump sum)	500	6,000
4	Lump sum after completion of the tenure at Rs. 2,000 per month	2,000	24,000
	Total	12,000	1,44,000

While the entire unit cost of Rs.1.44 lakh shall be borne by CSB (100%), the other expenditure like transportation and premium for insurance coverage shall be met out of the annual budget of CSTRI, based on the actual expenditure.

The sharing pattern, unit cost, physical targets and financial projections are given below.

	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	100%	-	-
	Special Category	100%	-	-

Description	Unit Cost (Rs. in lakh)	Physical Target (No.)	Financial projection (CSB share Rs. in crore)		
Master reelers	1.44	50	0.72		
Master technicians	1.44	10	0.14		
Total	-	-	0.86		
Note: Unit cost is common for all the zones					

#### Component specific operational guidelines:

The concept is aimed at increasing the skill level of operatives at work place by engaging field experts for a specific period. The master reelers or technicians shall be empanelled by CSB based on their experience in the particular field at least for 5 years. Based on request received from DOSs, societies and individuals, CSB shall deploy master reelers to the needy reeling units for a period of one year. The master technicians shall be deployed to the units of CSTRI for a period of one year and these units shall send the master technicians to the reeling units to attend the repair and other related works as and when such requests are received from the reeling units. Whenever, master technicians are available at the sub-units where they are

deployed, their services shall be utilized for the official work of the units so as to keep them engaged. Apart from the above unit cost, each master reeler or technician is entitled for the following:

- 1. The actual expenditure (TA and DA) towards travel from the place of residence to the place of deployment (one-time to and fro), as applicable for Group D employees.
- 2. TA and DA to master technicians shall be as per the rates applicable for Group D employees, whenever they travel from the units of CSTRI (Headquarters) to reeling units.
- 3. Actual premium for insurance coverage for a period of one year for an assured sum of Rs.1.00 lakh.
- 4. One day leave for every month, which may be taken every month or accumulated and taken in split basis as per their requirement during the tenure, apart from weekly off.

As mentioned above, the actual expenditure towards TA and DA to master reelers/ technicians and premium for insurance coverage (SI.No.1 to 3 above) shall be met out of the annual budget of the CSTRI or the nested units of CSTRI, Bangalore. Therefore, necessary budget provision shall be made under their annual plan for this purpose.

The master reelers/technicians shall have to work for at least six months regularly to become eligible for lump sum of Rs.24,000 proposed to be paid after their tenure. The lump sum shall be worked out on the basis of number of months of working and no lump sum advance shall be paid for those master reelers/technicians working less than six months. For calculating number of months beyond six months, working for a period of 15 days and above shall be considered as one month of work and less than 15 days shall be ignored.

## 12. Support for handloom sector

## A) Loom upgradation through jacquards and other equipment

The existing silk handloom units are not having financial capacity to upgrade their handlooms for producing diversified products and for adopting small interventions required for better operation. In this direction, support would be provided for upgrading existing pit or frame or improved handlooms working on silk through installation of attachments like additional jacquards, dobby and by the way of providing pirn winding machine, Asu machine, winding machine etc.

The sharing pattern, unit cost, physical targets and financial projections are given below:

	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	50%	25%	25%
	Special Category	80%	10%	10%

Unit Cost	Physical	Financial Projections (Rs. in crore)			
(Rs. in lakh)	Target (No.)	CSB	State	Beneficiary	Total
0.15	5,000	3.86	1.82	1.82	7.50

## B) Pneumatic lifting mechanism

This mechanism has been developed by CSTRI for silk handloom clusters. The use of three to four jacquards for weaving intricate designs is a common practice on silk handlooms. The manual effort required to lift these jacquards puts lot of strain on the weaver and it takes a heavy toll with severe joint ailments leading to arthritis. This is probably one of the main reasons for the younger generation to move away from traditional handloom weaving. The use of pneumatic lifting mechanism on handloom is a forward step in the right direction to reduce the drudgery/strain on the weaver.

Support has been provided for attaching pneumatic lifting mechanism on silk handlooms during the XI Plan period and it is proposed to continue this component during the XII Plan keeping in view the benefits of the component to silk handloom weavers.

The sharing pattern, unit cost, physical targets and financial projections are given below.

	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	50%	25%	25%
	Special Category	80%	10%	10%

Unit Description	Unit cost	Physical	Financial Projections (Rs. in crore)			
ome Boodinphon	(Rs. in lakh)	Target (No.)	CSB	State	Beneficiary	Total
2 loom unit	0.33	1,000	1.80	0.75	0.75	3.30
4 loom unit	0.50	1,000	2.73	1.14	1.13	5.00
Total	-	-	4.53	1.89	1.88	8.30

Note: Unit cost is common for all the zones

## 13. Support for setting up of common facility centre for yarn dyeing and processing

## A) Computer Aided Textile Designing (CATD) units

The component on special technology package developed by CSTRI was implemented during the XI Plan period and the response was overwhelming from the traditional silk handloom clusters. Therefore, it is proposed to continue the support during XII Plan. Design forms an integral and crucial part of textiles and offers an edge to the product in the market. The aesthetic design starts with a creative idea which goes through a period of detailed development before it is put on to the textiles. Much of the effort involved in the process of design development can be minimized with the use of computers with software for textile designing. CATD provides freedom to the textile designer to get the best out of his artistic ingenuity and better flexibility for his creativity and also facilitates the artist with ease and quickness in operations besides making available innumerable options. It also equips the textile designer with a tool to react to the changes in the market trend in a faster way. The components like computerized card punching machine eliminates the requirement of manual labour to a large extent.

Under the component, the beneficiaries can go for individual sub-components like, hardware, textile design software, card punching, card lacing etc. The central share of subsidy shall be limited to only those sub-components.

The sharing pattern, unit cost, physical targets and financial projections are given below.

	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	50%	25%	25%
onanng.	Special Category	80%	10%	10%

Unit Cost	Physical Target	Financial Projections (Rs. in crore)				
(Rs. in lakh)	(No.)	CSB	State	Beneficiary	Total	
3.96	50	1.23	0.38	0.37	1.98	

Note: Unit cost is common for all the zones

## B) CFC for yarn dyeing

Though silk is produced only in few states, almost all the states have at least one silk weaving cluster. Mainly the small time traditional dyers meet the dyeing requirements of these clusters, by dyeing small quantities of silk, employing low level of technology and equipment. This results in poor quality dyeing especially, poor colour fastness etc. CSB has studied the requirements of these dyeing clusters across the country and came out with certain measures to address the problems. Based on these, silk yarn dyeing units of varying capacity were introduced during the X and XI Plans. The dyeing units established under the component have a better working environment and are able to supply quality dyed yarn to weavers. Based on the response from the weavers, it is proposed to continue the support for establishment of tub dyeing and arm dyeing units for silk yarn with certain modifications like incorporating Effluent Treatment Plant as part of the package.

**Tub dyeing unit:** It is an equipment package used for degumming and dyeing of silk yarn. In this process, the yarn to be dyed is worked manually in a tub containing the dye solution. It is proposed to support establishment of 25 kg and 50 kg capacity units.

**Arm dyeing unit:** It is also an equipment package used for processing of silk yarn (degumming and dyeing). In this process, the yarn shall be rotated on the perforated arms of the machine automatically and dye solution is sprayed through these perforations resulting in uniform dyeing. Considering the viability of the unit, it is proposed to support establishment of 50 kg capacity units.

## C) CFC for fabric processing

As most of the silk fabrics produced on powerlooms like soft silk, chiffon, crepe and georgette are piece dyed, fabric processing and finishing facility is required. As these facilities are capital intensive, the fabric processing is carried out in vessels in primitive manner resulting in poor quality. The finishing work is generally outsourced. Hence, creation of such fabric processing and finishing facility shall certainly help the silk processors in places like Serampore, Varanasi and Bangalore. Hence, it is proposed to continue the programme with certain modifications like incorporating ETP and calendering units as part of the package.

## D) Effluent Treatment Plant (ETP)

The silk yarn dyeing and silk fabric processing facilities created under CDP during earlier Plan periods were not with ETP. The Pollution Control Board in the recent past has issued guidelines, for strict compliance, for treatment of effluent before discharge. With a view to equip these yarn dyeing and fabric processing units with ETP and to keep the environment free from pollution, it is proposed to provide support for ETP to these existing units as well as new units to be established under XII Plan.

The sharing pattern, unit cost, physical targets and financial projections are given below.

	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	75%	0%	25%
	Special Category	80%	10%	10%

	Unit Cost	Physical Target	Financial Projections (Rs. in crore)			
Unit Description	(Rs. in lakh)	(No.)	CSB	State	Beneficiary	Total
Tub dyeing - 25 kg capacity unit	3.92	10	0.30	0.02	0.07	0.39
Tub dyeing - 50 kg capacity unit	6.37	25	1.22	0.05	0.32	1.59
Arm dyeing - 50 kg capacity units	17.12	10	1.33	0.09	0.29	1.71
Fabric processing - 250 kg capacity unit	27.15	10	2.10	0.14	0.48	2.72
Effluent treatment plant - Zero discharge type	7.00	25	1.32	0.02	0.41	1.75
Effluent treatment plant – Discharge to ground type	4.00	50	1.52	0.04	0.44	2.00
Total		-	7.79	0.36	2.01	10.16
Note: Unit cost is common	for all the zones					

## 14. Providing services of master weavers, designers, dyers and technicians

Each handloom cluster is known for its unique product and there is very little effort to incorporate design changes to suit the changing market demands. The main reason could be the non-availability of skilled manpower to handle this task. Similarly, silk yarn dyeing is an integral part of silk weaving cluster and standard dyeing practices are the need of the hour. In order to address these issues, under XI Plan, master weavers/dyers were deputed to silk weaving/ dyeing clusters identified by DOSs to train the workers engaged in the cluster on various aspects of weaving/dyeing and to develop confidence among weavers/dyers to manage and run the units satisfactorily. Considering the good feed back, demand and request from the states, it is proposed to continue the component during XII Plan with a modification to provide services of master technicians to weaving/dyeing to attend the services, repair and other related work of weaving/ dyeing units.

The sharing pattern, unit cost, physical targets and financial projections are given below.

	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	100%	-	-
	Special Category	100%	-	-

Description	Unit Cost (Rs. in lakh)	Physical Target (No.)	Financial projection (Rs. in crore)
Master weavers/ designers	1.44	25	0.36
Master dyers	1.44	25	0.36
Master technicians	1.44	10	0.14
Total	-	-	0.86

Note: Unit cost is common for all the zones

The component specific operational guidelines are as mentioned above under the component Providing services of Master reelers and Technicians under reeling and spinning sector.

# 15. Support to states for creating/upgrading marketing infrastructure for cocoons and raw silk

In order to establish an organized marketing system and to facilitate the farmers/ reelers for transacting their produce on quality linked pricing system, a component *viz.*, Quality Linked Price Support System for cocoon and raw silk was implemented during the X and XI Plan periods. The component also envisaged creation of non-erodable revolving fund facilitating DOSs to purchase cocoons/raw silk from farmers/reelers on quality basis by making spot payment to farmers/reelers. Based on the request from DOSs, it is proposed to continue the component with modification during XII Plan. The component envisages support to states with the lumpsum of Rs.150.00 lakh for each traditional states and Rs.70.00 lakh for each non-traditional states, for various purposes indicated below.

## A) Establishment of new cocoon markets/silk exchanges

Support is provided for construction of building and procurement of market related equipment like cocoon bins/baskets, electronic balance, computers with printers, kiosk (information desk), public audio system, trolleys, generator, hot air dryers, cocoon/raw silk testing equipment, furniture and fixtures, etc. The DOSs shall send a complete proposal indicating the number of cocoon markets/silk exchanges to be established, location, land availability, approved building plan and estimate, list of equipment to be procured with item-wise cost details etc.

## C) Upgradation of existing cocoon markets/silk exchanges

Support is provided for renovation/expansion of building and procurement of market related equipment [as mentioned above under (a)]. The interested states shall send a complete and clear proposal indicating the number of cocoon markets/silk exchanges proposed to be upgraded, details of upgradation/ renovation, locations, list of equipments proposed to be procured with item-wise cost details etc.

## C) Establishment of cocoon banks/ware houses

Support is provided for construction of building and procurement of market related equipment [as mentioned above under (a)]. DOSs shall send a complete proposal indicating the number of cocoon banks/ware houses to be established, location, land availability, approved building plan and estimate, list of equipment to be procured with itemwise cost, detailed operation modalities etc.

## D) Organization of Vanya (muga and eri) cocoon marketing outlets

There is no organized marketing system in *Vanya* sector in general and muga and eri in particular. Cocoon growers in these sectors are being exploited by the middlemen and are deprived of getting their due share of value addition in spite of the high cost of realization for muga yarn and finished products. In muga and eri sectors, farmers lack bargaining power due to absence of storage and stifling facilities besides holding capacity to pass through market glut immediately after crop harvest

In order to mitigate this, Vanya market outlets in the production clusters shall be organized with following objectives:

- Channalise and organize the marketing of eri and muga cocoons.
- Prevent middlemen exploiting trade practices in cocoon marketing.
- Ensure the availability of quality cocoons for reelers and spinners.

#### Market outlets shall be organized in the following manner:

- The market outlets shall have facility for storage, stifling, grading of cocoons and sufficient non-erodable revolving fund for purchase of cocoons.
- The outlets shall be directly organized by DOS or NGOs, CBOs, SHGs having sufficient experience in sericulture to ensure efficient procurement, handling and marketing of the stock.
- A consultative committee with representation from all the concerned besides representatives of cocoon producers, reelers, spinners and weavers shall be in place to oversee the functioning of the market outlets and the committee is empowered to take all the decisions related to the functioning of the market outlets.
- To encourage individual yarn converters, ceiling shall be fixed on the quantum of cocoons to be purchased per person per transaction, which shall vary with the demand for the cocoons at a given time.
- The floor price fixed by Local Authorization Committee (LAC) of Muga Raw Material Bank (MRMB) or a consultative committee shall be followed to enable the farmers to get a remunerative price for their produce.
- Since, one tme grant is provided to meet expenses on hiring and maintenance, the market outlets shall operate in such a way that it can sustain on its own with minimum profit.

DOSs shall send a complete proposal indicating the number of market outlets to be organized, locations, project cost of each outlet, list of equipments to be procured with item-wise cost, details of non-erodable revolving fund to be created with a clear modus operandi etc.

## E) Development of information technology solutions

Support shall be provided for development of information technology (IT) solutions in quality linked price support system and other marketing aspects. DOSs shall send detailed proposal.

DOSs can apportion the above unit cost of Rs.150.00 and .70.00 lakh fixed for traditional states and non-traditional states, respectively among the above sub-components (a) to (e) depending upon their requirement. Accordingly, DOSs shall send their proposal for establishment of any of the sub-components, indicating the present cocoon/raw silk production in their state, existing marketing system, justification to establish the proposed system etc.

The details of assistance availed under the component Quality linked price support system for cocoons and raw silk and establishment of cocoon banks/market support to *Vanya* sector of the XI Plan CDP (if any), progress made,

present status of non-erodable revolving fund (if any) etc. shall be indicated in the state proposal mandatorily for considering further support under this component. The central assistance to DOSs under the component during XII Plan period is limited to a maximum of 75% and 90% of the unit cost for general states and special status states, respectively.

The sharing pattern, unit cost, physical targets and financial projections are given below.

	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	75%	25%	-
	Special Category	90%	10%	-

Catagory	Unit Cost	No. of States/	s/ Financial Projections (Rs.		tions (Rs. in	crore)
Category	(Rs. in lakh)	Agencies	CSB	State	Beneficiary	Total
Traditional states	150.00	5	5.85	1.65	-	7.50
Non-traditional states	70.00	10	6.09	0.91	-	7.00
Total	-	15	11.94	2.56	-	14.50

## 16. Support for setting up of hot air driers

This is an ongoing programme, which shall be continued during the XII Plan. In northern and north-eastern states, sericulture is practiced as a seasonal activity. During the favorable seasons, cocoons are harvested and these harvested cocoons are to be dried and stored for long for its use over a period of six months. In most of the non-traditional states proper cocoon drying facility is not available and the farmer/reelers are practicing sun drying / steam stifling, which is not advisable as it deteriorates the quality of cocoons and the cocoons becomes vulnerable to fungus attack. To overcome these problems, use of hot air dryers was supported.

This component encourages state/farmer/reelers to establish electrical/multi-fuel hot air drying units of 50 kg and 100 kg capacity. The establishment of hot air driers helps the reelers to dry and store the cocoons for later use. When established at the farmer level, it helps the farmer to dry and store the cocoons enabling him to dispose the cocoons during favourable market conditions thus avoiding distress sale. It is also proposed to support setting up of conveyor type hot air dryer of 2 MT capacity as a common facility as there is a demand to this type of hot air dryers especially in the bi-annual cropping states like HP, Uttarakhand, J&K etc.

The sharing pattern, unit cost, physical targets and financial projections are given below.

	State Category	CSB	State	Beneficiary
Sharing pattern	General Category	50%	25%	25%
	Special Category	80%	10%	10%

	Unit Cost	Physical	Financial Projections (Rs. in crore)				
Zone	(Rs. in lakh)			State	Beneficiary	Total	
Electricity operated - 50 kg capacity units							
Southern	1.32						
Central and western	1.33						
North-western	1.34	300	2.53	0.75	0.75	4.03	
Eastern	1.36						
North-eastern	1.37						

	Unit Cost	Physical	Finan	cial Project	ions (Rs. in cr	ore)		
Zone	(Rs. in lakh)	Target	CSB	State	Beneficiary	Total		
Electricity operated - 100 kg capacity units								
Southern	1.82							
Central and western	1.84							
North-western	1.86	200	2.42	0.65	0.65	3.72		
Eastern	1.88							
North-eastern	1.89							
Multi-fuel: 50 kg cap	acity units							
Southern	0.61		1.18	0.34	0.34			
Central and western	0.62							
North-western	0.62	300				1.86		
Eastern	0.63							
North-eastern	0.63							
Multi-fuel: 100 kg ca	pacity units							
Southern	0.81							
Central and western	0.82							
North-western	0.83	200	1.08	0.29	0.29	1.66		
Eastern	0.84							
North-eastern	0.84							
Conveyor hot air dryer - 2 MT capacity (Imported)	22.88	3	0.55	0.07	0.07	0.69		
Total		1003	7.76	2.10	2.10	11.96		

## 17. Vanya silk marketing promotion

#### a) Brief description of the component:

In recent years, the *Vanya* silks or natural silks other than mulberry silk have recorded dramatic improvements in quality and productivity levels. The new initiatives made by CSB like popularization of new machines for reeling, spinning etc, facilitated the emergence of wide range of marketable products in these sectors. A host of initiatives were taken by CSB to promote these silks and their exports as well as local consumption by creating awareness in the public by various sources. The component was initiated during the X Plan and had made remarkable impact in the Vanya silk market development. Hence, it is proposed to continue the said component during the XII Plan also with a few modifications.

During XII Plan, the generic, brand and market promotion is the main focus area. *Vanya* silk marketing promotion (VSMP) shall provide required input support to Vanya sector in the areas of market promotion in domestic/overseas markets. *Vanya silk* market development has faced huge challenges on designs. Therefore, VSMP shall continue development of marketable designs and product diversification through research and development and collaborative projects. VSMP shall also focus on evaluation of existing infrastructure in silk weaving clusters and need based upgradation of looms and training of weavers in advanced production techniques. The VSMP shall also be involved in organizing exhibitions in major metros and non-metro cities and sponsoring manufacturers to participate in domestic

and overseas marketing events and exhibitions. Besides, the *Vanya* silk producing states shall be provided financial assistance to undertake programs for product development in their state/region.

The following activities are proposed under the component for promotion of Vanya silk:

- DOSs shall gather information on *Vanya* silk producers organizational details, production, production capacity, product range, raw material details, current marketing arrangements etc.
- CSB shall gather information on domestic and export markets for Vanya silk products; outside experts shall be engaged for this purpose, if necessary.
- Financial assistance shall be extended to the artisans through DOSs for preparation of swatches and brochures along with technical details to support them in marketing.
- DOSs shall identify societies/groups of artisans for product development in association with any designers or design institutes.
- To facilitate participation of producers in major marketing events like fairs, expos, exhibitions etc, in the country and abroad.
- DOSs shall engage designers, merchandisers and other specialists on contract for specific periods.
- Support shall be extended to *Vanya* producing states to establish *Vanya* silk shoppees in major market potential areas for promotion of *Vanya* products.
- DOSs shall also assist individual artisans/NGOs/societies for the development of equipment/machinery required as per the cluster needs in association with private/government institutions and entrepreneurs.
- Assistance shall be extended for participation in exhibitions organized in major cities for promotion and creating awareness about Vanya silk.
- DOSs shall collaborate with textile and fashion technology institutes in developing the marketable, high value addition designer products.

#### b) Implementation guidelines

The *Vanya* producing states may propose fund requirement for implementation of Vanya silk promotion programs as per the said activities based on the actual requirement. The details given above are not exhaustive and DOS may propose additional activities to support the *Vanya* product marketing within and outside the country.

#### c) The details of sharing pattern and financial projections:

	State Category	CSB	State	Beneficiary
Sharing pattern	General Category	100%	-	-
	Special Category	100%	-	-

A total provision of Rs.1.00 crore is proposed for implementation of the programme during XII Plan by all *Vanya* producing states. The provision can also be utilized by CSB for the activities which are not state specific. Even though there is no unit cost, state may propose fund requirements based on the activities listed above or for additional programs as per their need.

## **General operational modalities**

The general implementation/operational modalities applicable for most of the components of reeling and spinning sector and post-yarn sector are indicated below.

- 1. The existing and new entrepreneurs/NGOs/societies/SHGs are eligible.
- 2. Prescribed application form shall be made available through DOSs/CSTRI (CSB) units. from the CSB's website www.csb.gov.in or www.cstri.res.in.
- The interested entrepreneurs/ beneficiaries shall apply for availing the benefit of the component in the
  prescribed application form and submit the duly filled-in application to the concerned field functionaries of
  CSB/ state.

- 4. Applications shall be scrutinized by a joint committee comprising members from CSB and DOSs for selecting suitable beneficiaries.
- 5. CSB/DOS shall issue selection letter to the selected beneficiaries with an advice to place the supply order with the machine suppliers.
- 6. A list of machinery/equipment approved under each component with specifications and identified manufacturers/suppliers shall also be made available DOS and CSTRI units and also in CSB's website. www.csb.gov.in or www.cstri.res.in facilitating the selected beneficiaries to choose the machinery suppliers of their choice.
- 7. On receipt of selection letter, the beneficiaries shall place supply order with the suppliers of their choice by paying their share under intimation to CSB/DOS. The beneficiary shall be advised to commission machinery within the stipulated time as a condition in the purchase order with a provision to levy penalty in the event on non-compliance.
- 8. In order to control the quality of machinery and standard specifications, machinery inspection shall be done by the designated scientists/technocrats of CSTRI/DOS preferably at two levels, once at the premises of the manufacturer before dispatch of machinery and secondly at the premises of beneficiaries after erection and commissioning of machinery.
- 9. After satisfactory erection and commissioning of machinery, a certificate shall be issued to the suppliers by the designated scientists/technocrats of CSTRI/DOS who inspect the machinery/unit to facilitate the suppliers to claim subsidy from CSB/DOS.
- 10. The suppliers shall claim subsidy from CSB/DOS, by producing the original certificate issued by the designated scientists/technocrats of CSTRI/DOS along with other relevant documents like invoice/cash bill etc. The invoice/bill shall contain the serial No. of machine supplied by the manufacturer to facilitate verification by designated team and to avoid duplication.
- 11. In cases, where GOI share is more than Rs 10.00 lakh, it is desirable that the machinery procurement is done through banks preferably by opening LC. In these cases, subsidy shall be released before erection and commissioning as per terms of LC. In such cases, as a safeguard measure, the machinery manufacturer/supplier shall be asked to furnish a bank guarantee for an amount equivalent to 20% of machinery cost.
- 12. In case the beneficiaries intend to avail credit for taking up any activity/component from banks/financial institutions, DOSs/CSB shall extend necessary assistance to such beneficiaries for availing credit. In such cases, the subsidy (both DOS and CSB) along with beneficiary share shall be deposited with the financial institutions / banks which financed the project, after approval of the project and sanction of loan. The financial institutions/banks shall be advised to release the total amount payable to the suppliers on submission of relevant documents.
- 13. Wherever the subsidy is more than Rs 1.00 lakh, the selected beneficiary shall give an undertaking or enter in to an agreement with CSB/DOS in connection with putting in to use the infrastructure created with subsidy support for a period of five years from the date of commissioning for the purpose for which it is created. During this period, CSB/DOS shall have the right to inspect the infrastructure created at the beneficiary premises. In respect of components where the unit cost is more than Rs.10.00 lakh, it is desirable that the beneficiary takes the insurance cover for the machinery/equipment.
- 14. In case DOSs intend to establish reeling/spinning/drying chambers/weaving/wet processing units for commercial or training/demonstration purpose, DOSs shall send detailed proposals to CSB. In such cases, financial support shall be provided only for procuring machinery and such support shall be as per the approved unit cost of the respective components. For such components to be availed by DOSs, GOI share shall be the same as per the sharing pattern of the component and DOS shall have to bear the beneficiary share also, in addition to its share. The land, building and other required infrastructure shall have to be provided by the DOSs. The DOSs shall follow GFR procedure while procuring machinery/equipment.

- 15. All the unit costs mentioned are basically indicative. The beneficiary has a right to negotiate the price. In case the negotiated price is less than the indicative price, the subsidy component (both CSB and state share) shall be proportionately reduced. In other cases, the extent of GOI subsidy shall be limited to an amount calculated based on the indicative unit cost and sharing pattern.
- 16. Depending on the demand at field/cluster level, decision to re-appropriate allocation in respect of one component to another component can be taken at AMC level without exceeding the overall allocation made for the post-cocoon sector under the Plan and without changing the approved unit cost and sharing pattern.
- 17. The projects under CDP can be dovetailed as far as possible with other schemes like SGSY, RKVY, MGNREGS, BRSF etc, by the state governments, wherever such programs are being implemented/ proposed to be implemented.
- 18. The participating states shall have to make necessary provision in their annual budget for smooth and successful implementation of the components, which involve state subsidy.
- 19. Post-cocoon sector components where there is no state share shall be implemented by CSB/CSTRI sub-units. Other components can be implemented either by the DOS directly or by the sub-units of CSTRI. Accordingly, the GOI share shall be released to DOSs/CSTRI and the utilization certificates shall be furnished along with a list of beneficiaries indicating name and address, Category (General/SCSP/TSP) etc.
- 20. In cases where the beneficiaries do not comply with terms and conditions and/or not in a position to run the unit successfully, the assets shall be taken over by government of India and shall be handed over to some other beneficiary as a recourse action.
- 21. With regard to implementation of components under post-yarn sector, the following procedure shall be followed:
  - a) The components like handloom upgradation, pneumatic lifting mechanism, CATD etc, shall be given to beneficiaries who operate in traditional silk handloom clusters.
  - b) The common facility centres like dyeing and fabric processing shall be given to the beneficiaries who operate in traditional silk weaving/processing clusters.
  - c) An undertaking shall be taken from the post-yarn sector beneficiaries that they shall use the infrastructure only for silk for a minimum period of five years from the date of commissioning.
  - d) Periodical reporting on the performance of the unit shall be done by DOS/CSTRI.

## Financial projection for the package

The financial projections for mulberry and *Vanya sectors* under this package are detailed below:

Sector-wise sharing (Rs. in crore)

Components	Financial Projections				
Components	Components and Sectors		State	Beneficiary	Total
Reeling and spinning	Mulberry	62.90	31.44	24.86	119.20
	Vanya	13.13	2.78	2.79	18.70
	Mulberry and Vanya	76.03	34.22	27.65	137.90
Post-yarn	Mulberry	12.79	3.12	4.26	20.17
	Vanya	5.48	1.33	1.82	8.63
	Mulberry and Vanya	18.27	4.45	6.08	28.80
Marketing support	Mulberry	13.79	3.26	1.47	18.52
	Vanya	6.91	1.40	0.63	8.94
	Mulberry and Vanya	20.70	4.66	2.10	27.46
Total for post-cocoon	Mulberry	89.48	37.82	30.59	157.89
Sector	Vanya	25.52	5.51	5.24	36.27
	Mulberry and Vanya	115.00	43.33	35.83	194.16

#### Head-wise sharing (Rs.in crore)

Objective head	CSB	State	Beneficiary	Total
Revenue head (31)	17.94	12.63	-	30.57
Capital head (35)	97.06	30.70	35.83	163.59
Revenue and capital head	115.00	43.33	35.83	194.16

#### North-eastern states sharing

(Rs.in crore)

Objective Head	CSB	State	Beneficiary	Total
Revenue head (31)	0.48	0.01	-	0.49
Capital head (35)	15.57	1.90	1.55	19.02
Revenue and capital Head	16.05	1.91	1.55	19.51

Note: Central share for North-eastern states works out to 13.96%.

## **Expected outcome of the package**

Implementation of the package of components shall ensure quantitative and qualitative growth of the post-cocoon sector, as the package envisages support for adoption of improved technologies in reeling and spinning sector and also post-yarn sector.

- 1. Quantitative: The implementation of package of post-cocoon components shall create an additional infrastructure like reeling units of different technologies and capacities, twisting units, wet-processing units, weaving units etc. By creating additional infrastructure, the following are expected:
  - Production of around 3,180 MT of quality raw silk per year, of which 2,210 MT of mulberry raw silk and 970 MT of *Vanya* raw silk. Out of 2,210 MT of mulberry raw silk, 590 MT of international grade silk (2A and above).
  - Direct employment to around 24,500 persons in the areas of reeling, twisting, yarn/fabric processing and weaving and indirect employment to a large number of workers in the related areas like machinery manufacture and other auxiliary activities.

#### 2. Qualitative:

- Implementation of the package is likely to result in production of quality raw silk *i.e.*, high-grade warp quality in more hygienic environment. This would result in replacement of imported silk yarn to certain extent.
- The package is expected to build world-class state-of-art reeling/spinning technology.
- High quality silk fabrics and garments shall be produced to meet the domestic demand and international market demand.
- An organised marketing system for both cocoon and raw silk is likely to be established and stabilize the market in all sericultural states. The quality linked pricing and spot payment system shall encourage the farmers/reelers to produce quality cocoons/raw silk.
- Institutional finance to the sector shall be encouraged and more credit flow to the sector is expected, since the subsidy envisaged under the components is proposed to be routed through the financial institutions/banks, wherever applicable.
- The package shall provide necessary support to the traditional reelers/weavers/dyers of both traditional and non-traditional silk clusters to refine their skills, learn new techniques and become more efficient and effective, resulting in improving the socio-economic conditions of the stakeholders, since additional income is expected to be generated.

## Monitoring and evaluation

Most of the components under the post-cocoon sector are machinery package/equipment related, beneficiary specific and concentrated in clusters. Although the components shall be implemented in association with the states, the active involvement of sub-units of CSTRI is crucial in the selection of the right beneficiaries. Apart from the selection of beneficiaries, pre-inspection of the infrastructure, monitoring, erection and commissioning of the unit, training and technical guidance etc, are involved in implementation of post-cocoon components. Therefore, the successful implementation of the post-cocoon components requires qualified textile technocrats who are working with the main institute of CSTRI and its sub-units.

The post-cocoon sector components can be implemented either by the states directly or by the sub-units of CSB/CSTRI.

The following components shall be implemented by the states directly:

- 1. Support for construction of reeling sheds.
- 2. Support for existing charkha reeling units to dissuade child labour.
- 3. Support for establishment of improved cottage basin reeling units.
- 4. Support for Vanya reeling / spinning sector.
- 5. Interest subsidy on working capital loan availed by reeling units.
- 6. Incentive for production of Bivoltine raw silk.
- 7. Support for setting up of hot air driers
- 8. Support to states for creating / upgrading marketing infrastructure for cocoons and raw silk.

For implementing these components, central share shall be released directly to the states. A Project Monitoring Committee (PMC) at the headquarters of each state sericulture department shall be constituted by the respective state sericulture department.

While the Commissioner/ Director of Sericulture of the states shall be the chairperson of this committee, Zonal incharge (CSB), the representatives from the sub-units of CSTRI looking after post-cocoon activities in the states, in-charge of the concerned RO of CSB and a representative from the concerned state sericulture department looking after the Post-cocoon sector shall be the members. Nodal officer nominated by CSB to the state shall also be a member of PMC. A senior officer, who is dealing with the post-cocoon sector in the state sericulture departments, shall be the member-convener. The responsibilities of this committee are:

- Selection of beneficiaries
- Formulation and submission of action plans/proposals, implementation/monitoring
- Furnishing of utilization certificates wherever necessary and
- Furnishing of progress report on quarterly basis.

The following components shall be implemented either by the DOSs directly or by CSTRI:

- 1. Support for establishment of multi-end reeling units.
- 2. Support for establishment of automatic reeling units.
- 3. Support for establishment of automatic dupion reeling units.
- 4. Support for establishment of twisting units.
- 5. Support for handloom sector.
- 6. Support for setting up of common facility centres for post-yarn and processing.
- 7. Providing services of master reelers/weavers/designers/dyers/technicians.

For implementing these components, central share of subsidy shall be released to the State or to CSTRI as the case may be. Wherever the components are being implemented by CSTRI sub units, a Zonal Post-Cocoon Committee (ZPCC) for each zone shall be constituted by CSB. While a senior officer from CSTRI / in-charge officer of respective Sub-unit of CSTRI shall be the chairperson of these Committees, the representative from Sub-units of CSTRI looking after post-cocoon activities in the states and a representative from the concerned State Sericulture Department and Department of Handlooms and Textiles looking after the post-cocoon sector shall be the members. An officer from concerned sub-unit of CSTRI shall be the member convener. This committee shall function in association with the State PMC.

The responsibilities of this committee are

- Selection of beneficiaries
- Formulation and submission of action plan/proposals
- Implementation/monitoring
- Furnishing utilization certificate wherever necessary and furnishing progress report on quarterly basis to CSB.

The component master reeler/weaver/designer/technician and *Vanya* silk marketing promotion shall be implemented by CSTRI/CSB unit.





Catalytic Development Program (Centrally Sponsored Scheme)



# CHAPTER V SUPPORT SERVICE SECTOR

#### Introduction

he components proposed under this sector are applicable to all the three sectors *viz.*, mulberry, *Vanya* and post-cocoon sectors of the sericulture industry to supplement the efforts for successful implementation of the CDP. Hence, these components are grouped under Support Services, as detailed below:

## 1. Crop insurance support (for all sectors)

#### a) Brief description:

Indian sericulture beneficiaries are facing the losses in silkworm crops during practice of sericulture up to 30% due to climatic vagaries reflecting into decrease of raw silk production. It is necessary to secure the silkworm crops and in turn, the raw silk production under the umbrella of an insurance cover to enable them to get compensated for the losses. Considering the immediate needs of beneficiaries of the government and NGO, the component of crop insurance support has become an important part of developmental programs for all sectors of sericulture in different sericulture practicing states.

The component has been successfully implemented through X and XI Plan periods and tried to reach to the crop security of the grassroot level beneficiaries of all sectors with more concentration in tasar sector and proved as the best supportive ingredient to help securing the silkworm crops of the beneficiaries of different sericulture states through the IRDA accredited general insurance companies. It is applicable to Univoltine, Bivoltine and Multivoltine, Pure or Hybrids of all silkworm types (mulberry, tasar, oak tasar, eri and muga).

With the advent of its progress and as per the requests of DOSs, it is proposed to extend the support to the beneficiaries during XII Plan under different activities of sericulture including silkworm rearing, silkworm egg production, reeling, twisting, weaving, spinning, dyeing and printing along with the safety of rearing and grainage houses, reeling and weaving sheds and equipment and the like. Further, due to increase in input cost, the sum assured has been enhanced to facilitate the beneficiaries ensuring fulfillment of loss claims.

## b) Technical guidelines:

The technical guidelines for considering the support for insurance cover are:

Crop insurance support shall be applicable to all sericulture sectors and categories of beneficiaries.

- Beneficiaries identified covered under different pre and post-cocoon components of sericulture shall be covered under insurance cover.
- A memorandum of understanding (MOU) shall be executed by insurance company, DOS and the beneficiary.
- The insurance cover shall be extended to all the beneficiaries who undertake silkworm rearing of 100 dfls or more as deemed fit as per the MOU.
- Disease free layings (dfls) procured from government and licensed seed producers shall only be covered.
- The policy period shall be for one year. The policy issued by the insurance company shall cover the entire quantum of dfls (all silkworm crops) reared by the beneficiary (ies) during the entire year. The premium shall be paid for one year by the farmer or organization or department as per the declaration of DOS.
- The insurance support shall start from the date and time of supply of dfls and cease with the marketing of cocoons.
- A technical committee consisting of subject experts from CSB, DOS and the insurance company shall be constituted for all purposes of scrutiny and verification.
- The beneficiary shall allow the members of the technical committee for inspection of the pre and postcocoon activities as and when desired.
- The details of rearing shall have to be recorded on the rearing card/log sheet/ passbook and be kept ready for inspection of technical committee.
- The beneficiary shall preserve all the cash memos, documents pertaining to purchase of dfls, chawki worms and marketing of cocoons etc., for inspection of technical committee.
- In case of total loss prior to cocoon stage, the insured shall submit the claim form duly filled in and authenticated by the concerned legitimate officer.
- In case of partial loss at fifth or cocoon stage, the insured shall submit the claim form along with the market document (for the sale of produce) enclosed to indicate the sum realized by him from the crop towards the cost of cocoons.
- The premium, as per the sharing pattern for general and special status states shall be released by CSB to DOS after receipt of MOU, copies of master policy, copies of premium paid receipts and the beneficiary/dfl distribution list from the concerned DOS. The sharing pattern in crop insurance support is 50:25:25 for general status states and 80:10:10 for special status states.

The unit costs of the component are indicated in the Unit Cost book. The details of insurance cover for different components of CDP of XII Plan are proposed as under:

#### Proposed premium rates for silkworm crop insurance coverage for XII Plan

SI. No	Particulars	Sum Assured (Rs.)	Rate of Premium proposed not more than (%)	Premium (Rs.)	ST @ 12.36% (Rs.)	Total Premium (Rs.)	Total Premium (Rounded off value) (Rs.)
1	Silkworm crops (for 100 dfls)						
а	Mulberry-Multivoltine (Pure/hybrid)	6,000	5	300	37.08	337.08	335
	Mulberry-Bivoltine (Pure/hybrid)	7,000	5	350	43.26	393.26	390
b	Tasar / Oak Tasar: I crop	2,900	7	203	25.09	228.09	230
	II crop	3,200	7	224	27.69	251.69	250
	III crop	3,500	7	245	30.28	275.28	275
С	Muga	3,050	7	214	26.45	240.45	240
d	Eri	2,770	5	139	17.18	156.18	155

SI. No	Particulars	Sum Assured (Rs.)	Rate of Premium proposed not more than (%)	Premium (Rs.)	ST @ 12.36% (Rs.)	Total premium (Rs.)	Total premium (Rounded off value) (Rs.)
2	Rearing house						
а	Mulberry- 250 dfls/batch	2,75,000	0.5	1375	169.95	1,544.95	1,545
	150 dfls/batch	1,75,000	0.5	875	108.15	983.15	980
	50 dfls/batch	90,000	0.5	450	55.62	505.62	500
	150 dfls/batch	30,000	0.5	150	18.54	168.54	165
b	Eri - 100 dfls/batch	1,00,000	0.5	500	61.80	561.80	560
3	Grainage house						
а	Tasar private graineur (5000 dfls)	1,25,000	0.5	625	77.25	702.25	700
b	Eri private graineur (5000 dfls)	1,00,000	0.5	500	61.80	561.80	560
С	Muga private graineur (5000 dfls)	1,00,000	0.5	500	61.80	561.80	560
4	Rearing equipment						
а	Mulberry	70,000	0.5	350	43.26	393.26	385
		50,000	0.5	250	30.90	280.90	280
		40,000	0.5	200	24.72	224.72	220
b	Tasar	6,500	0.5	33	4.07	37.07	40
С	Muga	10,000	0.5	50	6.18	56.18	55
d	Eri	10,000	0.5	50	6.18	56.18	55
4	Grainage equipment						
a	Mulberry- 5000 dfls	2,00,000	0.5	1000	123.60	1,123.60	1,120
b	Tasar- 5000 dfls	45,000	0.5	225	27.81	252.81	250
С	Muga- 5000 dfls	47,000	0.5	235	29.05	264.05	260
d	Eri- 5000 dfls	77,000	0.5	385	47.59	432.59	430
5	Cocoon storage	0.00.000	0.5	1000	000.40	0.000.40	0.000
a	Cocoon storage shed (500 kg)	3,60,000	0.5 0.5	1800	222.48	2,022.48	2,020
6	Cocoon storage equipment Reeling shed	2,00,000	0.5	1000	123.60	1,123.60	1120
a	Reeling shed (10 basin) 1200 sq ft	7,20,000	0.5	3600	444.96	4,044.96	4,045
b	Reeling shed (10 basin) 1200 sq ft	4,80,000	0.5	2400	296.64	2,696.64	2,695
7	Reeling machinery	4,00,000	0.0	2400	230.04	2,090.04	2,090
a	Reeling machinery -10 basins	10,00,000	1.00	10000	1236.00	1,12,36.00	11,235
b	Reeling machinery - 6 basins	2,50,000	1.00	2500		2,809.00	2,810
8	Spinning	_,_,_,				_,	_,0 : 0
а	Spinning shed (4 machines)	1,00,000	0.50	500	61.80	561.80	560
b	Spinning machines	24,000	0.50	120	14.83	134.83	135
9	Weaving sheds	,					
а	Shed for 6 looms 1200 sq ft	7,20,000	0.50	3600	444.96	4,044.96	4,045
b	Shed for 4 looms 800 sq ft	4,80,000	0.50	2400	296.64	2,696.64	2,695
10	Weaving looms						
a	Weaving looms existing (each)	50,000	1.00	500	61.80	561.80	560
b	Weaving looms new (each)	6,00,000	1.00	6000	741.60	6,741.60	6,740
11	Personal accident coverage	50,000	50.00	50	6.18	56.18	55

Note: 1. Rates of premium have been fixed looking into the risks involved in the particular sector

- $2. \ \ \, \text{They are applicable to all the sericulture states and shall promote more beneficiary participation}$
- 3. During open tenders at state or CSB level, rates of premium quoted by the insurance companies shall not exceed the proposed rates.
- 4. Tasar/oak tasar and muga reared outdoors are succumbed to high risks hence increase in premium rates
- 5. Depreciation is calculated for 10% per year. Accordingly, the assessed value need be calculated for rearing house, rearing / reeling/Spinning/weaving equipment for other years.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given in the table below:

	Sharing	State Category	CSB	State	Beneficiary
	Pattern	General Category	50%	25%	25%
	Special Category	80%	10%	10%	

Particulars	Unit Cost	Physical	Financial Projections (Rs. in crore)			
rantoularo	(Rs.)	Target	CSB	State	Beneficiary	Total
Sub-components implemented through states	Lumpsum	Demand Dependent	0.80	0.40	0.40	1.60

## d) Implementation guidelines / operational modalities:

The component "Crop Insurance Support" shall be implemented by all the sericulture states for the benefit of the beneficiaries under their purview. CSB, as per the sharing pattern, shall reimburse 50% of the premium paid by the state to the insurance company. The claim settlement shall also be taken care of by the DOS and insurance company. The states shall implement in the form of master policies envisaging 50 to 100 beneficiaries depending on the nature of subcomponent and density.

## 2. Publicity for sericulture sector

#### a) Brief description

The increasing expansion of the sericulture industry, introduction of new technologies and practices and changing equations of silk trade etc., necessitate repetitive efforts to publicize them for generating awareness and better reach of the farmers/industry stakeholders.

The main objective of the publicity package is to support the expansion of mulberry and *Vanya* silk production activities in traditional states and potential areas in non-traditional states of the country through audio-visuals, publications and periodicals, extension literature, exhibitions, buyer-seller meets, awareness programs, workshops, seminars etc, and also to support for market and generic promotion of silk products from India through intensive publicity campaign both at national and international levels. One of the major drawbacks experienced during the implementation of XI Plan program was the absence of effective publicity support to disseminate the details of CDP programs to the beneficiaries and other stakeholders. Such details should reach the end users in simple and understandable language. Keeping this in view, it is felt that the publicity sector is required to be strengthened further and it is proposed to continue the existing programs during XII Plan by intensifying the on-going activities.

During XII Plan, the CSB shall assist the states to undertake publicity and propaganda programs to ensure dissemination of technologies developed by the research institutes of CSB to the field, keep the field level functionaries of DOSs abreast with the new packages of practices of mulberry cultivation and silkworm rearing and motivate the farmers in new areas through publications, visual and print media. It is proposed to give a new thrust to the on-going publicity programs by making use of the latest tools of multi-media campaigning and information technology to ensure effective transfer of technologies to the field. The component shall also provide wide publicity support to CDP components for its effective implementation.

A provision of Rs.10.60 crore has been proposed towards implementation of publicity activity during XII Plan of which Rs.8.00 crore is central share. Only states' programs shall be covered under this component, as separate provision has been made for publicity activities under central sector schemes.

## b) Sub-components under publicity package:

## Sub-components to be implemented through states

a)	Printing/supply of publications	To ensure regular dissemination of updated information on research and development in sericulture, new technologies, events etc. and to update the knowledge of the technical and extension staff of DOSs for improving their efficiency, it is proposed to provide 50% assistance by the CSB to states for printing and supply of booklets, pamphlets, brochures and passbooks etc., To the farmers besides conducting awareness programs, seminars and workshops. The states shall have to contribute the balance 50% of the cost.
b)	Production of audio-visual publicity materials	As has been done during XI Plan, CSB shall produce need-based and subject oriented audio-visual aids like films, VCDs and DVDs in English and vernacular languages based on the requests from states to support the extension and field level staff in propagation of the new technologies so as to ensure wider reach of these films right up to taluk/ village level. The cost is shared at 50:50 by CSB and state, respectively.

#### Sub-components to be implemented directly by CSB

	Sub-components to be implemented directly by CSB					
c)	Advertising in press and electronic media	To organize mass press and media publicity programs about the on-going developmental schemes and projects to promote the silk industry both at national and international levels. CSB shall implement the sub-component directly.				
d)	Organizing and participation in trade fairs, expos and exhibitions	To promote the Indian silk through organization of exclusive silk expos and trade fairs across the country and abroad through participation in state, national and international level silk and textile trade fairs and exhibitions, organizing exclusive exhibitions to promote <i>Vanya</i> silk products such as eri, tasar and muga, conducting technological exhibitions in taluk, district and state levels to promote the technologies particularly in the cluster areas and participation in district and state level exhibitions conducted by other development agencies. CSB shall implement the sub-component directly.				
e)	Organizing multi-media campaigns	To organize multi-media campaigns in association with DOS, field publicity, NGOs, District Development Agencies (DDA) and cluster area in-charges to promote sericulture activities in various clusters. Services of AIR, Doordarshan, field publicity, press & media and DAVP shall be utilized for implementation of this sub-component. During the multi-media campaign, field level exhibitions, workshops, women sericulturist meets etc., shall also be conducted.				
		<b>Press and media relation activities</b> : Press conferences, press meets, press tours etc., are proposed to be organized regularly by CSB. It is also proposed to co-ordinate with state, national and international level news agencies to give wider publicity about the sericulture and silk industry.				
f)	Supply of Indian Silk magazine	Supply of <b>Indian Silk</b> magazine of CSB to states shall be continued during XII Plan also, as there has been good feedback from the states and the contents of the magazine proved to be useful to the technical and extension network of the DOSs. The entire cost (100%) towards supply of Indian Silk magazine shall be met under this component, as the magazine is published by CSB and is quite useful to the extension workers.				

#### c) Operational guidelines:

- While traditional states are eligible for a share of Rs.50.00 lakh, the non-traditional states are eligible for Rs.25.00 lakh from the central sector.
- > 27 states (5 traditional and 22 non-traditional) shall be supported under this component.
- > The states' proposals recommended by the respective project monitoring and zonal committees towards printing of publications like brochures, pamphlets, booklets, organizing awareness programs, seminars and workshops etc., shall be placed before the Apex Monitoring Committee (AMC) for approval and subsequent release of funds along with other CDP components proposed by the state for a particular year.
- The Publicity Section of CSB shall finalize the production of audio-visual publicity materials in consultation with the research institutes of CSB and DOSs.
- > Press publicity campaigns shall be organized in consultation with the silk section of MOT.
- Press conferences and press tours shall be organized in consultation with the research institutes of CSB and PIB units located in different parts of the country.
- Publicity for trade fairs, silk expos and exhibitions shall be conducted in consultation with the officials concerned.
- Multi-media campaigns shall be conducted in consultation with cluster area in-charges, DOSs, field publicity department and district level development agencies.
- CSB share shall be released to states as per the lumpsum amount earmarked. After receipt of utilization certificate and depending upon the progress achieved, further release of funds shall be considered by CSB for subsequent proposals within the overall sanctioned provision of the component.

#### d) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

	State Category	CSB	State	Beneficiary
Sharing pattern	General Category	50%	50%	_
	Special Category	90%	10%	_

Particulare	Particulars  Unit Cost Physical Particulars		F	Financial Projections (Rs. in crore)				
i di liculai 3	(Rs.)	Target	CSB	State	Beneficiary	Total		
Sub-components implemented through states	Lumpsum	Demand Dependent	5.40	2.60	-	8.00		
Sub-components implemented directly by CSB	Lumpsum	Demand Dependent	2.60	-	-	2.60		
Total	-	-	8.00	2.60	-	10.60		

## 3. Support for studies/consultancies, surveys organized by CSB and state

#### a) Brief description:

This is an on-going program under implementation since IX Plan. During XI Plan, the component was implemented to:

- Support for conducting studies, surveys and consultancies for collecting basic information from the field on specific activities and problems of silk industry;
- ii) Undertake regular supervision of field activities and monitoring of progress for effective implementation of projects/schemes;

- iii) Undertake in-house yearly evaluation by CSB to ensure timely execution of the projects/schemes and also to make impact assessment; and
- iv) Assess the progress and impact of the projects/schemes on the development of silk industry through midterm and final evaluation by an external agency.

It is proposed to continue the program during XII Plan also with a few modifications.

- i) Support for conducting studies, surveys and consultancies: The component enables the states and/or the implementing agencies to obtain assistance to conduct studies/consultancies, surveys in areas to promote productivity, technology absorption, quality up-gradation and investment generation. The implementing agencies or DOSs may encounter many unique problems related to the silk industry while implementing different schemes/projects for development of sericulture. In order to identify the reasons and address the problems encountered during implementation of developmental projects, studies/surveys may be required to be conducted to gather information on ground realities. Sometimes, the task is found so unique and important that the same may not be possible to be attended by the DOSs or CSB due to technical reasons and warrants engaging specialized consultants.
- **Regular supervision of field activities and monitoring of progress:** The component assists to undertake the regular supervision/monitoring of the programs, review meetings through the regional offices and by the field level monitoring groups and meet expenditure for which provision does not exist under other components.
- **iii) In-house yearly evaluation by CSB:** To ensure timely execution of the programs/projects and also to make impact assessment, the component provides assistance to conduct the in-house yearly evaluation by the monitoring committee/study teams through field visits.
- iv) Assessment of progress and impact of the projects/schemes on the development of silk industry through mid-term and final evaluation: Evaluation study by external agency has to be carried out to focus mainly on the effectiveness of the projects/programs/schemes implemented by the CSB/state units and identify the constraints/bottlenecks in the implementation process, besides assessing the actual benefits accrued to the stakeholders in the field.

During XII Plan, in addition to providing assistance to the above four sub-components, it is also proposed to carry out mapping of infrastructure available at public and private sectors, created over a period of time under various sericulture development programs supported from CDP or non-CDP for optimum utilization of infrastructure. This exercise shall enable CSB to decide on creation of additional infrastructure and strengthening of existing infrastructure in potential areas, besides handing over of such infrastructure to CBOs/NGOs in inaccessible areas (based on the availability of technical manpower within the state), within a definite timeline besides developing web based MIS on sericulture. This is essential for better planning of potential sectors, effective utilisation and maximising benefits.

It is also proposed to organize studies and training programs for CSB and state functionaries involved in project formulation, implementation and monitoring, in advanced countries not only developed in sericulture, but in countries who have made advancements in project implementation and achieved remarkable success. Support of United Nations in various nations and other organizations in advanced countries shall also be sought for collaborating such studies and training. It is felt necessary to focus on the monitoring and evaluation mechanism for the success of development programs in a systematic way by learning from similar projects by other nations.

The entire cost towards implementation of the above sub-components shall be borne by CSB. Therefore, a provision of Rs. 4.00 crore is proposed as CSB share towards implementation of this component during XII Plan.

#### b) Operational guidelines:

- DOS / the implementing agency shall submit the proposal to CSB indicating the area they wish to undertake the studies/surveys/consultancies with justification.
- DOS shall take action for commencement of surveys, studies and investigation.
- > Once the survey, study and investigation are completed, the report shall be submitted to CSB.
- > CSB shall verify the agencies with credentials, the modalities and design of the study, survey etc., before undertaking the study.

- CSB and DOSs shall closely monitor the implementation of the survey, studies and consultancies and shall verify the activities undertaken by the consultants.
- > PMC constituted at state level and zonal cell shall monitor implementation of the projects.
- Cluster and district-wise field level monitoring group shall be constituted.
- > Technical evaluation shall be conducted every year by the internal committee by taking the inputs of the monitoring report.
- > CSB shall identify the agency through the news paper advertisement (expression of interest) to conduct the final evaluation of the projects/schemes.
- > DOS shall involve NGOs/CBOs for mapping of infrastructure.
- > CSB/DOS shall recommend the candidates for abroad visits (to advanced countries) on training and deputation.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

	State Category	CSB	State	Beneficiary
Sharing pattern	General Category	100%	-	-
	Special Category	100%	-	-

Zone	Unit Cost Physical		Fi	nancial Proj	ections (Rs. in c	rore)			
	(Rs.)	Target	CSB	State	Beneficiary	Total			
Southern									
North-western		Demand	Б	Damand	Domond				
Central and western	Lumpsum		4.00	-	-	4.00			
Eastern		Dependent							
North-eastern									

## 4. Product design, development and diversification division (P3D)

#### a) Brief description:

Product design development and diversification for exclusive silk goods have been a pressing need of the Indian silk industry at present. In the emerging silk scenario, where India is consolidating its position as the second largest silk producer in terms of quality as well as quantity, diversification of products to address market needs is critically important. Indian silk industry has certain inherent strength that need to be projected in the right perspective and at the same time harnessed effectively.

Export market base needs to be widened and the range of products has to be broad based. At the same time, quality products should meet the customer's expectations. The domestic market for silk is quite substantial. Product diversification into casual wear and alternate end uses and focus on bringing the growing upper middle income group and high income group into the fold of silk products shall lead to greater value addition in domestic silk production.

Growing market awareness has been evidenced in the recent years for the *Vanya* silk products especially tasar and eri silk in the domestic market. Product development and diversification in tasar, eri and muga has been almost a virgin area in the country. Importance of new designs, motifs and products has, of late, been recognized in *Vanya* sector and the thrust given to product development shall not only contribute in diversification of the product, but also enlarge the market share.

To meet the objectives of the product design, development and diversification, the "P3D-The Cocoon" centre was established by CSB during X Plan at its secretariat to facilitate the product design, development and diversification activity with adequate infrastructure facilities. The scheme was continued during XI Plan. New fabric structures and designs were created and diversified products were developed through the research units of CSB and design institutes like NIFT, AIFD etc.

The products designed and developed under P3D are put on display in different exhibitions/silk expos for the benefit of the manufacturers, traders, designers and exporters. The cell is providing technical know-how on the design and development of the marketable products. It is, therefore, proposed to continue P3D activities during XII Plan also.

#### b) Implementation guidelines:

**Product development and diversification:** Product design, development, diversification and innovative use of silk in its pure form or blending with other natural fibres shall be explored in making fabrics for their alternative use. Research and development activity shall be undertaken towards identification and procurement of raw materials like silk yarn, other natural yarns, accessories for garment making and yarn preparation depending on the fabric texture defined, dyeing, conversion into fabric, embroidery, embellishment, garment preparations, finishing, etc. In order to conceptualise product development ideas the agencies like fashion design institutes, NGOs, individual designers, master weavers, skilled weavers etc., shall also be involved in this activity.

**Design consultations:** Data on production, trade flows, demand trends, prices and fashion trends shall be collected from exporters / importers. Design consultant/s shall also be engaged to assist CSB/CSTRI and product development shall take place under their supervision.

**Interaction meets, workshops and seminars:** The interaction meets and workshops shall be conducted on selected topic related to the product design, development and diversification activity for promotion of the developmental activity and efforts shall be directed towards bringing awareness to the producers, consumers, buyers, designers, etc., about the rich heritage of silk weaving clusters of India and recent developments, designs and diversification of silk products.

**Publicity**/ **exhibitions**/ **demonstrations**/ **fashion shows:** The innovative silk products developed through this activity shall be showcased in exhibitions and products/ technology shall be demonstrated. Publicity of the new products shall also be taken up through magazines, hoardings, pullouts, brochures etc.

**Documentation of products developed and stationery:** Documentation of product development and cluster studies shall be done in both printed and audio-visual formats. This shall enable not only the documentation of old and traditional works, but also help in bringing innovations in the core or thrust areas.

**Documentation of GI related products and consultation:** Consultation, survey and documentation of products covered under GI, survey of the techno-economic conditions, environment and work conditions of the GI clusters etc., shall be outsourced and final comprehensive report on all silk GI clusters is envisaged.

Computer software, hardware and annual maintenance contract: The display centre inaugurated at CSB Complex with equipment and infrastructure for product development activity shall be strengthened. The Information technology has helped the textiles industry by providing software and computer aided textile design etc and facilitated speedy growth of the industry. The design tools required for this activity shall be made available.

Fashion forecast books, reference books, periodicals, maintenance of display centre and purchase of silk products: In order to maintain the display centre, a product needs to be displayed in a manner, which brings awareness and educate the producers, consumers, buyers etc. The expenditure related to maintenance of the P3D Cell, educational materials like fashion forecast books, reference books, periodicals etc, shall be met out of this component. Further, relevant silk products covering the various aspect of this plan shall be done to strengthen the inventory of silk products for display in P3D.

**Outsourcing digital printing:** In order to keep abreast with the latest technology of printing directly on garments etc., outsourcing shall be done.

**Training for in-house staff and outsiders:** Product development activity is the heart of the cluster and it shall help to utilise local artisan skill. Special emphasis to impart direct training to the weavers, processors and garment converters to enhance their skill is planned and at the same time in-house training to staff of CSB is planned to hone the skills in various aspects like garmentability etc.

**Transportation, travel and honoraria:** The nature of the work demands officers, officials and design consultants involved in this activity to travel to distance places/ weaving clusters situated in remote areas and stay for a few or more days during product development activity/cluster studies. The silk weaving clusters are scattered through out India spreading over different corners. Honorarium shall be given to the officers and officials as appreciation for their contributions.

#### c) The details of sharing pattern, unit cost, physical targets and financial projections are given below:

	State Category	CSB	State	Beneficiary
Sharing pattern	General Category	100%	-	-
	Special Category	100%	-	-

Zone / State	Unit Cost	Physical	Fi	inancial Proj	ections (Rs. in c	rore)
Zono / Clato	(Rs.)	Target	CSB	State	Beneficiary	Total
Southern (Karnataka)						
Central and western (Madhya Pradesh)	Lumpsum	Demand	0.50	_		0.50
Eastern (West Bengal)	Lumpsum	Dependent	0.50	·	,	0.50
North-western (Jammu & Kashmir)						

#### 5. Health insurance cover for sericulture farmers and workers

#### a) Brief description:

Sericulturists and sericulture workers involved in silkworm seed production, silkworm rearing and silk reeling have to work under hazardous and unhygienic conditions, because of which they succumb to certain health hazards. Quite often such sericulturists and workers do not find easy access for medical facilities. Besides, economic penury may force them to fend for themselves in times of disease affliction and ailments forced upon them as a professional risk.

In order to address this issue, which has a social welfare dimension and to ameliorate the sufferings of sericulturists and sericulture workers, CSB has been implementing this CDP scheme since XI Plan as a support service to the flagship program of GOI.

The health insurance scheme offers medical facilities for a certain class of identified diseases and ailments, including the pre-existing ones through a network of hospitals by way of reimbursement of medical expenditure as well as cash-less facilities. The overwhelming response from all over the country merits this component for continuation during XII Plan, although with slight modifications. During XI Plan, only women beneficiaries were eligible for the coverage. Based on feedback received from the states, it is proposed to offer this component to all sericulturists and sericulture workers, irrespective of the gender.

#### b) Premium:

Indicative premium has been estimated at Rs. 1,000 per sericulturist plus service tax at 12.36%, which may vary from time to time. Out of this, 80% of the premium and service tax shall be borne by the CSB and the balance shall be borne by state and the beneficiaries. Minimum contribution of the stake holder shall be Rs 50.00.

#### c) Coverage:

The scheme covers a maximum family members of 5, i.e., self, spouse and 3 dependant family members.

#### d) Technical specification and operational guidelines:

**Implementing agencies:** This scheme is envisaged to be implemented as a common scheme for different agencies under the Ministry of Textiles in line with RSBY scheme for two years period *i.e.*, 2013-14 and 2014-15. During the period, the component shall be implemented as a part of combined scheme for handloom and power loom weavers, handicraft artisans and other sericulturists and monitored by CSB.

Later on, the scheme shall be transferred to Ministry of Labour for implementation during the last two years of XII Plan (2015-16 and 2016-17). The scheme shall be implemented on a smart card platform which shall have the information on the package. The features of the RSBY scheme shall be incorporated into this scheme. The hardware and software facilities and empanelled hospitals of the RSBY scheme of Ministry of Labour shall be utilized for the implementation of the scheme.

**Eligibility:** All sericulturists and sericulture workers, irrespective of gender belonging to both BPL and APL categories, as detailed below are eligible:

- 1. **Sericulture farmers:** Farmers engaged in host plant cultivation, silkworm seed production, silkworm rearing and cocoon production and other allied activities covering both mulberry and *Vanya* silks.
- 2. **Reelers/spinners:** Reelers/spinners engaged in silk reeling, spinning and allied activities covering both mulberry and *Vanya* silks.
- 3. Workers: Workers engaged by the sericulture farmers/ silkworm seed producers/ reelers/spinners for host plant cultivation, silkworm seed production, silkworm rearing and cocoon production, silk reeling/spinning and other allied activities covering both mulberry and Vanya silks. Only those skilled workers recommended by their employers and who shall work for a minimum of one year shall be selected for insurance coverage. The beneficiary shall give an undertaking to take up the sericulture activity/work for a minimum period of one year.
- 4. The scheme shall cover people of all age groups. There is no age limit for beneficiaries.
- 5. The scheme shall not cover silk weavers as they are separately covered under the health insurance schemes of the Development Commissioner of Handlooms, Ministry of Textiles.

**Period:** The policy shall be valid for a period of 12 months, from the date of receipt of premium by the insurer and shall cover the treatments listed below:

Benefits: Annual limit per family (1+4) is Rs.30,000 for covering treatments mentioned below:

- All pre-existing diseases + new diseases
- 2. Maternity benefits (per child for the first two)
- 3. Dental treatment
- 4. Eye treatment
- 5. Spectacles (Limit Rs. 500/-)
- 6. Domiciliary hospitalization
- 7. Ayurvedic / Unani / Homeopathic / Siddha (Limit: Rs. 4000)
- 8. Pre and post-hospitalization
- 9. Baby coverage
- 10. OPD with a limit of Rs. 10,000

**Exclusions:** Corrective cosmetic surgery or treatment, HIV, AIDS, sterility, venereal diseases, intentional self-injury, use of intoxicating drug or alcohol, war, riot, strike, terrorist acts and nuclear risks.

#### e) Operational modalities:

- a. DOS and its sub-ordinate offices shall be the nodal agencies for implementation of the scheme.
- b. Beneficiaries shall be required to fill up an enrolment form and submit the same to DOS or through their employer or by themselves along with the owner's/their share of the premium in case of workers in reeling units and grainages. The format of the application form shall be made available to DOSs by the insurance company.
- c. On receipt of the above, DOS shall scrutinize the applications and if found eligible, shall accept the premium amount and forward the list(s) of such beneficiaries along with premium amount to the insurance company.
- d. On receipt of the premium amount with the list of beneficiaries from DOS, the insurance agency shall issue Health Cards to DOS, along with the statement indicating the names of the individuals insured. DOS shall arrange to inform individual beneficiaries about the coverage.
- e. In case a beneficiary changes his/her employment during the period of insurance from one unit to another, the beneficiary shall intimate to the nodal agency about the change.
- f. DOS and its subordinate field units shall be actively associated in implementation of the component by way of sensitizing the beneficiaries engaged in sericulture to join the health insurance coverage.
- g. DOS shall also submit periodical reports to CSB, indicating the details of coverage, settlement of claims etc.

#### f) Grievance redressal mechanism:

A Grievance Redressal Committee (GRC) shall be formed to receive and consider individual or group complaints from individuals or group of beneficiaries with the following types of grievances against the insurers:

- i) Any partial or total repudiation or rejection of claims by the insurance company;
- ii) Delay in settlement of claims;
- iii) Non-issuance or delay in issuance of any insurance document (including health insurance card) to beneficiaries after receipt of premium.

#### g) Claim procedure:

#### i) Planned hospitalization:

- A patient can go to any empanelled hospital/nursing homes of his/her choice. The list of such hospitals shall be provided by the insurance company.
- The name of the patient/policy number /nature of ailment /the name of the hospital are to be communicated
  to insurance company or its representatives by the concerned empanelled hospitals/nursing homes. A list
  of insurance company's representatives (third party agent -TPA) /contact persons shall be provided by the
  insurance company.
- Health cards to the beneficiaries shall be issued by the insurance company to avail the cashless facility. The
  details of insurance company or its representatives, phone numbers and help line numbers shall also be
  mentioned in the health cards for easy reference. Additionally, the empanelled hospitals shall also fax an
  authorization form to the insurance company or its representatives on their own. The insurance company or
  its representatives shall give approval within 12 hours.
- Patient shall take the treatment, sign the bills and get discharged. No payment is to be made.

## ii) Emergency hospitalization:

- The patient can be rushed to any of the empanelled hospitals.
- Health card is to be produced to the hospital and the patient can avail the treatment. Simultaneously, the
  family can contact the insurance company or its representatives (TPA) over help line and submit the preauthorization form. The insurance company or its authorized representatives has to fax the approval to the
  hospital immediately.
- Patient shall take the emergency treatment, sign the bills and get discharged. No payment is to be made.

#### iii) Reimbursement claims:

- Patient can avail treatment from a doctor or at a clinic in addition to the network/empanelled hospitals.
- Can settle the hospital bills directly by paying all the charges.
- Can call/contact insurance company, TPA office on toll-free number provided.
- Can submit the prescription and the vouchers for the medicines/claim form to the insurance company or its representatives.
- The claims have to be settled within a week's time after receipt of all the documents/information.

#### h) Role of insurance company:

- The insurance company or its authorized representatives shall furnish a list of medium class hospitals/nursing homes for medical treatment to the beneficiaries and DOS.
- Shall also furnish a list of hospitals covered under the health insurance scheme for making addition/deletion by DOS.
- Shall take all steps to make the scheme a success and shall get in touch with DOSs for taking preparatory steps like identification of beneficiaries, furnishing forms, instructions, etc., immediately for coverage of beneficiaries under the component.
- Shall take all steps to popularize the scheme among the beneficiaries throughout the country by various means including advertising in the media.
- Shall prepare information related to the component/beneficiaries in vernacular languages.
- Shall open offices in the identified clusters in consultation with DOS for early settlement of medical bills of beneficiaries under the OPD cover.
- Shall send a monthly progress report on first of every month to DOS indicating number of people insured, funds utilized and claims settled.
- > DOS, in turn, shall furnish progress reports containing details of enrolments/ renewal and settlement of claims at periodical intervals to CSB.

#### i) Monitoring and evaluation:

The performance shall be monitored by the PMC and AMC. A representative of the insurance company shall also be included in the PMC. The PMC shall also identify the beneficiaries and other inputs proposed under the component and release health cards to the beneficiaries, prepare half yearly plans, etc. The concerned DOS shall also hold discussions with the owner of the private reeling units and grainages to sensitize about the program and pay the share for the policy of the beneficiaries. The insurance company shall organize awareness camps in sericulture clusters for the benefit of beneficiaries.

#### i) Fund allocation:

During 2013-14 and 2014-15, it is proposed to cover 24,000 beneficiaries with an estimated cost of Rs 2.40 crore (total cost), of which CSB share is Rs.2.00 crore to cover 75% of the premium and tax. Later on, the component shall be implemented by the Ministry of Labour.

## 6. Capacity building for sericulture sector

(Training and exposure visit to CSB, states and other stakeholders)

#### a) Brief description

Growth of an organization or an Industry has a direct correlation with its ability to learn and adapt to the emerging new concepts and changes happening all around on a continuous basis. Following this concept, extensive efforts were made during the XI Plan period to empower and educate various industry stakeholders, existing and potential entrepreneurs, extension agents and other supporting staff through a variety of training programs, exposure visits and skill enhancement initiatives. This had very encouraging and visible impact in the XI Plan. Therefore, it is planned to continue this vital endeavour during the XII Plan period as well.

Under this component, specific, need based training programs focusing on sericulture concepts and technologies, business acumen and desired hard and soft skills shall be organized in identified seri-clusters and potential silk hubs of both traditional and non-traditional states. This component includes three sub-components to meet the planned objectives:

- Skill Training and Enterprise Development program (STEP)
- > Beneficiaries Empowerment program (BEP)
- Establishment of Sericulture Resource Center(SRC)

Skill training and enterprise development programs (STEP): This component consists of a variety of training modules focusing on various identified training needs of the industry. The basic objective of this component is to promote entrepreneurship and empower the farmers, industry partners, stakeholders, extension agents and officials representing CSB/DOS and all other agencies involved in the development of sericulture and silk industry by sharing relevant information and knowledge, upgrading the desired/required skills, refining various concepts, processes and technologies through a variety of training programs. All these training programs are 100% funded by CSB and there is no state or beneficiary share. Some of the prominent training modules under this component are:

- i) Entrepreneurship development program (EDP): It is a comprehensive training package for venturing into seri-business. The training inputs include business opportunity guidance in sericulture, technical inputs with practical exposure, skill seeding and enhancement, motivational and psychological inputs, simple financial management, exposure to business plan preparation method and project evaluation techniques, market survey techniques and market intelligence. All the existing and potential/prospective entrepreneurs are eligible to attend this program.
- ii) Resource development program (RDP): This program is basically designed for influencing the behaviour and attitude parameters, technological awareness and skill levels of existing resources at CSB, states and industry at large for better efficiency and performance. RDP also aims at developing a group of resource persons as trainers with all the desired competencies and sericulture skills for imparting second level training (farmers/ beneficiaries) and successfully implementing seri-development projects. Officers/ officials from states and CSB and representatives from NGOs and farmer groups are eligible to attend this program.
- iii) **Technology up-gradation program (TUP):** Demonstration of modern/ latest technologies pertaining to different activities of silk value chain is the major objective of the program. This program is focused on farmers and industry stakeholders.
- iv) **Banker's sensitization program (BSP):** This program is targeting the bankers and bank managers to sensitize and update their seri-knowledge/information by providing inputs on latest cocoon and raw silk production technologies and introduction to various bankable seri-business options.
- v) Management development program (MDP): The sub-component is meant basically for enhancing technical, general and motivational levels of in-house and state government officers/officials and others and also for introducing new developments in the field of science and technology and other functional areas, as detailed below.
  - a) Competence enhancement training
  - b) Specialized management training
  - c) Foundation training for young scientists
  - d) One-day workshops by eminent speakers

Beneficiaries empowerment program (BEP): These programs are meant for both skill seeding and skill enhancement of the industry stakeholders. The BEPs shall be conducted by respective DOSs/DOHs/DOTs with faculty support if required from CSB field units for the beneficiaries of concerned states. The sub-component can be categorized under following heads:

- i) **Beneficiary training/farmers training:** Specialized skill development focused training programs for farmers, artisans, entrepreneurs and supervisors both through peripatetic and conventional modes. The unit cost for beneficiary training shall be Rs.3,000 per head for 1-2 week program that includes cost of training and training consumables, faculty fee and wage compensation at Rs.50 per person per day (with a cap of Rs.750 per person per program). The physical target envisaged for BEP covering all the states is 4,000 beneficiaries in five years.
- ii) **Exposure visits for elite farmers and extension agents:** This program is meant for visit to different sericulture clusters/establishments/research institutes to have an exposure to the latest know-how and sericulture technologies and processes in the field. One in four persons covered under beneficiary training shall be considered for exposure visit for which the unit cost per head is Rs.2,000 for an envisaged target of covering 700 persons.

**Establishment of sericulture resource centre (SRC):** SRCs located in select sericulture clusters shall function as training-cum-facilitation centres for cluster actors, farmers and other stakeholders. It shall be managed by selected lead/elite farmers or any non-profit organizations or sericulture societies for the benefit of cluster farmers/sericulturists.

#### b) Operational guidelines and implementation modalities:

Under STEP, the envisaged trainings shall be funded 100% through CDP by CSB and shall be conceived, designed and conducted by a group of accredited and professional trainers from C&ED, an ISO 9001:2008 quality certified training wing of CSB, and a set of well equipped CSB zonal trainers in association with DOS/DOT/DOHs and other renowned trainers and training consultants/agencies. These training programs shall be carefully planned, designed and executed in relevant silk clusters/locations adopting appropriate training mode and approach (conventional, peripatetic, etc.) depending on the target groups.

The unit cost and sharing pattern are given below:

Component and unit cost	Sharing Pattern					
Component and unit cost	CSB	State	Beneficiary			
Programme-wise unit cost is given separately in Table	100%	-	-			

The BEP which consists of farmers and stakeholders training shall be conducted by respective DOS in association with CSB to address the training needs and skill gaps of the industry stakeholders. The XI Plan unit cost of Rs.5000 per beneficiary has been bifurcated in XII Plan as Rs.3,000 towards training and Rs.2,000 for exposure visit. One elite/lead farmer out of every four farmers trained shall be considered for exposure visit to developed sericulture clusters. Depending up on the need, the training programs under BEP could be of 1-2 week duration focusing on specific requirements and industry needs.

Component unit cost and sharing pattern	CSB	State	Beneficiary
Beneficiary training @ Rs. 3,000 per person	50%	50%	-
Exposure visit @ Rs. 2,000 per person	50%	50%	-

Sericulture Resource centres shall act as an important link between extension centre of research institutes and beneficiaries. During XII Plan, 16 such centres are planned in select sericulture clusters. It shall be managed by selected lead/elite farmers or any 'not for profit' organizations or sericulture societies for the benefit of cluster farmers/sericulturist. The unit cost of establishing and managing each such centre shall be Rs.2.50 lakh out of which Rs.1.00 lakh shall be the capital expenditure consisting of construction of open sheds at Rs.60,000, and procurement of training equipment at Rs.40,000 (TV, DVD, black board, steel trunk, board, basic furniture, mat/durry, rearing appliances, stand, trays etc.), respectively. The balance Rs.1.50 lakh shall be towards recurring cost/operational cost of training programs for five years @ Rs.30,000 per year, for consumables, stationary, documentation, communication, photocopy, photography, tea and snacks etc.

Unit cost and sharing pattern	CSB	State	Beneficiary
Shed construction and equipment procurement - Rs.1.00 lakh	50%	50%	-
Operational cost - Rs.1.50 lakh for five years	50%	50%	-
Total cost - Rs.2.50 lakh	50%	50%	-

## **Physical projections:**

## A. Skill Training and Enterprise Development Program

					No	. of progr	ams		
#		Component	Unit	2012- 13	2013- 14	2014- 15	2015- 16	2016- 17	Total
1		trepreneurship development ogram	No.	-	-	1	-	-	1
2		chnology up-gradation/ monstration program	No.	3	1	1	1	1	7
3		source development ogram	No.	8	3	3	3	2	19
4		nkers' sensitization ogram	No.	-	-	1	-	-	1
5	Ma	nagement development program							
	а	Competence enhancement training	l						
		Local	No.	-	3	3	3	3	12
		Out station	No.	1	1	1	1	1	5
	b	Specialized management training							
		Short-term (Non-residential)	No.	1	1	1	1	1	5
		Short-term (Residential)	No.	1	1	1	1	-	4
	С	Foundation training for young Scientists	No.	-	-	-	1	-	1
	d	One-day workshops	No.	-	2	1	1	1	5
		Total		14	12	13	12	9	60

## **B.** Beneficiary Empowerment Program

			No.	of persor	ıs			
#	Component	Unit	2012-13	2013-14	2014-15	2015-16	2016-17	Total
1	Training	No.	2000	1000	1000	-	-	4000
2	Sericulture exposure visit	No.	300	200	200	-	-	700

## C. Sericulture Resource Centre

				No	o. of centr	es		
#	Component	Unit	2012-13	2013-14	2014-15	2015-16	2016-17	Total
1	Sericulture Resource Centre	No.	-	10	6	-	-	16

## **Financial projections:**

## A. Skill Training and Enterprise Development Program

			Unit cost	Financial Projections (Rs. in crore)					Total	
#	C	Components / Programs		(Rs)	2012-13	2013-14	2014-15	2015-16	2016-17	(Rs. in crore)
1	Entrepreneurship Development Program (EDP)		2,00,000	-	-	0.020	-	-	0.020	
2	Technology Up-gradation/ Demonstration Program (TUP/TDP)		75,000	0.230	0.008	0.008	0.008	0.008	0.053	
3	Resource Development Program (RDP)		3,50,000	0.280	0.110	0.110	0.110	0.070	0.665	
4	Bankers Sensitization Program (BSP)		2,00.000	-	-	0.020	-	-	0.020	
5	Management Development Program (MDP)									
	а	Competence Enhancement Training (CET)	Local	50,000	-	0.015	0.015	0.015	0.015	0.060
			Out station	1,50,000	0.015	0.015	0.015	0.015	0.015	0.075
	b	Specialised Management Training (SMT)	Short term Non- residential	25,000	0.003	0.003	0.003	0.003	0.003	0.013
			Residential	1,00,000	0.010	0.010	0.010	0.010	-	0.040
	c Foundation Training for Young Scientist (FOTYS)		4,50,000	-	-	-	0.043	-	0.043	
	d	One day works eminent speak		25,000	-	0.003	0.003	0.003	0.005	0.013
	Total (A)			0.330	0.158	0.198	0.200	0.115	1.000	

## **B.** Beneficiary Empowerment Program

#		Unit cost	Fina	<del>!</del> )	Total			
	Component	(Rs)	2012-13	2013-14	2014-15	2015-16	2016-17	(Rs. in crore)
1	Beneficiary training	3,000	0.600	0.300	0.300	-	-	1.200
2	Sericulture exposure visit	2,000	0.060	0.040	0.040	-	-	0.150
	Total (B)		0.660	0.340	0.340	-	-	1.350

## C. Sericulture Resource Centre

		Unit	i manolar i rojectiono (rioi in croro)					Total
#	Component	cost (Rs)	2012-13	2013-14	2014-15	2015-16	2016-17	(Rs. in crore)
1	Capital expenditure	1,00,000		0.100	0.060	-	-	0.160
2	Operational expenditure	1,50,000		0.150	0.090	-	-	0.240
	Total (C)			0.250	0.150	-	-	0.400
	Grand Total (A+B+C)		0.990	0.748	0.688	0.200	0.115	2.750

#### Cumulative sharing of CSB and state

Scheme / Sub-component	CSB	DOS	TOTAL
A. Skill training and enterprise development program	1.00	-	1.00
B. Beneficiary empowerment program	0.95	0.40	1.35
C. Sericulture resource centre	0.28	0.12	0.40
Total	2.23	0.52	2.75

Beneficiary empowerment program towards training can be organized through sericulture resource centres and funds earmarked under BEP for the purpose could be provided to SRCs.

# 7. Developing community based organizations in line with Resham Doot concept (for all sectors)

#### a) Brief description:

This concept has been implemented successfully among the tasar farmers of Jharkhand under a different nomenclature: Resham Doot and Resham Mitra. The objective of the component is to resolve major gaps in sericulture industry like dissemination of new findings and technology, group activity among the beneficiaries, popularization of bivoltine, training, extension, synchronizing the various activities of the sericulture to produce uniform quality cocoons, credit facilitation etc.

The silk industry by its nature is a network of many non-farm and on-farm activities and has strong need for many forward and backward linkages. The heterogeneous activities in the entire silk production chain of silk industry calls for group approach and support systems in the areas of training, extension, infrastructural support, information support, technology support, credit availability, timely raw material availability, market tie-up, generation of skilled person power etc. CSB and DOS are providing all the support required for the overall development of sericulture. However, the government system has certain limitations such as limited staff, weak extension machinery, lack of mobility, knowledge gap etc. This is where the CBO system can play an important role and significant contribution supplementing the government system by raising the level of technology to suit local needs, offering a better platform for the transfer of superior technology and training, organizing the farmers for activities like technology absorption, narrowing the gap between lab and land and acting as trouble shooters at the field level at appropriate time.

#### b) Technical specifications / operational guidelines:

Twenty farmers are motivated to take up sericulture activities and form Sericulture Cluster Group (SCG). Support shall be provided for organizing the meetings, procurement of registers etc. In the second phase, the cluster groups shall be assisted to take up sericulture activities like plantation development, irrigation facilities, rearing house, conservation camps, health insurance etc by extending the support through CDP. The common facilities like CRCs, sericulture equipment supply centres, community mounting hall, disinfection units, grainage activities, common facility centres and other similar group related activities under CDP shall also be extended to the SCG based on the need and requirement. Support shall also be provided to the group towards working capital to enable them to procure required inputs for distribution among the members and non-members. In the third phase, the SCGs shall be networked to improve their potential levels in the following areas:

- > Groups shall be linked to credit institutions for upliftment of program.
- Groups shall be given continued support in the form of training, awareness and exposure visits. The interventions shall make the groups self-reliant and sustainable, and then slow withdrawal by the department in a phased manner.
- NGOs shall be involved to internalize the concept of group dynamics.
- Members shall be made aware of benefits of collectiveness-mass rearings by synchronizing brushing.
- Integrate other departmental scheme with SCGs.

Organize women SCGs and general SCGs in each village and strengthen group approach for technology transfer.

**Village level resource persons (Resham Sathi):** The Resham Sathis shall be engaged to motivate the SCGs on the following lines:

- 1. Self help attitude for development and to share experiences for group improvement.
- 2. Regular meetings for exchanging ideas.
- 3. Regular savings and lending to help each other.
- 4. Planning for the future.
- 5. Participatory approach for technology transfer and to get government assistance for adoption of technology.
- 6. Develop linkages with financial institutions for credit.
- 7. Better utilization of resources.
- 8. Participate in social activities.

Formation of cluster level associations (CLA): Each SCG with 20 members operating from a village as a self help group has lot of limitations. They need support to decide better and bargain effectively, plan and negotiate better, improve financial resources to meet the demand of group members, appraise local problems and represent to the concerned and develop effective linkages, to function collectively against social evils (child labour, gender bias, etc.) and financial support to perform better with low level savings due to constraints. To overcome these practical difficulties, it is necessary to make a CLA comprising 10 SCGs with functions and resources for overall development. It provides a platform for each participating SCG to voice its concern for assistance and hear the experiences of other members for better decision so as to develop into an effective institution for learning, acquire leadership qualities and promote involvement in development process in the long run.

#### **Functions of CLAs:**

- > Improvement in efficiency of SCGs by sharing experiences.
- Strengthening the member SCGs.
- > Organizing new SCGs to benefit those who require and desire to involve in development process.
- Review on monthly basis on the performance of SCGs.
- Involve in training program, awareness meet, demonstration trials to supervise participation of SCGs and liaise with concerned agencies for better effectiveness of programs.
- Forming special groups for specific programs.
- Ensuring periodical auditing of accounts.
- Participating in social and development activities.
- Developing the linkages for SCGs with institutions like financial institutions, local panchayats, government departments and district administration.
- ldentifying the systems for SCGs for enhanced income of members.
- Assisting SCGs in proper maintenance of accounts.
- Promoting the involvement of women members in development activities and promote participation of members in local panchayats.
- Assisting to develop infrastructure required in the village from local institutions.
- Operating funds and nominate members on rotation basis.
- Communicating decisions to SCGs.
- Documenting success results and bringing out news letters periodically.

Structure of SCG and CLAs: Each SCG having 20 members shall nominate one member to CLA, who had communication and leadership skills and could successfully lead SCG for a period of one year. From the nominees of SCGs, one member shall be selected as secretary and another as joint secretary/coordinator and both shall be changed each year on rotation basis. Funds shall be operated jointly by opening joint accounts in banks. Process of nomination shall take place 3 months in advance at SCG and CLA levels. The secretary of CLA shall convene monthly meetings and motivate members for their active and effective participation. The joint secretary shall document the decisions, maintain registers, accounts, and maintain liaison with member SCGs and inform the decisions. For specific works, such groups shall be formed with 2-3 members by the secretary. In the absence of secretary, the joint secretary shall preside over the meetings.

Meetings of CLAs shall be conducted at regular intervals. Secretary shall ensure 80 % attendance of the members. CLA shall decide to frame the guidelines on admission and removal of representatives, fixing of responsibility, recording and reading of minutes, maintenance of records, maintenance and reading of accounts, fixing of interest rate, entrance fee, monthly fee, fine etc., amendment of rules, formation of committee to appraise and sanction of loan and follow up, utilization and verification of assets, laying down the procedure to sanction loans and liaisoning with the bank to improve resources etc. CLA shall take technical support and guidance from the local Assistant Director of Sericulture.

The Assistant Directors of the respective DOSs shall attend the meeting convened by CLAs and if necessary, CLAs shall attend meetings convened by the Assistant Directors. SCGs shall file the reports and periodicals prescribed by the Assistant Directors. CLAs shall also prepare an annual action plan and conduct the review and self audit periodically. A savings account shall be opened in the name of CLA followed by resolution for operation of accounts. CLAs shall finance SCGs when bank is not able to finance after recording the reasons. CLAs shall have 10 members representing 10 SCGs.

Funding of SCGs and CLAs: To organize SCG on voluntary basis with common interest for mutual strength to develop leadership qualities, communication skill and for overall development, each participating SCG shall contribute Rs.10,000 to CLA by sourcing Rs.500 from each farmer. Each CLA shall have 10 SCG representatives and with such contribution of Rs.10,000 each, each CLA shall have Rs.1,00,000. In this way, the amount of Rs.4.00 lakh (four times of contribution) shall become the seed money to each CLA under the program. The fund thus mobilized shall be utilized to lend to SCGs initially for establishment of sericulture activities on priority basis with proper analysis and agreement of SCGs and subsequently, for other allied activities after strengthening under agriculture and social activities. The loan shall be released to the SCG members through the savings account of SCG on agreed interest with a repayment schedule of minimum 5 installments.

**Training and capacity building:** The SCG as the potential forums for self organization of the communities, their potential can be fine tuned with proper training to SCGs representative/SCG member on maintenance of accounts, book keeping, auditing, PRA exercise, communication skill, etc. Training shall not be continuous and based on progress, training program shall be organized with a review of earlier program and its result at Rs.1,000/day/trainee to cover cost on travel, hall rent, refreshments, honorarium for trainer, print outs etc. It is proposed to provide Rs.2.00 lakh to conduct one day training program for 200 participants (200 x Rs.1,000 = Rs.2.00 lakh). This apart, technical training on sericulture shall be imparted to the group members under the Beneficiary Empowerment program of CDP.

**Exposure visit:** To understand better and share experiences, it is necessary to take the members of CLAs to the state like Jharkhand and also to progressive areas of sericulture tract to see the practices. Exposure visits result in

better communication for early adoption of technology for increased returns. These visits shall definitely improve ideas for better strategy. The expenditure proposed is on travel, print outs, books, refreshment, lodging, etc., at Rs.10,000/member and Rs.2.00 lakh for 20 members.

Honorarium to village level resource person (Resham Sathi): SCG shall maintain records, book of accounts, monitor repayment of loans, inform members on meetings, and bear the travel cost to visit bank and office of Assistant Director/other offices. As it is necessary to employ staff and to meet the incidental expenses on travel, it is proposed to provide a grant of Rs.60,000 per year (Rs.5000/ per month) to utilise it as honorarium to maintain book of accounts and to conduct the affairs of 10 SCGs under each CLA. This shall be extended to a maximum period of 3 years and subsequently can be met by the SCGs through revenue generation.

Honorarium to service provider (Resham Mitra): The service provider is a key person coordinating among the DOS, CSB and the CLA/SCG. The service provider shall be actively involved in organizing the SCG and CLA, monitor the group activity, maintain the books of accounts and support the DOS and CSB in the transfer of technology as Para Extension Worker (PEW). PEW shall be a sericulture/agriculture graduate, trained by the CSB research institute to undertake extension activity in coordination with the extension machinery of the DOS. It is proposed to provide a grant of Rs.1.20 lakh per annum (Rs.10,000 per month). This shall be extended to a maximum period of 3 years and subsequently can be met by the CLA through revenue generation.

**Cost on books and forms:** For uniform and proper maintenance of accords, minutes of meeting, an one time grant of Rs.5,000 per SCG and Rs.10,000 per CLA is proposed towards cost of stationary and to maintain registers like admission book, meeting minutes, attendance of members, receipt book, cash book, loan ledger, general ledger, voucher and voucher pad, loan application forms, SQC loan pass books, letter pads, seals, etc..

**Workshops and evaluation:** It is proposed to conduct inter SCG workshop after one year and mid-term evaluation for corrective steps. For motivation, it is proposed to honour best performing SCG with an incentive or prize. And for organizing the workshops and undertaking the evaluation works, a sum of Rs.1.00 lakh is proposed for each CLA.

**Overall program:** It is planned to organize 50 CLAs in the country initially covering mulberry, *Vanya* and the post-cocoon sectors. CLAs shall prepare projects in line with the CDP norms and route them through the concerned DOSs for release of funds and. shall implement the CDP components in project mode and cluster approach. NGOs or Cluster Development Management Agency (CDMA) shall also be encouraged to take up sericulture projects involving CLAs.

The CBOs can be integrated into the cluster programs for which administrative assistance can be sourced from the cluster programs for the implementing agency, i.e., DOS or NGO. 10% of the total project cost shall be provided as administrative cost to the NGOs who are developing CLAs independently. No administrative cost shall be provided to the states who are taking up this component independently. The component shall be made flexible for enabling the states to avail the benefits entirely or only Resham Mitras to strengthen the extension activities. It is also planned to support producer company linked to CBOs for long term sustainability.

**Fund requirement:** 50 CLAs shall be initially developed for mulberry, *Vanya* and post-cocoon sectors at a maximum cost of Rs. 35.42 lakhs per CLA, of which GOI share is Rs.20.59 lakhs. NABARD shall also be involved to support such CBOs. The unit cost details of this component are given in next page.

#### c) Physical targets and financial projections:

The details of sharing pattern, unit cost, physical targets and financial projections are given below:

Sharing	State Category	CSB	State	Beneficiary
Pattern	Common to all states	60%	34%	6%

7000	Unit Cost	Physical	Finai	ncial Projec	tions (Rs. In cro	re)
Zone	(Rs.)	Target	CSB	State	Beneficiary	Total
Applicable to all zones	1,77,100 per SCG	500 SCGs to form 50 CLAs	10.62	6.00	1.11	17.73

#### Unit cost for developing Community Based Organizations (CBOs) under CDP

(Rs. In lakh)

#	Dataila	Sharing		Amou	ınt of share	
#	Details	pattern	CSB	State	Beneficiary	Total
1	Thrift fund (beneficiary contribution)  @ Rs. 500 x 200	00:00:100	-		1.00	1.00
	Seed money to thrift fund @ Rs.2000 x 200	60:40:00	2.40	1.60	0.00	4.00
2	Training and capacity building of SCGs/ CLAs  @ Rs.1000 X 200	60:40:00	1.20	0.80	0.00	2.00
3	Honorarium to village level resource person / lead farmer / Resham Sathi @ (Rs.5000 X 12) X 10 X 3 years	60:40:00	10.80	7.20	0.00	18.00
4	Honorarium to para-extension Worker / Resham Mitra @ Rs.10,000 X 12 X 3 years	60:40:00	2.16	1.44	0.00	3.60
5	Exposure visits @ Rs.10,000 x 20	60:40:00	1.20	0.80	0.00	2.00
6	Stationary @Rs.10000 x 1 CLA	60:40:00	0.06	0.04	0.00	0.10
	@ Rs.5000 x 10 SCGs		0.30	0.20	0.00	0.50
7	Workshops and evaluation per CLA	60:40:00	0.60	0.40	0.00	1.00
	Total per CLA		18.72	12.48	1.00	32.20
	Administrative cost of NGOs/ Cluster Development Management Company	60:40:00	2.52	0.64	0.10	3.26
	Total per CLA		20.59	13.73	1.10	35.42
	Total for 50 CLAs		1,062.00	656.00	55.00	1,773.00

**Note**: The central share under the component shall be 60% while the state and beneficiary share together shall Be 40%. However, there shall be flexibility in sharing between state and beneficiary within 40%.

#### 8. Support for convergence activities for sericulture development

#### I. Cluster development projects

#### a) Brief description:

The successful implementation of JICA assisted Bivoltine Promotion Project has paved the way for cluster development approach and CSB has implemented a Cluster Promotion program during XI Plan. In close co-ordination with the state sericulture departments, CSB had organized 50 model sericulture clusters in pre-cocoon (45 No.) and post-cocoon (5 No.) sectors in Karnataka, Tamilnadu, Andhra Pradesh, Jammu & Kashmir, West Bengal, Maharashtra, Odisha, Uttarakhand, Uttar Pradesh, Himachal Pradesh, Chhattisgarh, Assam/BTC, Meghalaya, Mizoram, Nagaland and Manipur.

The funds for the cluster program have been met out of budget provision made to states under CDP. The CSB has provided required technical assistance/extension support and the states have provided matching grants and extension support for implementing the program. The program received a very good response from the participating states, as it is a well knit program for the benefit of the farmers. Therefore, it has been proposed that these successful model clusters could be continued to replicate the same in other potential areas for adoption of improved technology towards productivity improvement.

During XII Plan, it is proposed to develop 100 sericulture clusters (pre-cocoon) under the state control with clear backward and forward linkages covering both mulberry and *Vanya* sectors in potential areas or through reputed NGOs/CBOs recommended by the DOSs. The main objective to encourage sericulture clusters is to supplement the efforts in achieving Bivoltine silk production target envisaged during XII Plan. While the DOS shall implement the cluster program and manage the CDP funds earmarked for the clusters, the research institutes of CSB shall assist in joint identification of potential areas, conducting benchmark surveys. chawki and seed supply, crop inspection and regular monitoring in close co-ordination with DOSs apart from providing technical assistance to farmers in identified cluster areas.

Out of 100 clusters, it is proposed to assist 71 mulberry clusters which shall be called as Bivoltine clusters, as Bivoltine silkworm rearing shall be conducted exclusively in favourable seasons of the year and in turn, in production of bivoltine cocoons and raw silk. Assistance shall also be extended for organizing remaining 29 clusters by the states in *Vanya* sector, 12 for tasar, 6 for oak tasar, 5 for eri and 6 for muga sector on the lines of mulberry. Towards organizing all the 100 clusters, it is proposed to provide financial support to states towards administration and monitoring expenses, conducting capacity building and awareness programs under CDP, since the fund requirement for plantation, upgradation of infrastructure, post-cocoon activities, etc., meant for organizing the clusters shall be dovetailed under normal CDP. A provision of Rs.10.00 crore has been earmarked under the component during XII Plan @ Rs.10.00 lakh per cluster.

This apart, it is proposed to extend financial assistance to DOSs who intend to come forward to organize farmer groups and set-up new and additional sericulture clusters in mulberry and *Vanya* sectors in potential areas dovetailing funds under normal CDP strictly on the lines indicated above, since the cluster mode approach has been found most suitable for implementation of CDP. The clusters shall be organized directly by DOS or through reputed NGOs/CBOs recommended by DOSs. Towards this, CSB shall extend financial assistance to develop 50 new clusters during XII Plan for incurring expenditure on administration, capacity building, awareness program, monitoring, etc. The fund requirement for all other on-farm and off-farm activities shall be dovetailed from normal CDP. Accordingly, a provision of Rs.5.00 crore has been made for organizing 150 clusters during XII Plan in a phased manner at Rs.10.00 lakh per cluster for 4 years (2013-14 to 2016-17).

#### b) Technical specifications / operational guidelines:

- DOS shall identify bonafide NGOs having experience in sericulture through transparent selection procedure.
- > 100 mulberry clusters shall be developed as Exclusive Bivoltine Clusters to conduct Bivoltine silkworm rearing during the favorable seasons of the year.

- > 29 Vanya clusters shall also be developed on similar lines of mulberry.
- DOS shall organize 50 clusters (covering both mulberry and *Vanya*) directly under their control in addition to 100 proposed clusters.
- All the 150 clusters shall be identified through a diagnostic study jointly by DOS and CSB.
- > Detailed benchmark survey shall be conducted jointly by CSB and DOS to know the present status of production and productivity in the identified locations.
- The clusters shall be developed in a limited geographical area involving at least 150 to 250 farmers covering around 100 to 300 acres in mulberry sector and around 100 to 150 farmers in *Vanya* sector. The locations selected shall have to have some extent standing mulberry acreage and *Vanya* plantations.
- > DOS in coordination with research institutes of CSB shall make arrangements for supply of quality silkworm seed, organize chawki worm supply, undertake transfer of latest technology, management of hygiene, rearing disciplines, crop supervision, monitoring, conducting awareness and training programs etc., in the cluster areas.
- Target shall be fixed for each cluster to reach higher productivity based on the parameters laid down by the CSB research institutes.
- DOS/NGOs/CBOs shall be extended financial assistance to the tune of Rs.10.00 lakh for each cluster for a period of four years under CDP towards cost of administration, capacity building, conducting awareness programs and monitoring.
- The funds shall be dovetailed from normal CDP for extending required assistance to all the 150 identified clusters towards raising of plantation, organizing seed, upgradation of infrastructure, skill development, post-cocoon activities, etc.
- > The cluster(s) shall be implemented by DOS in close co-ordination with the research institutes, its nested units and regional offices of CSB.
- > The progress on implementation of the clusters shall be evaluated and monitored on a regular basis at state level / Institute level and suitable suggestions made for improvement.

#### c) Physical Targets and Financial Projections

The details of sharing pattern, unit cost, physical targets and financial projections are given in the table below:

	State Category	CSB	State	Beneficiary
Sharing Pattern	General Category	100%	-	-
	Special Category	100%	-	-

Zone	Unit Cost	Physical	Fi	nancial Proj	ections (Rs. in c	rore)
	(Rs.)	Target	CSB	State	Beneficiary	Total
Applicable to all zones	10.00 lakh per cluster	150	15.00	-	-	15.00

#### **Special initiatives (Flexi fund)**

The CDP of CSB covers the entire country catering to extremely diversified, demographic, geographical, economic and rural and urban needs. It is difficult to design schemes, which shall have parameters for catering to the requirements of all the regions. It is, therefore, necessary to have a certain flexible component which may be used for developing specific programs by the implementing agencies to meet the overall objective of the centrally sponsored scheme. Implementation of CDP with flexibility and convergence leads to better results. These results could be in the form of improvement in the quality of service, extension and monitoring mechanism, efficient delivery and servicing

beneficiaries at hinterlands etc. Often, in the absence of such flexibility, the set objective of the schemes cannot be met.

CDP has been successfully implemented by various states to address the critical gaps so as to upscale the sericulture activity through increasing the productivity. However, flexibility is also required to enable overall optimum use of the financial resources of GOI and states and leverage the same. Also, there is a wider scope and potential for better and effective dovetailing and convergence with other developmental agencies depending on the field requirements, which are crucial.

Special initiatives are proposed to enable the states and other implementing agencies including CSB in Bivoltine cluster projects to meet their specific needs and pilot innovations within the overall objective of CDP for its expected outcome. The states shall make a provision of maximum 10% of the total project cost to support the overall development of sericulture through implementation of CDP while formulating their project proposals under CDP.

There are some essential interventions with specific objectives which cannot be covered under the available CDP components and can only be implemented under this component with pre-defined norms. However, flexibility is also required to enable overall optimum use of the financial resources of GOI and states and leverage the same. A few of the interventions proposed under the flexi fund are:

- Reduced allocations of central share under CDP and enhanced target of silk production during XII Plan
  warrants for various dovetailing options with other ministries, states and developmental agencies like
  NABARD etc. Funding under most of these agencies is as per the project grant and not as per annual
  allocation and for CSB to have its say in project management, part of the assistance need to be met, which
  can be accommodated under provisions like special initiatives alone.
- In order to upscale the initiatives with a leveraging impact, such convergence mechanism with other
  agencies like., NABARD, State Rural Livelihood Missions (SRLM) and other agencies shall also help for
  better field level monitoring, which is most vital in view of dwindling extension machinery of both CSB and
  DOSs.
- Due to increasing electricity problems, installed capacities for conversion and processing are severely
  affected. This warrants a need for utilizing solar power and lighting. Dovetailing the available schemes from
  the Ministry of New and Renewable Energy (MNRE) besides mobilizing interested corporates is necessary
  to rope in for possible assistance for the purpose.
- This attains importance in view of the state specific issues, which shall differ and these critical gaps may not be addressed from the available CDP components, but very much essential to achieve the inclusive growth.
- Further, keeping in view the ambitious Bivoltine and ICB targets of XII Plan, the following issues require attention to encourage the farmers/agencies to take up Bivotine and ICB silk production.
- In order to encourage Bivoltine production, cash award for best Bivoltine clusters, CBOs, SHGs, best farmer etc. shall be given.
- Incentives shall be given to the farmers of Bivoltine clusters who produce quality cocoons beyond the specified target with higher productivity to encourage expansion.
- Providing transportation cost to private CRCs to transport the chawki worms to farmers in Bivoltine clusters
  as well as to meet additional cost of machinery and equipment attributed to transportation to far flung areas
  of project implementation.
- Incentives shall also be given to the scientists/technocrats and farmers for innovative practices, discoveries and inventions
- Normally, the expenditure incurred by private Bivoltine seed rearers to produce quality seed cocoons is
  higher than those who invest for production of reeling cocoons. If the seed cocoons produced are not sold
  for reasons like sudden variation in temperature, humidity, erratic rainfall, shortage of mulberry leaf etc. and
  the farmer is forced to sell the seed cocoons for reeling. Such farmers shall be given some compensation
  based on the rates fixed by state government.
- In case of Vanya sector, it is suggested to provide incentive to rear seed crops during unfavorable seasons.

- The flexi fund component shall facilitate the drawing of state specific projects and address critical gaps, if no
  provision exists under any of the sector-specific components of CDP.
- The provision proposed for flexi fund should not exceed 10% of the total project cost.

Such initiatives shall follow cluster approach to have a visible impact and with a potential to replicate in other potential areas. Invariably the funding under CDP schemes shall have the element of flexibility as per the need of the initiative which may be decided by the PMB/PMC or the highest body constituted under the respective projects so as to achieve the project objectives. The GOI share under such initiatives need to be taken in to account as percentage to the entire project grant as required by the other funding agencies and not against each activity and its unit cost. CSB shall have specific role to play in joint monitoring and management of the project to oversee the effective utilization of its share, transfer of technology and to achieve the project objectives.

The required interventions with pre-defined objectives, norms, actual requirement of funds etc. shall be worked out by the concerned states and attached to the project for implementation of CDP for consideration and approval by state level PMC followed by zonal committee and AMC. Such proposals approved by the AMC under this component shall be approved by the MOT in consultation with Internal Finance Division of MOT.

The proposal and implementing agencies of flexi fund component shall not lead to a violation of GFR. The GFR and other prescribed procedures of GOI and DOS for incurring expenditure shall be adhered to. Though a general sharing pattern of 30:35:35 is proposed under this component among GOI, state and beneficiary, the average sharing pattern of the overall project cost of CDP proposed by state agency is to be adopted for sharing of this component. If beneficiary is not involved in the flexi funds, the sharing shall be among GOI, state and the implementing agency where in the GoI share shall remain same as the average GOI share of the CDP project cost. In case of special status states, the sharing shall be 80:10:10 or 80:20.

A token provision of Rs.19.00 crore is proposed for implementation of this component during XII Plan. As per the recommendations made by the B.K.Chaturvedi Committee on restructuring of centrally sponsored schemes for XII Plan, 10% of total outlay for the scheme is to be earmarked for implementation of Special Initiatives (Flexi Fund) to take care of the needs of the states. Subsequently, this has been approved by the Cabinet. Therefore, 10% of total proposed central share of Rs.889.00 crore under CDP works out to Rs.89.00 crore. However, due to limited availability of resources for CDP, a token provision of Rs.19.00 crore only is proposed, which shall be enhanced during the course of implementation of the CDP, subject to availability of funds in annual plans.





# Catalytic Development Program (Centrally Sponsored Scheme)

## CHAPTER VI IMPLEMENTATION GUIDELINES

#### Introduction

The Catalytic Development Program consists of various components and sub-components under mulberry, *Vanya* and post-cocoon sectors. The program is continued for implementation as a centrally sponsored scheme with certain modifications and intensifying of XI Plan activities, for implementation in a project-mode during XII Plan. The packages under CDP cover three major areas, *viz.*, mulberry, *Vanya* and post-cocoon, supplemented by other components of support services, which are common to all packages. The program catalyzes the efforts of state governments to improve the quality, productivity and production of raw silk, besides generating employment opportunities, particularly in the rural areas.

#### **Objectives**

- To increase the production, productivity and quality of Indian silk through a package of innovations, technologies and incentive investments to reduce the burden of the beneficiaries, so as to promote equitable and sustainable human development, with special attention to Bivoltine and gradable ICB silk production.
- To set up viable enterprises for seed production, cocoon production, reeling, processing etc., and facilitate direct access to the latest technologies and findings developed by CSB through its research institutes.
- To focus on complete and holistic development of sericulture industry in all states of the country involving states and stakeholders for sustainability and improvement in output, in terms of quality and quantity.
- To promote sericulture as a major instrument of poverty eradication and employment generation, particularly in the rural and tribal areas of the country.
- To act as convergence vehicle among the major players like central and state governments, NGOs, SHGs, private parties and other stakeholders.
- To organize equitable distribution of benefits among the stakeholders across the production chain and inculcate participatory mode of extension system, capacity building and private participation in critical areas.
- To organize the beneficiaries into CBOs for up-scaling their activities, increasing productivity, synchronizing the pre and post-cocoon activities, strengthening extension and increasing credit flow.
- To inculcate zonal approach for neutralizing regional variations in unit cost, agro-climatic conditions and effective monitoring of developmental programmes.

- To implement 100-150 model mulberry clusters in association with states and support from nested units of research institutes of CSB across the country, for exclusive production of Bivoltine silk of international standard. Depending on the need and resources available for CDP, additional cluster projects for Bivoltine silk production in the country would be implemented.
- > To establish convergence and synergy with other schemes of the central and state government through integrated approach for the overall development of silk industry to achieve horizontal and vertical integration of all the links in silk production chain.

#### Implementing agencies

CSB shall implement the scheme in collaboration with DOSs, NGOs, CBOs, SHGs, SPVs, co-operatives and other para-status bodies identified by the states through proper procedure.

#### **Project approach**

The implementation of the CDP during the XII Plan shall be on a project-mode with clear goals, measurable targets, resources and time schedule. The CDP is redesigned to suit different seri-zones and will be offered as packages for implementation in a project-mode during XII Plan with zone-wise unit costs. Identification and implementation of components within the scheme shall be based on zonal/regional/sectoral requirements and the regional variations are neutralized in the unit costs through zonal approach, The zones and states included under them are:

#	Zone	States covered
1	North-western (5 states)	Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Haryana and Punjab
2	Central and western (5 states)	Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Rajasthan and Gujarat
3	Eastern (4 states)	West Bengal, Bihar, Jharkhand and Odisha
4	North-eastern (8 states)	Assam (including BTC and other Autonomous Councils), Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura
5	Southern (5 states)	Karnataka, Andhra Pradesh, Tamil Nadu, Kerala and Maharashtra
	Total	27 states

The projects are to be prepared by the states, with specific goals. Separate projects must be prepared by combining different sectors for each variety *viz.*, mulberry, eri, muga and tasar depending on the area, need and requirement. Within each sector, relative and required components (whether seed, cocoon and post-cocoon sectors) can be chosen and included in the project. Broadly, the components under CDP are as below:

#	Sectors	Components (No.)
1	Mulberry	19
2	Vanya (tasar, eri and muga)	14
3	Post-cocoon	17
4	Support service	8
	Total	58

#### **Project planning**

In order to seek assistance from CDP, the states shall have to prepare a DPR for remaining period of XII Plan, clearly stating the years-wise action plan with fund requirement details (GOI:state:beneficiary), along with year-wise output/outcome, in a prescribed format.

- > The projects must be prepared and submitted with clear goals, measurable targets, resources and time schedule as per the format. In case of any shortfall in financial or physical targets for a particular year as per the project due to shortage of funds or any other reasons, such targets shall be added to next year by suitably modifying the action plan for relevant year.
- Forward and backward linkages, such as, supply of planting materials, silkworm seed, other inputs and marketing support etc., shall be taken care of while preparing the projects to match the raw silk production targets proposed for the state (Bivoltine, ICB, tasar, eri and muga)
- > The project shall be prepared on cluster basis. Each cluster can have around 300 farmers under mulberry sector and 150-200 farmers under *Vanya* sector and hilly areas (figures are indicative). The cluster project shall contain the details of beneficiaries, name of the village(s), number of farmers/reelers/ weavers, cocoon productivity, etc., based on the base-line survey.
- > The project shall specify the names of components/interventions required from CDP, cost of each component, sharing pattern of CSB, state and beneficiary, year and cluster-wise output, total output, expected outcome etc., at the end of the Plan period.
- Available infrastructure like seed production, CRCs, reeling, storage and processing capabilities indicating the installed capacities and working capacities and other facilities like cocoon storage and marketing shall enable to plan for full utilization of facilities and bridging the gaps, if any, also to indicate the area under food plants both under irrigated and rain-fed system, the rearing space available and cocoon production to suggest measures to improve the utilization of available plantation.
- Maximisation of benefits from the existing infrastructure available in the clusters shall be ensured before proposing new interventions in the project.
- > Dovetail CDP components to other schemes of GOI, prioritizing the critical inputs along the silk production cycle.
- Components under mulberry cocoon sector of CDP are oriented towards Bivoltine and ICB gradable silk production. Other farmers producing Multivoltine and non-gradable Cross Breed silk shall be given less priority while sanctioning the projects.

#### Mechanism for project appraisal/approval and release of funds

The year-wise state proposals shall first be discussed and approved by the concerned state level PMC and then scrutinized/finalized by a committee constituted for the respective zones (comprising members of CSB, state and other stakeholders). The zonal committee shall examine all the proposals from states of respective zones and recommend for approval of AMC. An in-house PAC constituted at CSB secretariat scrutinize the proposals received from zonal committees along with the status of utilization certificate, physical progress, fund allocation for current year (for categories like general, SCSP, TSP and NE) against capital and revenue heads, consolidate and place before AMC with its recommendations. Basically, this is a three-tier project appraisal and approval mechanism proposed from 2012-13. Conversely, the CDP funds shall be released through the zonal/regional offices to the implementing agencies for effective monitoring. Apart from monitoring of activities through the zonal offices, other regional offices of the CSB located in the respective states shall also monitor and support the states' efforts in implementing the programs.

- > Three committees *viz.*, (i) Apex Monitoring Committee (AMC) at CSB Secretariat, (ii) Project Monitoring Committee (PMC) at state level and, (iii) Zonal Committees (ZC) at zonal level are constituted to monitor/oversee the project implementation under CDP and review the progress.
- > The state level PMC headed by the Commissioner/Director of Sericulture of the concerned state shall formulate/discuss project proposals and forward to the zonal committee for scrutiny by the working group of sector experts and recommend to AMC for approval and release of funds.
- > The AMC shall discuss and approve the proposals for release of funds for implementation of CDP components based on the progress achieved in earlier year, extent of utilization certificates received, allocation earmarked to a state, funds allocated by GOI for the Annual Plan etc. Release of funds for subsequent installments/year shall also depend on performance during previous year, especially in terms of raw silk production against the targets.

- After approval by AMC, funds will be released to the concerned states/implementing agencies through *Single Window Release System*, based on grant-in-aid received from GOI.
- In respect of the post-cocoon sector, a few of the components shall be implemented directly by the CSB/CSTRI though its nested units/committees with representation from states and stakeholders. Detailed guidelines for this are provided in the post-cocoon sector write-up.

#### Submission of utilization certificate

Utilization certificates for the funds released to state governments/other implementing agencies has to be given to CSB based on the amounts spent or released to stakeholders directly or through banks. Submission of utilization certificate should be as per the prescribed format as prescribed under GFR, supported by a statement of component-wise physical and financial progress.

The progress report and utilization certificates shall have to be submitted to CSB as per stipulated time/period. Shortfall in achieving progress/delay in furnishing of utilization certificates may adversely affect subsequent release of funds as per project action plan.

#### **General guidelines**

Sector and component-wise technical specifications and operational guidelines are detailed in the CDP manual separately. However, the general guidelines for implementation of CDP in the project mode, irrespective of the sector, viz., mulberry, *Vanya* or post-cocoon, are as below:

- 1) Introduction of Aadhaar enabled service delivery mechanism in respect of beneficiary oriented components in a phased manner. States to draw up a road map for convergence of the financial inclusion initiative with Aadhaar, so as to ensure its utility to the Aadhaar enabled payment system for disbursement of subsidy under CDP components. They may specifically examine ways to facilitate opening of bank accounts for all individual Aadhaar, holders.
- 2) Till the Aadhaar enabled service delivery mechanism comes to effect, the subsidy release to the beneficiaries shall be in the form of cheque/electronic transfer only and all the beneficiaries are expected to open bank accounts for easy disbursement. In exceptional cases, where beneficiaries are from far-flung hinterlands without banking facilities, the cash transfers shall be made directly to the beneficiaries by following prescribed procedure for ensuring proper utilization of subsidy.
- 3) The implementation of CDP components shall be region-specific, as different types of silkworm food plants, breeds and package of practices are suited for different areas.
- 4) All states shall operate separate accounts at the DOS for managing the funds received for implementation of CDP so that fund release to stakeholders and implementing agencies could be made without loss of time keeping in view the season based activities of sericulture sector. The states, which do not have separate accounts, shall have to open current account immediately.
- 5) Matching state share shall also be deposited in the DOS account where central share is maintained.
- 6) The states shall bridge the existing gaps in the silkworm seed, cocoon and post-cocoon sectors to reach their full potential by identifying critical areas.
- 7) It is necessary to involve reputed NGOs, VSOs, SHGs and PRIs, wherever they exist, in identification of stakeholders. While identifying stakeholders either for on-farm or off-farm activity, their Aadhaar numbers, bank account numbers etc. have to be collected and indicated in the list of beneficiaries. While the list of beneficiaries for the entire project period may not be possible to collect in the first year itself, Aadhaar based beneficiaries shall have to be identified in the beginning of every year.
- 8) At least 30% coverage shall have to be given for women in respect of components, which are beneficiary oriented.
- 9) Adequate coverage may be done for SC/ST stakeholders (SCSP/TSP) based on the allocation to be communicated by GOI on yearly basis for all the states.
- 10) Preference shall be given to cover more small and marginal farmers (while furnishing the periodical progress

- report, a separate list of SC/ST/BPL/women benefited, as well as the list of other stakeholders under the project shall be furnished).
- 11) DOSs shall take the responsibility of arranging credit facilities from banks/financial institutions wherever required. For this purpose, if the beneficiaries are organized into SHGs, then the financial institutions shall come forward for providing credit facilities.
- 12) One beneficiary can avail the assistance for plantation development up to two hectares with supporting components of CDP. However, for group activity or other sericulture business enterprise, additional assistance can be recommended by the state, depending on the nature of the proposal on *pro-rata* basis for organizing larger rearing house, rearing equipment, farm mechanization and related activity components. This can be replicated in *Vanya* and post-cocoon sectors also.
- 13) The farmers shall be organised into groups to neutralize the variations in the fragmented production bases.
- 14) Components proposed under mulberry cocoon sector are to support production of Bivoltine and ICB silk only.
- 15) For availing assistance under drip-irrigation component, construction of vermi-compost sheds, fencing of plantation *etc.*, the state shall have to give a certificate stating that the beneficiaries had not availed funds for similar components from other departments.
- 16) Components proposed under post-yarn sector of CDP in respect of handlooms and CFC for yarn dyeing and fabric processing are meant to promote equipment and technologies developed by CSTRI for silk clusters only.
- 17) Under the support service sector, while some of the components shall be directly implemented by CSB, the states can also seek financial assistance as per the component-specific guidelines.
- 18) The CSB shall release GOI share as per the approved unit costs and sharing pattern only.
- 19) After approval of the project and release of funds by CSB, as far as possible, re-appropriation of funds from one component to another may be avoided. Nevertheless, reappropriation is not permitted from *Capital Head* components to *Revenue Head* components.
- 20) The involvement of private graineurs in Vanya sector has yielded desirable results during X and XI Plans. The implementing states shall encourage more such private participation to augment commercial Vanya seed production in the country.
- 21) Where registered NGOs and SHGs arrange loans for their individual beneficiaries for sericulture development, CSB and states shall consider deposit their share of eligible subsidy amount in the beneficiary's account as per the procedure laid by the state.
- 22) The project appraisal and approval mechanism is also applicable to NGOs similar to states or other implementing agencies and the NGOs shall be assisted as per the CDP norms.
- 23) The projects under CDP can be dovetailed as far as possible with other schemes like SGSY, RKVY, MGNREGS, Backward Regions Grant Fund (BRGF), PRIs, BADP etc., by DOSs wherever such programmes are being proposed and implemented.
- 24) Efforts shall be made for development of sericulture in states sharing the borders with other countries, through integration of schemes under Panchayat Raj Ministry and BADP.
- 25) Plantation activities (especially in case of *Vanya*) shall be taken up in coordination with the departments of forest, sericulture and rural development, wherever required.
- 26) DOSs shall not propose maximum unit cost for any component and shall not propose all the component or subcomponents. The proposals shall be need based and state specific.
- 27) DOSs shall have the option to adopt any of the unit costs depending on its requirement with adequate justification, as different unit costs have been suggested for different zones based on the local requirements like rearing capacity etc., in pre-cocoon sector.
- 28) The allocation of CDP assistance to states shall be based on the progress made in the previous year and also targets in the action plan of XII Plan.

- 29) Since the seed sector has to equip fully for providing the required seed support to achieve the silk production targets of XII Plan, it is proposed to cover the targeted stakeholders in the first three years itself (instead of spreading over to the entire five year period) so as to facilitate the timely production of required quantity of silkworm seed.
- 30) DOSs shall encourage PPP for development of clusters, especially in areas of post-cocoon development.
- 31) DOSs shall ensure proper backward and forward linkages in the value chain for a balanced growth of the industry, while formulating the projects.
- 32) DOSs desiring to implement the components basically meant for beneficiaries and state farms/units may do so by meeting beneficiary share also, in addition to state share.
- 33) DOSs shall increase their share of subsidy by earmarking necessary matching share in order to reduce the financial burden of beneficiaries, especially in general category states. However, the CSB share shall remain unchanged.
- 34) Maintenance/recurring cost of infrastructure developed with support from CDP shall be the responsibility of entrepreneurs/stakeholders or the states, as the case may be.
- 35) If CSB directly implements any of the components for demonstration of technologies to the farmers/entrepreneurs in new areas for sericulture promotion activities, 100% cost of the components in such cases, shall be borne by the GOI.
- 36) The 'final outcome' need not be co-terminus with the 'annual outlay' and 'intermediate physical output' respectively. Thus indicatively, the 'final outcome' may span a longer time frame than the annual outlay and corresponding intermediate output. Wherever the 'final outcome' is not the direct result of the annual outlay and is the cumulative effect of outlay of the past several years, this shall have to be clearly explained in the project document. Wherever the 'final outcome' is estimated to take longer than one year, the estimated time frame shall have to be clearly indicated. In case the gestation is four to five years or longer, the 'partial outcome' need to be tracked on an annual basis to ensure that the 'final outcome' once indicated as achievable after five years is not forgotten or mechanically repeated in the project document from one year to the other, and that the progress made towards achieving the final goal is reflected.
- 37) To put in place, if not already there, right system of data collection shall be put into practice with the help of specialized agencies wherever necessary, for the purpose of (i) developing performance indices to measure and assess quality of implementation, (ii) developing standard norms of unit cost and delivery of service, (iii) quantification of environmental outcome, (iv) quantification of community and empowerment outcome through social capital formation, and (v) quantification of impact of funds earmarked for publicity/awareness generation. Both collection of data on past trends and present development in technology and market is involved.
- 38) Provision made under 'Special Initiatives' (Flexi fund), shall be utilized for addressing the unexpected critical gaps during the implementation of the project based on the recommendations of PMC/ZC/AMC and with prior approval of the Ministry of Textiles, GOI.
- 39) The proposal for Flexi fund shall not lead to violation of GFR. Necessary guidelines drawn for utilization of 'Flexi funds' elsewhere is included in the CDP Manual.
- 40) The components of CDP involving higher capital subsidy, especially under post-cocoon sector, can be implemented on SPV/CBO/SHG/Cooperative mode also.
- 41) NGOs availing support under CDP shall have the responsibility of implementing the scheme components and to achieve the target envisaged, failing which they are liable to refund the administrative costs.
- 42) Sericulture beneficiaries receiving assistance under different components shall be issued passbooks as proof of identity containing details like, Aadhaar number, bank account number, education level, family members, size of holding, infrastructure available, sericulture activities performed, manpower engaged, benefits and subsidy availed at different stages and their utilization, production details, assistance availed from other departments/schemes, etc,.

- 43) Revolving capital provided to DOSs and stakeholders in seed production, cocoon marketing and processing (reeling units), etc., shall essentially be flown back after completion of each activity cycle to the accounts of states and stakeholders, respectively. DOSs shall institute a monitoring mechanism to verify the flow of revolving capital and its maintenance on half yearly/annual basis as deemed fit and maintain records of their progress with them.
- 44) The stakeholders availing support under CDP shall have to continue specified sericulture activity for a minimum period of 5 years, failing which government shall have right to recover the element of subsidy disbursed to them. Stakeholders failing to implement the scheme component(s) as per the guidelines or failing to utilize the funds provided by CSB and DOS are liable for the recovery of the grants provided to them. DOSs shall develop suitable recourse mechanism through legally valid agreements/MoUs to deal with such instances and make them essential part of the implementation for CDP. DOSs shall maintain these valid agreements along with valid documents, without fail.
- 45) The beneficiary who is availing support for any one or more components together with a subsidy element of Rs.1,00,000 and above shall be required to enter into a MOU (legal agreement) with DOS. Failure on the part of beneficiary shall attract penal action as per the legal binding.
- 46) Implementing agencies shall adhere to the component-wise operational modalities, technical specifications, sharing pattern and guidelines detailed in the CDP manual.

#### Monitoring and evaluation

- Monitoring and reviewing mechanism at CSB shall be strengthened with regional focus for ensuring effective implementation of scheme components.
- AMC at CSB secretariat consisting members from MOT, Planning Commission, Member Secretary and senior officers, examines the various proposals from the DOSs and recommends for release of funds, keeping in view the overall allocation made by MoT and the provisions available under revenue and capital heads, SCSP, TSP as well as NE states.
- > Separate cell shall be created at CSB Secretariat to monitor production of Bivoltine, as well as gradable ICB silk, in addition to production of other silk in states as per plan targets. The cell shall have constant consultation with states to monitor and review progress of silk production.
- > DOSs shall also have to create separate cell for monitoring production of different varieties of silk in the state and directly interact with monitoring cell at CSB secretariat on all issues related to production of silk.
- Funds shall be released to DOSs through the zonal cells for implementation and its utilization is regulated as per the provisions contained under the GFR-2005 and DOSs shall also have to implement Aadhaar enabled service delivery mechanism, whereever Aadhaar and bank details are available.
- AMC monitors the progress of utilization of funds and suggests corrective actions from time to time during CDP implementation.
- Nodal officers/zonal in-charges nominated for all states for effective monitoring of the CDP, in addition to monitoring of CDP implementation, participation in PMC/Zonal Committee meetings, shall also help the states in formulation of project proposals as per state's requirement. The states shall also constitute Field Level Monitoring Group for each cluster, involving members from DOS and CSB field units. With a view to strengthen the process of project implementation at zonal level, sector specific issues (seed, cocoon and post-cocoon sectors, training and publicity, support services and research and development), committees shall be constituted with subject matter specialists and officers from DOS to assist the SPMCs. The committee shall be empowered to take necessary action to accomplish the tasks required to be completed under the relevant sector, keeping in view the overall targets of the zone and individual states, proposed under CDP.
- > The zonal cell shall conduct an evaluation study at the end of each financial year to assess the progress of implementation and fund for the next year shall only be released based on the assessment report.
- > Concurrent evaluation and social audit on implementation of the programme shall be conducted.

- A mid-term evaluation shall be done by a third party to suggest mid-course correction and modification, if any, based on field realities for the plan period.
- The final evaluation of the scheme components shall be done at the end of XII Plan by an external agency.
- > The progress review shall be based on physical indicators and recommended guidelines.

The composition, duties and responsibilities of the 3 committees (Project Monitoring Committee, Zonal Committee and Apex Monitoring Committee, are as follows:

#### I. State Project Monitoring Committee

#### Composition

#### Chairperson

Commissioner / Director of Sericulture

#### **Members**

- Director, CSTRI, Bangalore
- 2. 3 Officers of concerned ROs of CSB
- 3. Representatives from DOSs looking after seed, cocoon and post-cocoon sectors
- Nodal officer from CSB for states.
- 5. Senior officer, DOS member convener of PMC.

#### **Duties and responsibilities**

- (i) Formulating proposals, action plan including Bivoltine cluster projects and recommendation to zonal cell.
- (ii) Monitoring of CDP component implementation progress at the grass root level in close association with the district/division/field level implementing agencies.
- (iii) Ensuring submission of utilization certificates as per GFR, and progress reports on quarterly basis to zonal cell/CSB for release of funds.
- (iv) Finalisation of beneficiary list along with Aadhaar number (if available) and other details.
- (v) Constituting sub-committee under the chairmanship of PMC, DOS/Commissioner of Sericulture involving CSB and state representatives to scrutinize and recommend purchase proposals involved in CDP components.
- (vi) Monitoring production of Bivoltine and other varieties of silk on quarterly basis (within and outside cluster areas) against targets and suggest interventions in case of shortfall.
- (vii) Reviewing progress on utilization of infrastructure created for sericulture in earlier Plan periods for maximization of benefits, keeping in view the mapping exercise carried out.
- (viii) Reviewing production and productivity improvement.
- (ix) Discussing coverage of beneficiaries under different categories
- (x) Reviewing schemes and programs of other ministries/departments implemented for sericulture development (financial and physical) and to ensure submission of monthly progress report to CSB, as per prescribed format.
- (xi) While recommending CDP proposals, the components for which support was availed from programs of other ministries/departments may be excluded in order to avoid duplication.
- (xii) Follow-up action taken on the decisions of AMC and other review meetings.
- (xiii) Considering reappropriation of fund from one component to another within the overall frame-work of CDP, with sufficient justification (reappropriation from capital to revenue head is not permitted).
- (xiv) Updation of state profile on quarterly basis.
- (xv) Maintaining, reviewing district-wise database and ensuring coverage of all categories of beneficiaries envisaged under CDP.

- (xvi) Listing out issues/gaps relating to sericulture development for suggesting remedial measures.
- (xvii) Organizing concurrent evaluation and social audit.
- (xviii)Committee meeting once in a month. PMC may co-opt any other member or form other sub-committees, if required.
- (xix) The term of the committee is for the entire period of XII Plan.

#### II. Zonal Committee

#### Composition

#### Convenor

Zonal officers In-charge

#### **Members**

- 1 Scientist-'D', research and development institute(s) and seed organizations in the zone
- 2. Scientist-'D' or 'C', post-cocoon unit of CSTRI in the zone
- 3. Zonal coordinators from CSB secretariat.
- 4. Officers In-charge of regional offices in the zone.

#### **Duties and responsibilities**

- (i) To recommend the CDP proposals from states, consolidate and send to CSB.
- (ii) To review CDP implementation in states, utilization of funds, status of utilization certificate, progress reports for previous and current
- (iii) To up-date state profiles on quarterly basis.
- (iv) To review all issues relating to CDP in the zone.
- (v) To review production of Bivoltine/ICB and other varieties of silk in the states as per targets and suggest interventions in case of short fall.
- (vi) Regional offices of the jurisdictional states shall report to the respective zonal in-charges on all matters related to CDP.
- (vii) To hold quarterly review meetings with DOSs of the zone.
- (viii) To discuss on production of dfls/cocoons/raw silk in with DOSs in review meeting and to arrive at anticipated production for the year.
- (ix) To review on Bivoltine silk production through cluster and outside cluster project areas.
- (x) To review the support availed by DOSs for sericulture from schemes other than CDP.
- (xi) Zonal cell shall be fully responsible for successful implementation of CDP in the jurisdictional states.
- (xii) To review the capacity utilization of infrastructure developed till end of XI Plan and suggest intervention for maximization of benefits.
- (xiii) To organize yearly evaluation and social audit.
- (xiv) To constitute sector specific (seed, cocoon and post-cocoon, training and publicity, support services and R&D issues) committees based on the requirement with subject matter specialists and officers from DOS to assist the SPMCs. The committee shall be empowered to take necessary action to accomplish the tasks required to be completed under the relevant sector, keeping in view the overall targets of the zone and individual states, proposed under CDP.
- (xv) Nodal officers nominated by CSB to the states shall coordinate with the zonal cell on all issues relating to CDP in respective states.
- (xvi) The term of the committee is for the entire period of XII Plan.

#### III. Apex Monitoring Committee (CSB Secretariat)

#### Composition

#### Chairperson

Member Secretary, CSB

#### **Members**

- 1. Representative from MOT
- 2. Representative from Planning Commission

#### **Central Silk Board Officers**

- 1. Director (Finance)
- 2. Director (Tech)
- 3. Director, NSSO
- 4. Director, CSTRI
- 5. Scientist 'D' (C&ED)
- 6. Joint Secretary (Tech) and Co-ordinator of CDP Convenor

#### **Permanent Invitees**

- Zonal Co-ordinators
- 2. Scientist 'D', (Stat.)

#### **Duties and responsibilities**

- (I) To approve the CDP proposals recommended by state PMC and duly appraised and recommended by the zonal committee and scrutinized by an IAC at CSB secretariat.
- (ii) To approve the proposals based on the overall allocation of funds, provision available under revenue and capital heads, SCSP, TSP and NE states.
- (iii) To consider and approve proposals/additionalities over and above the budget estimate approved for the year, based on justification, but release of funds is subject to sanction of additional Grants-in-Aid by GOI.
- (iv) To consider spill over liability for the programs approved in previous year, but funds not released for want of GIA.
- (v) To review the progress of raw silk production (Bivoltine, ICB and other varieties of silk).
- (vi) To review progress on implementation of cluster development projects for production of Bivoltine silk.
- (vii) To oversee the implementation of CDP in XII Plan.
- (viii) To put in place an MIS for monitoring progress and review of CDP implementation (cluster and general projects implemented by DOSs outside cluster areas)
- (ix) To issue directions and guidelines from time to time to the Zonal Committee on all issues regarding formulation and implementation of CDP.
- (x) To review yearly evaluation reports received from zonal cells and organize mid-term evaluation during 2014-15 followed by mid-term appraisal of XII Plan CDP for necessary interventions.
- (xi) The committee shall meet once in a quarter to review/monitor the implementation of the CDP components and also approve proposals.
- (xii) The committee may co-opt any other member or form sub-committees, if deemed necessary.
- (xiii) The term of the committee is for the entire period of XII Plan.

#### Guidelines for implementation of projects through NGO by dovetailing CDP components

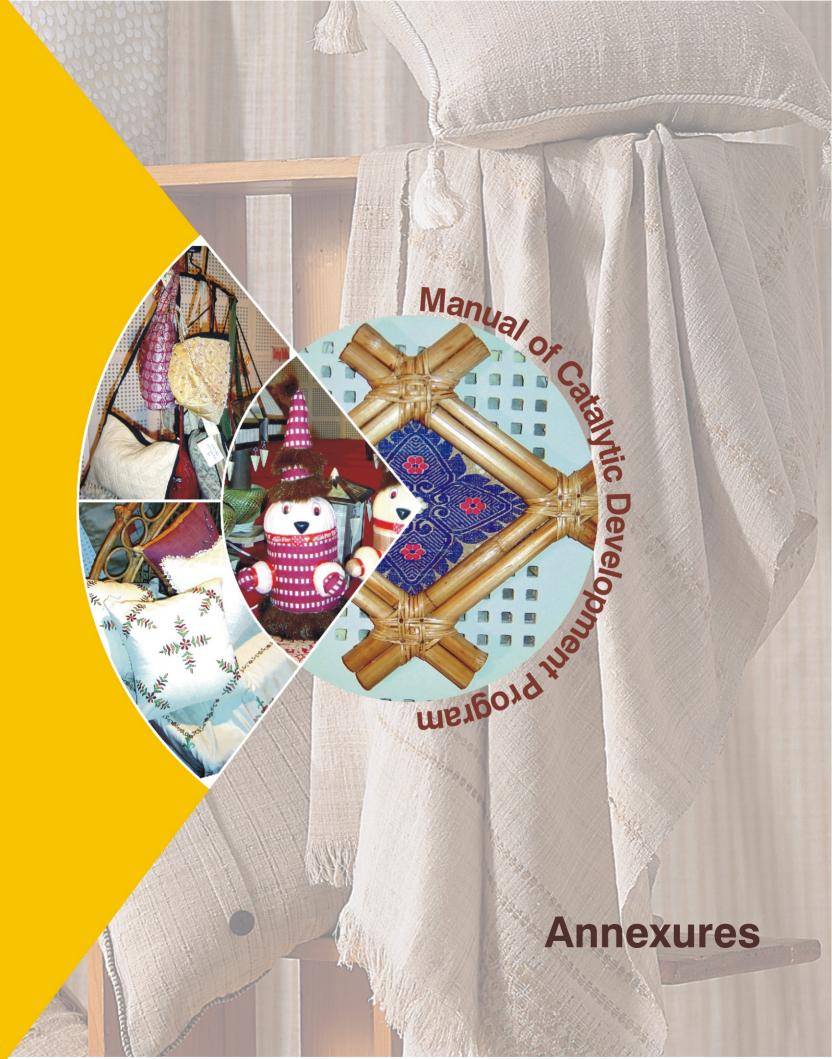
#### Criteria for identification of NGOs

- NGOs duly registered for last 5 years having minimum 3 years experience in sericulture/agriculture shall be considered for financial assistance.
- NGO shall have a properly constituted managing body with clearly defined powers, duties and responsibilities laid down in written memorandum of association / by-laws.
- NGO shall furnish audited statement of accounts for the last three successive years.
- NGO shall not have been blacklisted by any central or state government or any other body for availing financial assistance.
- > NGO registered under foreign contribution regulation act is not a defaulter.
- NGOs shall have bonafides and strengths in terms of exposure and expertise in the field, manpower, network and infrastructure to take up the sericulture projects.
- > NGOs shall have the technical competency for implementation of sericulture projects.
- NGOs shall have good financial background and network to undertake the projects in rural areas and shall furnish the financial transactions, audited statements of accounts for the last three successive years.
- Accessibility of the NGOs to the rural poor/tribal areas for undertaking different welfare activities.

#### Procedure for recommendation of NGO projects

- The NGO project proposals shall be discussed and approved by the concerned SPMC and submitted to the respective zonal cells indicating the technical and financial feasibility of the proposal. The zonal committee shall examine the NGO proposals received from DOSs and make recommendations for approval by AMC at CSB secretariat. Once the projects are approved by AMC, funds shall be released to NGOs through the concerned DOS for effective monitoring of the programs. Zonal cells/ROs and the DOSs shall monitor implementation of the NGO projects. The projects shall be sanctioned based on the distributional equity across the country and in those subjects of sericulture where progress is poor because of some critical gaps like shortage of manpower etc.
- DOSs shall ensure that the projects have a minimum limit of Rs.10.00 lakh and maximum of Rs.5.00 crore share of GOI.
- > DOSs shall ensure to avoid duplication in selection of beneficiaries, area of operation in implementing the projects.
- Projects shall be cluster based following all norms prescribed under CDP and shall be implemented in a projectile approach.
- Approved CSB share shall be released in installments based on the duration of the project, status of utilization certificates, expenditure statements and progress reports. The concerned DOS is responsible for furnishing the utilization certificate.
- > CSB shall release subsequent installments only after ensuring positive recommendations of the respective SPMC/Zonal Committee.
- > NGOs shall submit the projects to respective DOSs only.
- Administrative cost on the total project cost shall be released as per GOI norms approved under CDP.
- > The grantee organization shall have to execute an undertaking/MOU under the GFR in the prescribed format and submit to CSB, with a copy to the concerned DOS once the proposal is approved by CSB.
- > All other conditions stipulated for CDP shall be applicable to NGO projects also.





## ANNEXURE

#### **CATALYTIC DEVELOPMENT PROGRAM**

#### **ANNEXURE - 1**

Continued ...

Physical and Ilnancial targets										
				Unit	Targets for	Targets for XII Plan	Œ.	Fund sharing	ıring	Object
	#	Name of the Scheme/Component	Unit	Cost (Rs.)	Physical	Financial	CSB	State	Beneficiary /Financial Institution	Head "C" and "R"
	-	MULBERRY SECTOR (BIVOLTINE AND IMPROVED CROSS BREED)	D CROS	S BREED)						
€		Mulberry Seed								
	-	Franschise disinfection programme of NSSO	No.	1,10,000	100	1.10	1.10	0.00	0.00	O
	N	Support to construct rearing houses for adopted seed rearers(ASRs) of NSSO	No.	1,20,000 to 3,00,000	275	4.62	2.31	0.00	2.31	O
	က	Revolving capital fund support for state grainages and registered seed producers	No.	1,35,000 to 5,00,000	485	13.06	6.56	6.50	0.00	O
	4	Assistance for purchasing seed testing equipments for state grainages and private registered seed producers	No.	1,75,000	310	5.43	2.42	1.99	1.02	O
	2	Support to strengthen basic seed farms of states	No.	5,00,000	35	1.75	1.03	0.72	0.00	O
	9	Support to upgrade state and private commercial seed production units	No.	3,50,000	310	10.85	4.83	3.97	2.05	O
		Total for mulberry seed				36.81	18.25	13.18	5.38	
<u>B</u>		Mulberry Cocoon								
	-	Support for mulberry plantation development	Acre	14,000	39,000	54.60	29.65	12.48	12.47	Œ
	N	Assistance for irrigation and other water conservation and usage techniques	Acre	25,000 to 30,000	25,000	72.50	37.68	17.41	17.41	O
	ო	Supply of rearing appliances (including improved mountages/farm equipment) to farmers	No. / Acre	40,000 to 70,000	58,000	364.50	194.68	84.91	84.91	O
	4	Supply of quality disinfecting materials and other crop protection measures for farmers	Seed Farmers	4,000 to 5,000	50,000	24.00	12.72	5.64	5.64	Œ
	r <sub>C</sub>	Assistance for construction of rearing houses-models of 1000 sq.ft, 600 sq.ft. and 225 sq.ft.	o O N	2,75,000 to 30,000	45,000	571.50	571.50 136.03 142.91	142.91	292.56	O

\* C: Capital, R: Revenue

Continued ...

#### **CATALYTIC DEVELOPMENT PROGRAM**

(Amount : Rs. in crore and physical units as indicated)	
Physical and financial targets	

					Tourse	10 II N		40		
				Onit	largets r	largets for All Plan	_	rund snaring	arıng	Object
	#	Name of the Scheme/Component	Unit	Cost (Rs.)	Physical	Financial	CSB	State	Beneficiary /Financial Institution	Head "C" and "R"
	9	Assistance for maintenance of chawki gardens, construction of chawki rearing centre buildings and procurement of chawki rearing equipment	o N	4,00,000 to 6,00,000	009	31.00	13.20	9.55	8.25	O
	7	Production units for biological inputs/door-to-door service agents for disinfection and input supply and assistance for sericulture poly-clinics	o O	1,50,000 to 3,00,000	400	9.94	5.32	2.31	2.31	O
	ω	Support for development of kissan nurseries	Acre	1,15,000	400	4.60	2.50	1.05	1.05	Œ
	0	Maintenance cost for mulberry plantation raised during X & XI Plans for 3 years	Acre	4,500	5,000	2.25	1.79	0.23	0.23	œ
	9	Support for construction of vermi-compost sheds	No.	20,000	2,000	10.00	5.44	2.28	2.28	Œ
	=	Assistance towards fencing of mulberry gradens in North-eastern states	Acre	10,000	5,000	2.00	4.00	0.50	0.50	Œ
	12	Assistance towards expansion of rearing houses to construct mounting halls in north-eastern states	o N	30,000	5,000	15.00	12.00	1.50	1.50	O
	13	Support for increasing the yield of existing rainfed mulberry gardens through water conservation techniques	Acre	10,000	5,000	5.00	2.74	1.13	1.13	Œ
		Total for mulberry cocoon				1,169.89 457.75 281.90	457.75	281.90	430.24	
		Total for mulberry sector				1,206.70 476.00 295.08	476.00	295.08	435.62	
		Revenue head - 31				105.45	58.84	23.31	23.30	
		Capital head - 35				1,101.25 417.16 271.77	417.16	271.77	412.32	
	7	VANYA SECTOR								
<b>a</b>		Vanya Seed								
	-	Tasar								
	_	Assistance to private tasar graineurs	Graineur	2,32,000	1,500	34.80	25.52	4.64	4.64	O
		a) Assistance to existing tasar graineurs for upgradation of seed production capacity	Graineur	42,000	1,000	4.20	3.02	0.59	0.59	O

\* C: Capital, R: Revenue

#### 7)

#### **CATALYTIC DEVELOPMENT PROGRAM**

#### **ANNEXURE - 1**

Continued ...

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Farm-cum 30,99,000

Assistance to state departments for strengthening of muga seed multiplication infrastructure (P2)

for upgradation of seed production capacity

grainage

# (Amount: Rs. in crore and physical units as indicated)

Physical and financial targets

				Unit	Targets fo	Targets for XII Plan	Ē	Fund sharing	ıring	Object
-te	#	Name of the Scheme/Component	Unit	Cost (Rs.)	Physical	Financial	CSB	State	Beneficiary /Financial " Institution	"C" and
	0	Assistance for strengthening of tasar seed multiplication infrastructure (tropical tasar)	PPC	5,00,000	30	1.50	1.11	0.39	ł	O
		a) Establishment of basic seed production units (by SHGs, co-operatiaves/NGOs)	O N	43,00,000 (Only 25% o	7 of the unit c	43,00,000 7 0.75 0.54 0.11 0.1 (Only 25% of the unit cost will be borne by CSB under CDP)	0.54 orne by	0.11 CSB un	0.10 der CDP)	O
	က	Assistance for strengthening of tasar seed multiplication infrastructure (oak tasar)	Grainage	15,00,000	9	0.90	0.81	0.09		O
	4	Assistance for tropical tasar rearers	No.	20,000	2,500	2.00	3.60	0.70	0.70	O
		a) Assistance for oak tasar seed rearers	No.	17,500 & 19,000	200	0.35	0.29	0.03	0.03	O
		<ul> <li>b) Assistance for mobile testing facility for disease monitoring and seed cocoon testing</li> </ul>	O	6,10,000	20	1.22	0.98	0.24	0.00	O
		Total for tasar seed				48.72	35.87	6.79	90.9	
	=	Eri								
	5	Assistance to state departments for strengthening of eri farm-cum-grainages	O	12,48,000	12	1.50	1.20	0.30	I	O
		a) Assistance to eri private graineurs	No.	233,000 &2,40,000	170	4.04	3.00	0.52	0.52	O
		b) Assistance to eri adopted seed rearers	No.	16,000	2,000	3.20	2.46	0.37	0.37	O
		c) Up-gradation of state eri basic seed farm-cum-grainages	O	12,38,000	10	1.24	0.97	0.27	E	O
		d) Assistance for estt. of self help eri grainage units	No.	8,400	250	0.21	0.16	0.03	0.05	O
		e) Mobile testing and certification units	No.	6,70,000	23	1.54	1.24	0.15	0.15	O
		Total for eri seed				11.73	9.03	1.64	1.06	
-	∷	Muga								
	9	Assistance to muga private graineurs	No.	2,55,000	140	3.57	2.79	0.39	0.39	O
		a) Assistance to existing muga private graineurs	No.	82,000	225	1.85	1.41	0.22	0.22	O

ANNEXURE

<sup>\*</sup> C: Capital, R: Revenue

#### **CATALYTIC DEVELOPMENT PROGRAM**

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				Unit	Targets for	Targets for XII Plan	_	Fund sharing	aring	Object
	#	Name of the Scheme/Component	Unit	Cost (Rs.)	Physical	Financial	CSB	State	Beneficiary /Financial Institution	Head "C" and "R"
		a) Assistance for estt. of muga P3 basic seed production unit	Rearer	20,35,000	9	1.22	0.90	0.16	0.16	O
		b) Assistance to muga adopted seed rearers	No.	74,500	2900	21.61	16.98	2.32	2.31	O
		Total for muga seed				31.35	24.62	3.65	3.08	
		Total for Vanya seed				91.80	69.52	12.08	10.20	
<u>a</u>		Vanya Cocoon								
	_	Tasar								
	_	Support to rearers for augmentation of tasar host plantation	Ha.	40,000	12,000	48.00	34.56	6.72	6.72	Œ
		<ul> <li>a) Assistance to beneficiaries for raising tasar food plant seedlings (kisan nurseries)</li> </ul>	Nursery	80,000	300	2.40	1.73	0.33	0.34	Œ
		b) Assistance to tasar commercial rearers for development of chawki garden	O	6,300	4,000	2.52	1.81	0.36	0.35	Œ
		c) Assistance to tasar rearers for maintenance of existing chawki garden	Ö	1,400	2,400	0.34	0.24	0.05	0.05	æ
		d) Assistance to tasar rearers for maintenance of existing tasar plantation	На.	17,000	1,200	2.04	1.47	0.29	0.28	Œ
		e) Conservation and utilization of sal based tasar eco-races.	Camp	4,58,300	350	16.04	4.01	12.03		Œ
	0	Assistance for raising and maintenance of systematic oak tasar plantation	На.	49,000	200	0.98	0.78	0.10	0.10	Œ
	က	Assistance for construction of cocoon storage houses in tasar sector	No.	1,00,000	100	1.00	0.69	0.16	0.15	O
		a) Assistance for construction of cocoon storage and stifling facilities for tasar rearers	No.	22,20,000 (Only 25%	30 of the unit	(2,20,000 30 1.66 1.22 0.22 (Only 25% of the unit cost will be borne by CSB under	1.22 orne by	0.22 CSB un	0.22 nder CDP)	O
		Total for tasar cocoon				74.98	46.51	20.26	8.21	
	=	Eri								
	4	Support for castor/tapioca cultivators with Start-up tools	Acre	12,500	5,000	6.25	4.69	0.78	0.78	œ
*	Ca	* C: Capital, R: Revenue							Con	Continued

Physical and financial targets

Continued ...

#### CATALYTIC DEVELOPMENT PROGRAM

(Amount: Rs. in crore and physical units as indicated)

Physical and financial targets

					Tought	10 IIV 10	_	do bour	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	100140
				Cuit	largets re	largets for All Plan	_	rund snaring	arıng	Opject
	#	Name of the Scheme/Component	Unit	Cost (Rs.)	Physical	Financial	CSB	State	Beneficiary /Financial Institution	Head "C" and "R"
	2	Augmentation of perennial eri food plants with supply of start-up tools	Acre	31,000	2,000	21.70	16.26	2.72	2.72	Œ
		a) Assistance for raising kesseru food plants nursery	Nursery	51,000	150	0.77	0.57	0.10	0.10	Œ
	9	Assistance for construction of rearing houses	Š.	1,00,000	11,600	116.00	81.10	18.10	16.80	O
		Total for Eri Cocoon				144.72	102.62	21.70	20.40	
_	≡	Muga								
	^	Augmentation and maintenance of Muga food plants with start-up tools	Acre	31,000	00009	18.60	14.51	2.05	2.04	Œ
		a) Assistance for raising muga food plants nursery	Nursery	52,500	120	0.63	0.47	0.08	0.08	Œ
		<ul><li>b) Assistance for maintenance of existing muga food plantation</li></ul>	Acre	9,500	3,000	2.85	2.22	0.32	0.31	œ
		Total for muga cocoon				22.08	17.20	2.45	2.43	
		Total for Vanya cocoon				241.78	166.33	44.41	31.04	
		Total for Vanya sector				333.58	235.85	56.49	41.24	
		Revenue head - 31				123.12	83.32	25.93	13.87	
		Capital head - 35				210.46	152.53	30.56	27.37	
		Total for Mulberry and Vanya Sector				1540.28	711.85 351.57	351.57	476.86	
		Revenue head - 31				228.57	142.16	49.24	37.17	
		Capital head - 35				1311.71 569.69 302.33	569.69	302.33	439.69	
	က	POST-COCOON SECTOR								
	_	Reeling and Spinning								
	⋖	Mulberry								
	-	Support for construction of reeling sheds								
		a) Improved cottage basin units								
		i) 36 ends unit (6 basins of 6 ends each)	No.	5,40,000	35	1.89	0.92	0.35	0.62	O
		ii) 48 ends unit (6 basins of 8 ends each)	No.	5,40,000	15	0.81	0.29	0.18	0.34	O

\* C: Capital, R: Revenue



Continued ...

(Amount: Rs. in crore and physical units as indicated)

# Physical and financial targets

			i lait	Targets fo	Targets for XII Plan	_	Fund sharing	aring	Object
#	Name of the Scheme/Component	Unit	Cost (Rs.)	Physical	Financial	CSB	State	Beneficiary /Financial Institution	Head "C" and "R"
	b) Multi-end reeling units								
	i) 6 basins unit (10 ends per basin)	So.	5,40,000	25	1.35	0.46	0.31	0.58	O
	ii) 10 basins unit ( 10 ends per basin )	So.	7,20,000	200	14.40	4.67	3.31	6.42	O
7	Support for motorized charkha to dissuade child labour (Single and double unit)	o N	13,000 to 14,000	1,000	1.31	0.73	0.29	0.29	O
က	Support for establishment of improved cottage basin reeling units								
	a) 36 ends unit (6 basins of 6 ends each)	S.	3,54,000 to 3,68,000	35	1.25	0.79	0.23	0.23	O
	b) 48 ends unit (6 basins of 8 ends each)	No.	3,93,000 to 4,08,000	15	09.0	0.34	0.13	0.13	O
4	Support for establishment of multi-end reeling units								
	a) 6 basins unit (10 ends per basin)	No.	1,105,000 to 11,49,000	25	2.78	1.52	0.63	0.63	O
	b) 10 basins unit (10 ends per basin)	Š.	1,405,000 to 14,61,000	200	28.21	15.27	6.47	6.47	O
	c) Support for existing multi-end units for procurement of additional equipment/re-conditioning	Ö	3,64,000 to 3,74,000	Demand Dependant	1.83	0.97	0.43	0.43	O
S	Support for establishment of automatic reeling units								
	a) 200 ends unit	Š.	72,97,000	2	3.65	2.26	0.69	0.70	O
	b) 400 ends unit	Š.	1,35,00,000	15	20.25	10.13	2.06	5.06	O
9	Support for establishment of automatic dupion reeling units (142 ends)	o N	85,00,000	က	2.55	1.28	0.64	0.63	O
7	Assistance for twisting units (480 ends)	Š.	7,86,000 to 8,17,000	125	9.87	7.45	0.09	2.33	O

\* C: Capital, R: Revenue

#### -17)

#### **CATALYTIC DEVELOPMENT PROGRAM**

#### **ANNEXURE - 1**

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(Amount: Rs. in crore and physical units as indicated)

Physical and financial targets

				10.00	Targets for	Targets for XII Plan	ш	Fund sharing	arina	Object
	*	Name of the Scheme/Component	Unit	Cost (Rs.)	Physical	Financial	CSB	State	ficiary	Head "C" and
									Institution	֡֟֟ <u></u>
	ω	Interest subisidy on working capital loan sanctioned by banks to reeling units	o O V	15,000 to 5,00,000	295	2.85	1.84	1.01	0.00	Œ
	6	Incentive for production of Bivoltine silk	Kg.							
		a) Gradable Bivoltine silk reeled on multi-end reeling units (Rs.100/- per kg.)	Kg.	100	100 10,00,000	10.00	5.58	4.45	0.00	œ
		b) 2 A grade and above Bivoltine silk reeled on automatic reeling units (Rs.150/- per kg.)	Kg.	150	150 10,00,000	15.00	7.80	7.20	0.00	œ
		Sub-total for mulberry (A)	ı	1	:	118.60	62.30	31.44	24.86	
m		Vanya								
	10	Support for Vanya reeling / spinning sector								
		a) Reeling cum twisting machines	O	45,000 to 47,000	3,000	13.91	9.71	2.10	2.10	O
		b) Wet reeling machine (2 basins of 6 ends each)	o S	46,000 to 48,800	100	0.48	0.36	0.06	0.00	O
		c) Two-in-one reeling-cum-twisting machine	ė Š	64,000 to 67,000	100	0.66	0.50	0.08	0.08	O
		d) Tasar cocoon sorting machine for co-operatives/SHGs	O	51,000 to 53,000	10	0.05	0.03	0.01	0.01	O
		e) Motorised-cum-pedal operated spinning machine	So.	7,000	4,500	3.15	2.13	0.51	0.51	O
		f) Solar operated spinning machine	No.	19,000	100	0.19	0.14	0.02	0.03	O
		Sub-total for Vanya (B)	:	:	:	18.44	12.87	2.78	2.79	
ပ		General (Mulberry- 70% and Vanya- 30%)								
	Ξ	Providing services of master reelers/technicians								
		a) Master reelers	No.	1,44,000	20	0.72	0.72	0.00	0.00	Œ
		b) Master technicians	No.	1,44,000	10	0.14	0.14	0.00	0.00	ш

\* C: Capital, R: Revenue

Total for reeling and spinning

Sub-total for General (C)

Continued ...



Continued ...

(Amount: Rs. in crore and physical units as indicated)

				Tarnote f	Targets for XII Dian	ц	Find charing	oring	Object
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*	Name of the Scheme/Component	Unit	Cost (Rs.)	Physical	Financial	CSB	State	Beneficiary /Financial Institution	Head "C" and "R"
=	Post-yarn (Mulberry- 70% and Vanya- 30%)								
12	Support for handloom sector								
	a) Loom upgradation through jacquards and other equipments developed by CSTRI	o O	15,000	2000	7.50	3.86	1.82	1.82	O
	b) Pneumatic lifting mechanism for handlooms developed by CSTRI								
	i) 2 Looms unit	No.	33,000	1000	3.30	1.80	0.75	0.75	O
	ii) 4 Looms unit	No.	20,000	1000	5.00	2.73	1.14	1.13	O
5	Support for setting up of common facility centre for yarn dyeing and fabric processing (Special technology package developed by CSTRI)								
	a) Computer aided textile designing	No.	3,96,000	20	1.98	1.23	0.38	0.37	O
	b) Tub dyeing - 25 kg. capacity units	No.	3,92,000	10	0.39	0.30	0.05	0.07	O
	c) Tub dyeing - 50 kg. capacity units	No.	6,37,000	25	1.59	1.22	0.05	0.32	O
	d) Arm dyeing - 50 kg. capacity units	No.	17,12,000	10	1.71	1.33	0.00	0.29	O
	e) Fabric processing - 250 kg capacity units	No.	27,15,000	10	2.72	2.10	0.14	0.48	O
	<ul> <li>f) Support for effluent treatment plant for yarn dyeing and fabric processing units (Existing &amp; new units)</li> </ul>	o.							
	(i) Zero discharge type (5000 litres / day)	No.	7,00,000	25	1.75	1.32	0.05	0.41	O
	(ii) Discharge to ground type (5000 litres / day)	No.	4,00,000	20	2.00	1.52	0.04	0.44	O
4	Providing services of master weavers / designers/technicians								
	a) Master weavers/designers	No.	1,44,000	25	0.36	0.36	00.00	0.00	œ
	b) Master dyers	No.	1,44,000	25	0.36	0.36	0.00	00.00	Œ
	c) Master technicians	No.	1,44,000	10	0.14	0.14	0.00	00.00	æ
	Total for post-yarn (Mulberry and Vanya)	ŀ	1	i	28.80	18.27	4.45	6.08	

\* C: Capital, R: Revenue

Physical and financial targets

### ANNEXURE

#### **CATALYTIC DEVELOPMENT PROGRAM**

#### **ANNEXURE - 1**

Continued ...

s indicated)	
units a	
Amount: Rs. in crore and physical	
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al and financial targets	
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				Tarnete for XII Plan	l Plan	ц	Fund sharing	aring	Ohiect
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#	Name of the Scheme/Component	Unit	Cost (Rs.)	Physical	Financial	CSB	State	Beneficiary /Financial Institution	Head "C" and "R"
≡	Marketing (Mulberry- 70% and Vanya- 30%)								
5	Support to states for creating / upgrading marketing infrastructure for cocoon and raw silk (Rs.1.50 cr for traditional and 0.70 cr. for non-traditional states)	States / Agencies	1.50 cr. & 0.70 cr.	15	14.50	11.94	2.56	0.00	O
16	Support for setting up of Hot air driers								
	a) 50 kg. capacity units (Electrical)	o N	132,000 to 1,37,000	300	4.03	2.53	0.75	0.75	O
	b) 100 kg. capacity units (Electrical)	Ö	1,82,000 to 1,89,000	200	3.72	2.42	0.65	0.65	O
	c) 50 kg. capacity units (Multi-fuel)	o O N	61,000 to 63,000	300	1.86	1.18	0.34	0.34	O
	d) 100 kg. capacity units (Multi-fuel)	o N	81,000 to 84,000	200	1.66	1.08	0.29	0.29	O
	e) 2000 kg. capacity conveyor hot air dryer (Imported )	Ö	22,88,000	က	69.0	0.55	0.07	0.07	O
17	Vanya silk market promotion (100% meant for Vanya sector)	ŀ	Depends on Projects	Demand Dependant	1.00	1.00	0.00	0.00	œ
	Total for marketing				27.46	20.70	4.66	2.10	
	Total for post-cocoon sector				194.16	115.00	43.33	35.83	
	Revenue head - 31				30.57	17.94	12.63	0.00	
	Capital head - 35				163.59	90.76	30.70	35.83	
4	SUPPORT SERVICE SECTOR								
_	Crop insurance support ( For all sectors )	;	Lumpsum	All States	1.60	0.80	0.40	0.40	œ
0	Publicity for sericulture sector	1	Lumpsum	All States	10.60	8.00	2.60	0.00	æ
က	Support for studies/consultancies/surveys organised by CSB and states	ŀ	Lumpsum	Demand Dependant	4.00	4.00	0.00	0.00	œ

\* C: Capital, R: Revenue

#### **CATALYTIC DEVELOPMENT PROGRAM**

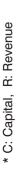
#### **ANNEXURE - 1**

Phy	/sic	Physical and financial targets		*	Amount : R	(Amount : Rs. in crore and physical units as indicated)	and phy	/sical u	nits as ind	icated)
				Unit	Targets for XII Plan	r XII Plan	ш	Fund sharing	aring	Object
	#	Name of the Scheme/Component	Unit	Cost (Rs.)	Physical	Financial	CSB	State	Beneficiary /Financial Institution	Head "C" and "R"
	4	Product design, development and diversification	1	Lumpsum	All States	0.50	0.50	00.00	0.00	Œ
	2	Health insurance scheme for sericulture farmers and workers	Policy	1,000	24,000	2.40	2.00	0.28	0.12	Œ
	9	Capacity building for sericulture sector (Includes all training and exposure visit to CSB, states and other stakeholders)								
		a) Beneficiary empowerment program	o O	3000 for Trg 2000 for Visit	4,000	1.35	0.95	0.40	0.00	Œ
		b) Sericutlure resource centres	No.	2,50,000	16	0.40	0.28	0.12	0.00	O
		c) Skill training and enterprise development program	Batch	Lumpsum (Variable)	09	1.00	1.00	0.00	0.00	Œ
	7	Developing community based organizations in line with resham doot concept	SHG	1,77,100	1000	17.73	10.62	00.9	1.11	Œ
	ω	Support for convergence activities for sericulture development								
		a) Cluster development projects	No.	10,00,000	150	15.00	15.00	0.00	0.00	Œ
		Total for support services				54.58	43.15	9.80	1.63	2
		SPECIAL INITIATIVES (FLEXI FUND) - Token provision		Demand Dependant	All states	63.34	19.00	22.17	22.17	Œ
		Revenue head - 31				117.52	61.87	31.85	23.80	
		Capital head - 35				0.40	0.28	0.12	0.00	
		GRAND TOTAL FOR CDP (1 TO 5)				1852.36 889.00 426.87	889.00	426.87	536.49	
		Revenue head - 31				376.66 221.97	221.97	93.72	60.97	
		Capital head - 35				1475.70 667.03 333.15	667.03	333.15	475.52	

Note: Out of CSB share of Rs.889.00 crore, for CDO during XII Plan Rs.266.00 crore (29.92%) is earmarked for north-eastern region

Share of Revenue Head	20%	25%	25%	11%
Share of Capital Head	%08	%92	%82	%68

hence, a combination of fund requirement for different states including sharing pattern of general and special status states. Note: This is the master statement based on the calculations done with different unit costs for different zones and





#### **CATALYTIC DEVELOPMENT PROGRAM**

#### ANNEXURE - 2

Continued ...

(Amount : Rs. in cr
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financial targets with s
Physical and fin

ore and physical units as indicated)

					•					
	:			:	Unit Cost	Targets fo	Targets for XII Plan	Sha	Sharing Pattern (%)	tern (%)
	#	Name of the Scheme/Component		Onit	(Rs.)	Physical	Financial	CSB	State	Beneficiary
	-	MULBERRY SECTOR (BIVOLTINE AND IMPROVED CROSS BREED)	MPROVE	CROSS	BREED)					
⋖		Mulberry Seed								
	-	Franschise disinfection programme of NSSO	0	No.	1,10,000	100	1.10	1.10 100%	1	1
	N	Support to construct rearing houses for adopted seed rearers of NSSO		o N	1,20,000 to	275	4.62	20%	1	20%
					3,00,000					
	က	Revolving capital fund support for state grainages	inages	o N	1,35,000	485	13.06	20%	20%	ł
		and registered seed producers			to 5,00,000			%08	20%	l
	4			o N	1,75,000	310	5.43	20%	20%	ł
		equipments for state grainages and private						80%	20%	:
		registered seed producers						40%	40%	20%
								%08	10%	10%
	2	Support to strengthen basic seed farms of states	states	No.	5,00,000	35	1.75	20%	20%	1
								%08	20%	l
	9	ate	State	No.	3,50,000	310	10.85	20%	20%	Ī
		commercial seed production units						% 00 00	% ? VO.2	:
			Private					40%	40%	20%
								80%	%01	%01
		Total for mulberry seed					36.81			
М		Mulberry Cocoon								
	-	Support for mulberry plantation development	ŧ	Acre	14,000	39,000	54.60	20%	25%	25%
								%08	10%	10%
	7	Assistance for irrigation and other water		Acre	25,000	25,000	72.50	20%	25%	25%
		conservation and usage techniques			to			%08	10%	10%
					30,000					
	က	Supply of rearing appliances (including		No./	40,000	28,000	364.50	20%	25%	25%
		improved mountages/farm equipment) to farmers	ırmers	Acre	70,000			%08	10%	10%



#### **CATALYTIC DEVELOPMENT PROGRAM**

#### ANNEXURE - 2

pattern
sharing
with
targets
financial
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hysical

(Amount: Rs. in crore and physical units as indicated)

\$	Nome of the Schome Comment	1	Unit Cost	Targets fo	Targets for XII Plan	Sh	Sharing Pattern (%)	tern (%)
<b>‡</b>	Name of the Scheme/Component		(Rs.)	Physical	Financial	CSB	State	Beneficiary
4	Supply of quality disinfecting materials and other crop protection measures for farmers	Seed Farmer	4,000 to 5,000	50,000	24.00	80%	25%	25%
က	Assistance for construction of rearing houses:  Model - I (1000 sq.ft to rear 250 dfl.)  Model - II (600 sq.ft to rear 150 dfl.)  Model - III (225 sq.ft to rear 50 dfl.)  Low cost rearing house (225 sq.ft to rear 50 dfl.)  Special status states (For all models)	o Z	2,75,000 to 30,000	45,000	571.50	10% 20% 35% 35% 80%	20% 30% 35% 10%	70% 50% 30% 10%
ဖ	Assistance for maintenance of chawki gardens, construction of CRC building and procurement of chawki rearing equipment	No.	4,00,000 to 6,00,000	009	31.00	35%	35%	30%
^	Production units for biological inputs/door-to-door service agents for disinfection and input supply and assistance for sericulture poly-clinics	No.	1,50,000 to 3,00,000	400	9.94	50%	25%	25%
ω	Support for development of kissan nurseries	Acre	1,15,000	400	4.60	50%	25%	25%
6	Maintenance cost for mulberry plantation raised during X & XI Plans for 3 years	Acre	4,500	2,000	2.25	50% 80%	25%	25%
9	Support for construction of vermi-compost sheds	No.	20,000	5,000	10.00	50%	25%	25% 10%
Ξ	Assistance towards fencing of mulberry gradens in north-eastern states	Acre	10,000	5,000	2.00	%08	10%	10%
12	Assistance towards expansion of rearing houses to construct mounting halls in north-eastern states	No.	30,000	5,000	15.00	%08	10%	10%
13	Support for increasing the yield of existing rainfed mulberry gardens through water conservation techniques	Acre	10,000	5,000	5.00	50% 80%	25%	25%
	Total for mulberry cocoon				1,169.89			
	Total for mulberry sector				1,206.70			

Continued ...

#### **CATALYTIC DEVELOPMENT PROGRAM**

#### ANNEXURE - 2

y of	Iysical allu Illialicial talyets With Shalling patterii		(Amo	UNIC RS. III	crore and	pnysic	al units	(Amount : Rs. In crore and physical units as indicated)
*		100	Unit Cost	Targets for XII Plan	r XII Plan	She	Sharing Pattern (%)	tern (%)
#	Name of the Scheme/Component	ODIE	(Rs.)	Physical	Financial	CSB	State	Beneficiary
7	VANYA SECTOR							
	Vanya Seed							
_	TASAR							
-	Assistance to private tasar graineurs	No.	2,32,000	1,500	34.80	%09	20%	20%
a)	Assistance to existing tasar graineurs for upgradation of seed production capacity	No.	42,000	1,000	4.20	%09	20%	20%
0	Assistance for strengthening of tasar seed multiplication infrastructure (tropical tasar)	PPC	5,00,000	30	1.50	20% 90%	50%	1 1
a)	Establishment of basic seed production units (by SHGs, co-operatiaves/NGOs)	o N	43,00,000	7	0.75	%09	20%	20%
			(Only 25% of the unit cost will be borne by CSB under CDP)	the unit cost	will be bor	ne by C	SB under	· CDP)
က	Assistance for strengthening of tasar seed multiplication infrastructure (oak tasar)	Grainage	15,00,000	9	0.90	20% 80%	50%	1 1
4	Assistance for tropical tasar rearers	No.	20,000	2,500	2.00	%09 80%	20%	20%
a)	Assistance for oak tasar seed rearers	No.	17,500 & 19,000	200	0.35	%09 80%	20%	20%
(q	Assistance for mobile testing facility for disease monitoring and seed cocoon testing	No.	6,10,000	20	1.22	20% 90%	50%	
	Total for tasar seed				48.72			
=	ERI							
2	Assistance to state departments for strengthening of eri farm-cum-grainages	No.	12,48,000	12	1.50	20% 80%	50%	1 1
a)	Assistance to eri private graineurs	No.	2,33,000 & 2,40,000	170	4.04	%09 80%	20%	20%
Q	Assistance to eri adopted seed rearers	No.	16,000	2,000	3.20	%09 80%	20%	20%
Ô	Upgradation of state eri basic seed farm-cum-grainages	No.	12,38,000	10	1.24	50% 90%	50%	1 1

#### **ANNEXURE - 2**

(Amount: Rs. in crore and physical units as indicated)

# Physical and financial targets with sharing pattern

					1		i		:
	\$	Nome of the Scheme	±	Unit Cost	Targets fo	Targets for XII Plan	Sha	Sharing Pattern (%)	tern (%)
	ŧ			(Rs.)	Physical	Financial	CSB	State	Beneficiary
	ਰ	Assistance for establishment of self-help eri grainage units	O	8,400	250	0.21	%09	20%	20%
	©	Mobile testing and certification units	No.	6,70,000	23	1.54	%09	20%	20%
		Total for eri seed				11.73			
	≡	MUGA							
	9	Assistance to muga private graineurs	o N	2,55,000	140	3.57	%09	20%	20%
	â	Assistance to existing muga private graineurs for up-gradation of seed production capacity	o N	82,000	225	1.85	%09	20%	20%
	7	Assistance to state departments for strengthening of muga seed multiplication infrastructure (P2)	Farm-cum -grainage	30,99,000	10	3.10	20% 90%	50%	1 1
	â	Assistance for estt. of muga P3 basic seed production unit	Rearer	20,35,000	9	1.22	%09	20%	20%
	Q	Assistance to muga adopted seed rearers	o Z	74,500	2900	21.61	%09 80%	20%	20%
		Total for muga seed				31.35			
		Total for Vanya seed				91.80			
m		VANYA COCOON							
	-	TASAR							
	_	Support to rearers for augmentation of tasar host plantation	На.	40,000	12,000	48.00	%09	20%	20%
	a	Assistance to beneficiaries for raising tasar food plant seedlings (kisan nurseries)	Nursery	80,000	300	2.40	%08	20%	20%
	Q	Assistance to tasar commercial rearers for development of chawki garden	O	6,300	4,000	2.52	%09 80%	20%	20%
	<del>ට</del>	Assistance to tasar rearers for maintenance of existing chawki garden	Š	1,400	2,400	0.34	%09 80%	20%	20%
	ਰ	Assistance to tasar rearers for maintenance of existing tasar plantation	На.	17,000	1,200	2.04	%08	20%	20%

#### **CATALYTIC DEVELOPMENT PROGRAM**

#### ANNEXURE - 2

(Amount : Rs. in crore and p	
sharing pattern	
ial targets with	
sical and financi	
Phys	

physical units as indicated)

١									`
	\$		ļ.	Unit Cost	Targets fc	Targets for XII Plan	Sh	Sharing Pattern (%)	tern (%)
	<b>‡</b>	Name of the Scheme/Component		(Rs.)	Physical	Financial	CSB	State	Beneficiary
	©	conservation and utilization of sal based tasar eco-races.	No. of Camp	4,58,300	350	16.04	25%	75%	l
	N	Assistance for raising and maintenance of systematic oak tasar plantation	На.	49,000	200	0.98	%09 80%	20%	20%
	က	Assistance for construction of cocoon storage houses in tasar sector	o N	1,00,000	100	1.00	35% 80%	35%	30% 10%
	a	Assistance for construction of cocoon storage and stifling facilities for tasar rearers	No.	22,20,000	30	1.66	35%	35%	30%
				(Only 25% of the unit cost will be borne by CSB under CDP)	the unit cos	t will be bor	rne by C	SB under	r CDP)
		Total for tasar cocoon				74.98			
	=	ERI							
	4	Support for castor/tapioca cultivators with Start-up tools	Acre	12,500	5,000	6.25	%08 80%	20%	20%
	D	Augmentation of perennial eri food plants with supply of start-up tools	Acre	31,000	7,000	21.70	%08 80%	20%	20%
	a)	Assistance for raising kesseru food plants nursery	Nursery	51,000	150	0.77	%08 80%	20%	20%
	9	Assistance for construction of rearing houses	No.	1,00,000	11,600	116.00	35%	35%	30%
		Total for eri cocoon				144.72			
	≣	MUGA							
	7	Augmentation and maintenance of muga food plants with start-up tools	Acre	31,000	6,000	18.60	%08 80%	20%	20%
	a)	Assistance for raising muga food plants nursery	Nursery	52,500	120	0.63	%08 80%	20%	20%
	Q	Assistance for maintenance of existing muga food plantation	Acre	9,500	3,000	2.85	%08 80%	20%	20%
		Total for muga cocoon				22.08			
		Total for Vanya cocoon				241.78			
		Total for Vanya sector				333.58			
		Total for Mulberry and Vanya Sector				1,540.28			



#### ANNEXURE - 2

Physical and financial targets with sharing pattern

(Amount: Rs. in crore and physical units as indicated)

	*	1	:	Unit Cost	Targets fo	Targets for XII Plan	Sh	Sharing Pattern (%)	tern (%)
	#	Name of the Scheme/Component		(Rs.)	Physical	Financial	CSB	State	Beneficiary
	က	POST-COCOON SECTOR							
	_	REELING & SPINNING							
4		MULBERRY							
	_	Support for construction of reeling sheds							
	a	Improved cottage basin units							
	<u>—</u>	36 ends unit ( 6 basins of 6 ends each )	o N	5,40,000	35	1.89	25%	25%	50%
	≘	48 ends unit ( 6 basins of 8 ends each )	o N	5,40,000	15	0.81	25%	25%	50%
	Q	Multiend reeling units							
	<u>:</u>	6 basins unit (10 ends per basin)	o N	5,40,000	25	1.35	25%	25%	50%
	Ē	10 basins unit ( 10 ends per basin )	o N	7,20,000	200	14.40	25%	25%	50%
	N	Support for motorized charkha to dissuade child labour (Single and double unit)	o N	13,000 to 27,000	1,000	1.31	50% 80%	25%	25%
	က	Support for establishment of improved cottage basin reeling units							
	a	36 ends unit ( 6 basins of 6 ends each )	No.	3,54,000 to 3,68,000	35	1.25	50% 80%	25%	25%
	Q	48 ends unit ( 6 basins of 8 ends each )	o N	3,93,000 to 4,08,000	15	09:0	50% 80%	25%	25%
	4	Support for establishment of multi-end reeling units							
	a	6 basins unit ( 10 ends per basin )	No.	11,05,000 to 11,49,000	25	2.78	50% 80%	25%	25%
	Q	10 basins unit ( 10 ends per basin )	O	14,05,000 to 14,61,000	200	28.21	50% 80%	25%	25%
	ΰ	Support for existing multi-end units for procurement of additional equipment/re-conditioning	Ö	3,64,000 to 3,74,000	50	1.83	80%	25%	25%

#### **CATALYTIC DEVELOPMENT PROGRAM**

#### ANNEXURE - 2

hys	Sice	hysical and financial targets with sharing pattern	tern	(Amo	unt : Rs. in	crore and	physic	al units	(Amount : Rs. in crore and physical units as indicated)
	*		11.5	Unit Cost	Targets fo	Targets for XII Plan	She	Sharing Pattern (%)	tern (%)
	<b>#</b>	Name of the scheme/Component	חוו	(Rs.)	Physical	Financial	CSB	State	Beneficiary
	Ŋ	Support for establishment of automatic reeling units							
	a)	200 ends unit	No.	72,97,000	5	3.65	20% 80%	25%	25% 10%
	Q	400 ends unit	o O N	1,35,00,000	15	20.25	50% 80%	25%	25% 10%
	9	Support for establishment of automatic dupion reeling units (142 ends)	No.	85,00,000	ဗ	2.55	50% 80%	25%	25%
	_	Assistance for twisting units (480 ends)	o O	7,86,000 to 8,17,000	125	9.87	75% 80%	10%	25% 10%
	ω	Interest subisidy on working capital loan sanctioned by banks to reeling units	ó	30,000 to 5,00,000	295	2.85	20% 80%	50%	1 1
	6	Incentive for production of Bivoltine silk							
	a	Gradable Bivoltine silk reeled on multi-end reeling units (Rs.100/- per kg.)	Kg.	100	10,00,000	10.00	20% 90%	50%	: :
	(q	2 A grade & above Bivoltine silk reeled on Automatic reeling units (Rs.150/- per kg.)	Kg.	150	10,00,000	15.00	20% 90%	50%	: :
		Sub-total for mulberry (A)	ŀ	-	1	118.60			
В		VANYA							
	9	Support for Vanya reeling / spinning sector							
	a	Reeling-cum-twisting machines	No	45,000 to 47,000	3,000	13.91	20% 80%	25%	25% 10%
	Q	Wet reeling machine (2 basins of 6 ends each)	N <sub>O</sub>	46,000 to 48,000	100	0.48	50% 80%	25%	25% 10%
	Ô	Two-in-one reeling-cum-twisting machine	N <sub>O</sub>	64,000 to 67,000	100	99.0	50% 80%	25%	25%

hy	Sic	Physical and financial targets with sharing pattern	tern	(Amo	unt : Rs. in	crore and	physic	al units	(Amount : Rs. in crore and physical units as indicated)
	*		:	<b>Unit Cost</b>	Targets fo	Targets for XII Plan	She	Sharing Pattern (%)	tern (%)
	<b>#</b>	Name of the Scheme/Component	ם מו	(Rs.)	Physical	Financial	CSB	State	Beneficiary
	ਰ	Tasar cocoon sorting machine for co-operatives/SHGs	o.	51,000 to 53,000	10	0.05	50% 80%	25%	25%
	<del>©</del>	Motorised-cum-pedal operated spinning machine	No.	2,000	4,500	3.15	50% 80%	25%	25% 10%
	<del>(</del>	Solar operated spinning machine	N O	19,000	100	0.19	50% 80%	25%	25%
		Sub-total for Vanya (B)	ŀ	:	1	18.44			
ပ		General (Mulberry- 70% and Vanya- 30%)							
	Ξ	Providing services of master reelers/technicians							
	a	Master reelers	No.	1,44,000	50	0.72	100%	ŀ	1
	Q	Master technicians	No.	1,44,000	10	0.14	100%	ł	ł
		Sub-total for general (C)	ŀ	1	1	0.86			
		Total for reeling and spinning	ŀ	:	1	137.90			
=		Post-yarn (Mulberry- 70% and Vanya- 30%)							
	12	Support for handloom sector							
	â	Loom up-gradation through jacquards and other equipments developed by CSTRI	No.	15,000	2000	7.50	50% 80%	25%	25% 10%
	Q	Pneumatic lifting mechanism for handlooms developed by CSTRI							
	<u> </u>	2 Looms unit	No.	33,000	1000	3.30	50% 80%	25%	25% 10%
	≘	4 Looms unit	O	50,000	1000	2.00	50% 80%	25%	25%
	5	Support for setting up of common facility centre for yarn dyeing and fabric processing (Special technology package developed by CSTRI)							
	â	Computer aided textile designing	No.	3,96,000	50	1.98	50% 80%	25%	25% 10%
	Q	Tub dyeing - 25 kg. capacity units	O	3,92,000	10	0.39	75%	10%	25% 10%

#### **CATALYTIC DEVELOPMENT PROGRAM**

(Amount: Rs. in crore and physical units as indicated)	
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(Amount	••
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Amount : Rs. in crore and physical units as indicated)	Sharing Pattern (%)
unt: Rs. in crore and	Targets for XII Plan
(Amo	Unit Cost
ttern	± E
and financial targets with sharing pa	Name of the Scheme/Component
<b>Physical</b> 8	#

				:			ō		
	#	Name of the Scheme/Component	Unit	Unit Cost	largets tor XII Plan		Sign	Snaring Pattern (%)	ern (%)
				(Rs.)	Physical	Financial	CSB	State	Beneficiary
	Ó	Tub dyeing - 50 kg. capacity units		6,37,000	25	1.59	75%	10%	25%
	ਰ	Arm dyeing - 50 kg. capacity units		17,12,000	10	1.71	75%	10%	25%
	©	Fabric processing - 250 kg capacity units		27,15,000	10	2.72	75%	10%	25%
	<del>1</del>	Support for effluent treatment plant for yarn dyeing and fabric processing units (Existing & new units)							
	=	Zero discharge type (5000 litres / day)		7,00,000	25	1.75	75%	10%	25%
	€	Discharge to ground type (5000 litres / day)		4,00,000	50	2.00	75% 80%	10%	25%
	<del>1</del> 4	Providing services of master weavers / designers/technicians							
	a)	aster weavers/designers	No.	1,44,000	25	0.36	100%	ŀ	1
	Q	Master dyers	No.	1,44,000	25	0.36	100%	1	1
	်	Master technicians	No.	1,44,000	10	0.14	100%	ł	1
		Total for post-yarn (Mulberry and Vanya)	ŀ	1	i	28.80			
≥		Marketing (Mulberry- 70% and Vanya- 30%)							
	5	Support to states for creating / upgrading marketing infrastructure for cocoon and raw silk (Rs.1.50 cr for traditional and 0.70 cr. for non-traditional states)	O	Rs.1.50 cr. & Rs.0.70 cr.	t.	14.50	%06	25%	; ;
	16	Support for setting up of hot air driers							
	â	50 kg. capacity units (Electrical)	O	1,32,000 to 1,37,000	300	4.03	50%	25%	25%
	Q	100 kg. capacity units (Electrical)	o N	1,82,000 to 1,89,000	200	3.72	50% 80%	25%	25%
	Ô	50 kg. capacity units (Multi-fuel)	o O	61,000 to 63,000	300	1.86	50% 80%	25%	25%
									Continued

#### **ANNEXURE - 2**

(Amount: Rs. in crore and physical units as indicated) Physical and financial targets with sharing pattern

	*	Nome of the Sound	12	Unit Cost	Targets fo	Targets for XII Plan	Sh	Sharing Pattern (%)	tern (%)
	<b>‡</b>		5	(Rs.)	Physical	Physical Financial	CSB	State	Beneficiary
	ਰ	100 kg. capacity units (Multi-fuel)	o N	81,000 to 84,000	200	1.66	50% 80%	25%	25%
	(e)	2000 kg. capacity conveyor hot air dryer (Imported )	No.	22,88,000	က	0.69	50% 80%	25%	25%
	17	<ul><li>Vanya silk market promotion</li><li>(100% meant for Vanya sector)</li></ul>	Lumpsum	Depends on Projects	Demand Dependant	1.00	100%	1	ŀ
		Total for marketing				27.46			
		Total for post-cocoon sector				194.16			
4		SUPPORT SERVICE SECTOR							
	_	Crop insurance support ( For all sectors )	ı	Lumpsum	All States	1.60	50% 80%	25%	25%
	N	Publicity for sericulture sector		Lumpsum	All States	10.60	%09	%09	ŀ
							%06	10%	-
	က	Support for study/consultancy/survey organised by CSB and states	ı	Lumpsum	Demand Dependant	4.00	100%	1	ı
	4	Product design, development and diversification	1	Lumpsum	All states	0.50	100%	1	1
	2	Health insurance scheme for sericulture farmers and workers	Policy	1,000	24,000	2.40	75%	15%	10%
	9	Capacity building for sericulture sector (Includes all training and exposure visit to CSB, states and other stakeholders)							
	a	Beneficiary empowerment program	S	3,000 for Trg 2,000 for Visit	4,000	1.35	50% 90%	50%	1 1
	(q	Sericutlure resource centres	No.	2,50,000	16	0.40	20%	50% 50%	1 1
	Ó	Skill training and enterprise development program	Batch	Lumpsum (Variable)	09	1.00	100%	l	ı
	7	Developing community based organizations in line with resham doot concept	O	1,77,100	1000	17.73	%09	35%	2%

#### **ANNEXURE - 2**

# (Amount: Rs. in crore and physical units as indicated) Physical and financial targets with sharing pattern

		:: 	Unit Cost	Targets for XII Plan	or XII Plan		aring Pa	Sharing Pattern (%)
•	# Name of the Scheme/Component		(Rs.)	(Rs.) Physical Financial CSB	Financial	CSB	State	State Beneficiary
	8 Support for convergence activities for sericulture development							
, U	a) Cluster development projects	No.	10,00,000	150	15.00 100%	100%	1	ŀ
	Total for support services				54.58			
	5 SPECIAL INITIATIVES (FLEXI FUND) - Token provision		Demand Dependant	Demand All states spendant	63.34	63.34 30%	35%	35%
	GRAND TOTAL FOR CDP (1 TO 5)				1,852.36			
9	Note: Sharing pattern is indicated for General and Special Status States, respectively against each component. If there is only one	al Status Sta	ates, respectively	against ead	compone	ent. If the	ere is only	y one



sharing pattern for any component(s), it is applicable commonly to both the categories of states.



#### **ANNEXURE - 3**

(Unit cost in Rupees and physical units as indicated) Physical targets, CSB Share and Zone-wise unit cost

ooo 1,10,000 (1,000 (1,10,000 (1,20,000 (1,20,000 (1,25,000 (1,25,000 (1,25,000 (1,20,							Zor	Zone-wise Unit Costs	Costs		
Mulberry sector (BivOLTINE AND IMPROVED CROSS BREED)   Mulberry seed   Mulbe		#	Name of the Scheme/Component	Unit	XII Plan Physical Targets	Southern	North- western	Central and Westren	Eastern	North- eastren	Share (Rs. in crore)
Franschise disinfection programme of NSSO   No.   100   1,10,000		-		ED CROSS	BREED)						
1   Franschise disinfection programme of NSSO   No.   100   1,10,000   1,10	€		Mulberry seed								
2 Support to construct rearing houses for additional pouses for additional pouses for several pouses for additional pouses for several pouses for additional pouses for several poundations and political pouses for additional pouses for several points and political		_		No.	100	1,10,000	1,10,000	1,10,000	1,10,000	1,10,000	1.10
3 Revolving capital fund support for state         No.         485 (0.00)         3.00,000         3.00,000         3.00,000         1,35,000		0	Support to construct rearing houses for adopted seed rearers of NSSO	No.	275		1,25,000	1,25,000	1,20,000	1,20,000	2.31
4 Assistance for purchasing seed testing         No.         310         1,75,000 <th< td=""><td></td><td>က</td><td>Revolving capital fund support for state grainages and registered seed producers</td><td>No.</td><td>485</td><td></td><td>3,00,000</td><td>3,00,000</td><td>1,35,000 2,70,000</td><td>1,35,000</td><td>92.9</td></th<>		က	Revolving capital fund support for state grainages and registered seed producers	No.	485		3,00,000	3,00,000	1,35,000 2,70,000	1,35,000	92.9
6         Support to strengthen basic seed farms of states         No.         310         5,00,000         5,00,000         5,00,000         5,00,000         5,00,000         5,00,000         5,00,000         5,00,000         5,00,000         5,00,000         5,00,000         5,00,000         5,00,000         5,00,000         5,00,000         5,00,000         5,00,000         5,00,000         5,00,000         3,50,000 <t< td=""><td></td><td>4</td><td>Assistance for purchasing seed testing equipment for state grainages and private registered seed producers</td><td>o N</td><td>310</td><td>1,75,000</td><td>1,75,000</td><td>1,75,000</td><td>1,75,000</td><td>1,75,000</td><td>2.42</td></t<>		4	Assistance for purchasing seed testing equipment for state grainages and private registered seed producers	o N	310	1,75,000	1,75,000	1,75,000	1,75,000	1,75,000	2.42
6 Support to upgrade state and private commercial seed production units         No.         310         3,50,000		2	Support to strengthen basic seed farms of states	No.	35	5,00,000	5,00,000	5,00,000	5,00,000	5,00,000	1.03
Mulberry seed         Acre         39,000         14,000         25		9	Support to upgrade state and private commercial seed production units	No.	310	3,50,000	3,50,000	3,50,000	3,50,000	3,50,000	4.83
Mulberry cocoon         Acre         39,000         14,000         14,000         14,000         14,000         14,000         14,000         14,000         14,000         14,000         14,000         14,000         14,000         14,000         14,000         14,000         14,000         14,000         14,000         25,000			Total for mulberry seed								18.25
Support for mulberry plantation development Assistance for irrigation and other water conservation and usage techniques         Acre 25,000 30,000 25,00	<u>B</u>		Mulberry cocoon								
Assistance for irrigation and other water conservation and usage techniques         Acre         25,000         30,000         25,000		_	Support for mulberry plantation development	Acre	39,000	14,000	14,000	14,000	14,000	14,000	29.62
Supply of rearing appliances to farmers (including improved mountages/ farm equipment)         Farmer farmed improved mountages/ farmer and including improved mountages/ farm equipment)         Farmer farmed improved mountages/ farmers         Farmer farmed improved mountages/ farmers         No.         50,000 50,000 50,000 4		0	Assistance for irrigation and other water conservation and usage techniques	Acre	25,000	30,000	25,000	25,000	25,000	25,000	37.68
Supply of quality disinfecting materials and other crop protection measures to farmers         No.         45,000         4,000		ო	Supply of rearing appliances to farmers (including improved mountages/farm equipment)	Seed Farmer	58,000	70,000	40,000	50,000	50,000	50,000	194.68
Assistance for construction of rearing houses       No.       45,000       2,75,000         1,75,000       1,75,000         Model - II (600 sq.ft to rear 150 dfls)       Model - III (225 sq.ft to rear 50 dfls)       90,000       75,000       75,000       75,000       60,000         Low cost rearing house (225 sq.ft to rear 50 dfl)       30,000       30,000       30,000       30,000       30,000		4	Supply of quality disinfecting materials and other crop protection measures to farmers	No.	50,000	5,000	4,000	4,000	4,000	4,000	12.72
2,75,000        1,75,000       1,25,000        1,25,000       1,20,000 <td></td> <td>5</td> <td>Assistance for construction of rearing houses</td> <td>No.</td> <td>45,000</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>136.03</td>		5	Assistance for construction of rearing houses	No.	45,000						136.03
1,75,000     1,25,000      1,20,000     1,20,000       90,000     75,000     60,000       30,000     30,000     30,000						2,75,000	1	ł	1,75,000	1,75,000	
90,000     75,000     75,000     60,000       30,000     30,000     30,000			Model - II (600 sq.ft to rear 150 dfls)			1,75,000	1,25,000	1	1,20,000	1,20,000	
30,000 30,000 30,000 30,000			Model - III (225 sq.ft to rear 50 dfls)			90,000	75,000	75,000	000'09	60,000	
			Low cost rearing house (225 sq.ft to rear 50 dfl)			30,000	30,000	30,000	30,000	30,000	

#### **ANNEXURE - 3**

(Unit cost in Rupees and physical units as indicated)	1.0 1.0
(Unit cost in Rupees	The Contract of the Contract o
<b>CSB Share and Zone-wise unit cost</b>	
Physical targets, C	

						Zon	<b>Zone-wise Unit Costs</b>	Costs		CSB
	#	Name of the Scheme/Component	Unit	XII Plan Physical Targets	Southern	North- western	Central and Westren	Eastern	North- eastren	Share (Rs. in crore)
	9	Assistance for maintenance of chawki gardens, construction of chawki rearing centres and procurement of chawki rearing equipment	o N	009	6,00,000	4,00,000	4,00,000	4,00,000	4,00,000	13.20
	7	Production units for biological inputs/ door-to-door service agents for disinfection and input supply and assistance for sericulture poly-clinics	o N	400	3,00,000	1,50,000	1,50,000	1,84,000	1,50,000	5.32
	ω	Support for development of kissan nursery	Acre	400	1,15,000	1,15,000	1,15,000	1,15,000	1,15,000	2.50
	6	Maintenance cost for mulberry plantation raised during X and XI Plans for 3 years	Acre	5,000	;	4,500	1	1	4,500	1.79
	10	Support for construction of vermi-compost sheds	N O	5,000	20,000	20,000	20,000	20,000	20,000	5.44
	Ξ	Assistance towards fencing of mulberry gradens in north-eastern states	Acre	5,000	l	l	1	1	10,000	4.00
	12	Assistance towards expansion of rearing houses to construct mounting halls in north-eastern states	O	5,000	1	30,000	1	1	30,000	12.00
	13	Support for increasing yield of existing rain-fed mulberry gardens through water conservation techniques	Acre	5,000	10,000	10,000	10,000	10,000	10,000	2.74
		Total for mulberry cocoon								457.75
		Total for mulberry sector								476.00
	0	VANYA SECTOR								
€		Vanya seed								
		Tasar								
	_	Assistance to private tasar graineurs	No.	1,500	2,32,000	1	2,32,000	2,32,000	1	25.52
		<ul> <li>a) Assistance to existing tasar graineurs for Upgradation of seed production capacity</li> </ul>	No O	1,000	42,000	ł	42,000	42,000	:	3.02
	7	Assistance for strengthening of tasar seed multiplication infrastructure (Tropical tasar)	PPC	30	5,00,000	1	5,00,000	5,00,000	1	1.1

#### **ANNEXURE - 3**

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units as
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in Rupees
cost i
(Unit

					Zon	Zone-wise Unit Costs	Costs		
#	Name of the Scheme/Component	Unit	XII Plan Physical	Southern	North-	Central	Eastern	North-	CSB Share (Rs. in
						Westren			crore)
	<ul><li>a) Establishment of basic seed production units (By SHGs, co-operatives/NGOs)</li></ul>	o N	7	43,00,000 (Only 25% c	 of the unit co	43,00,000 st will be bor	43,00,000 43,00,000 43,00,000 (Only 25% of the unit cost will be borne by CSB under CDP)	 under CDP)	0.54
က	Assistance for strengthening of tasar seed multiplication infrastructure (Oak tasar)	Grainage	9	l	15,00,000	+	1	15,00,000	0.81
4	Assistance for tropical tasar rearers	No.	2,500	20,000	1	20,000	20,000	-	3.60
	a) Assistance for oak tasar seed rearers	No.	200	;	19,000	:	1	17,500	0.29
	<ul> <li>b) Assistance for mobile testing facility for disease monitoring and seed cocoon testing</li> </ul>	o O	20	6,10,000	¦	6,10,000	6,10,000	1	0.98
	Total for tasar seed								35.87
=	Eri								
2	Assistance to state departments for strengthening of eri farm-cum-grainages	No.	12	12,48,000	12,48000	12,48,000	12,48,000	12,48,000	1.20
	a) Assistance to eri private graineurs	No.	170	2,33,000	2,33,000	2,33,000	2,33,000	2,40,000	3.00
	b) Assistance to eri adopted seed rearers	No.	2,000	16,000	16,000	16,000	16,000	16,000	2.46
	<ul><li>c) Up-gradation of state eri basic seed farm-cum-grainages</li></ul>	No.	10	12,38,000	12,38,000	12,38,000	12,38,000	12,38,000	0.97
	d) Assistance for establishment of self help eri grainage units	No.	250	1	1	1	1	8,400	0.16
	e) Mobile testing and certification units	No.	23	1	1	1	1	6,70,000	1.24
	Total for eri seed								9.03
≡	Muga								
9	Assistance to muga private graineurs	No.	140	1	;	;	2,55,000	2,55,000	2.79
	a) Assistance to existing muga private graineurs For upgradation of seed production capacity	No.	225	I	1	l	82,000	82,000	1.41
^	Assistance to state departments for strengtheningof muga seed multiplication infrastructure (P2)	Farm-cum -grainage	10	-	1	1	30,99,000	30,99,000	2.54
	a) Assistance for establishment of muga P3 basic seed production unit	O	9	I	;	1	20,35,000	20,35,000	0.90

Continued ...

Physical targets, CSB Share and Zone-wise unit cost

#### CATALYTIC DEVELOPMENT PROGRAM

#### **ANNEXURE - 3**

4.69

12,500

12,500

12,500

12,500

12,500

5,000

Acre

Support for castor/tapioca cultivators with

start-up tools

46.51

1.22

22.20.000

22,20,000

22,20,000

30

<u>.</u>

a) Assistance for construction of cocoon storage

and stifling facilities for tasar rearers

Total for tasar cocoon

<u>Б</u>

Only 25% of the unit cost will be borne by CSB under CDP)

69.0

1,00,000

1,00,000

1,00,000

100

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Assistance for construction of cocoon storage

က

houses in tasar sector

## (Unit cost in Rupees and physical units as indicated)

#### Share (Rs. in 69.52 crore) 16.98 24.62 34.56 CSB 0.78 1.73 0.24 1.81 1.47 4.01 74,500 49,000 Northeastren 74,500 40,000 6,300 1,400 80,000 17,000 4,58,300 Eastern **Zone-wise Unit Costs** 17,000 40,000 6,300 1,400 4,58,300 80,000 Westren Central and Ī ł 49,000 Northwestern 40,000 80,000 6,300 1,400 17,000 Southern 12,000 4,000 1,200 2,900 300 2,400 350 200 Physical XII Plan **Fargets** Physical targets, CSB Share and Zone-wise unit cost Nursery Camp Unit . N è N ė Š Ha. Ha. 揊. d) Assistance to tasar rearers for maintenance c) Assistance to tasar rearers for maintenance a) Assistance to beneficiaries for raising tasar b) Assistance to muga adopted seed rearers b) Assistance to tasar commercial rearers for e) Conservation and utilization of sal based Assistance for raising and maintenance of Name of the Scheme/Component Support to rearers for augmentation of food plant seedlings (Kisan nursery) systematic oak tasar plantation development of chawki garden of existing tasar plantation of existing chawki garden Total for Vanya seed Total for muga seed tasar host plantation tasar eco-races. Vanya cocoon N # <u>a</u>

Continued ...

16.26

31,000

31,000

31,000

31,000

31,000

7,000

Acre

Augmentation of perennial eri food plants with

supply of start-up tools

2

711.85

#### CATALYTIC DEVELOPMENT PROGRAM

#### **ANNEXURE - 3**

4.67

7,20,000

7,20,000

7,20,000

200

1,000

Support for motorized charkha to dissuade

Q

i) 6 basins unit (10 ends per basin) ii) 10 basins unit (10 ends per basin) child labour (Single and twin charkha)

14,000

13,000 26,000

13,000 26,000

27,000

26,000

26,000

0.46

5,40,000

5,40,000 7,20,000

5,40,000

5,40,000 7,20,000

5,40,000

25

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5,40,000

5,40,000

5,40,000

5,40,000

5,40,000

35

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ii) 48 ends unit (6 basins of 8 ends each)

b) Multi-end reeling units

i) 36 ends unit (6 basins of 6 ends each)

a) Improved cottage basin units

Support for construction of reeling sheds

Total for Mulberry and Vanya sector

POST-COCOON SECTOR

Reeling and spinning

Mulberry

4

5,40,000

5,40,000

(Unit cost in Rupees and physical units as indicated)

235.85 102.62 166.33 81.10 17.20 Rs. in Share 14.51 2.22 0.57 0.47 crore) 1,00,000 31,000 52,500 9,500 51,000 Northeastren 31,000 52,500 9,500 1,00,000 51,000 Eastern **Zone-wise Unit Costs** 1,00,000 ł 51,000 Westren Central and 1,00,000 52,500 9,500 51,000 31,000 western North-1,00,000 1 ŀ 51,000 Southern 150 11,600 6,000 120 3,000 XII Plan Physical Targets Nursery Nursery Acre Acre Unit Š. Augmentation and maintenance of muga food Assistance for construction of rearing house b) Assistance for maintenance of existing Name of the Scheme/Component a) Assistance for raising kesseru food a) Assistance for raising muga food plants with start-up tools Total for Vanya cocoon Total for muga cocoon **Total for Vanya sector** muga food plantation Total for eri cocoon plants nursery plant nursery # 

Continued ...

Physical targets, CSB Share and Zone-wise unit cost

#### **CATALYTIC DEVELOPMENT PROGRAM**

XII Plan		XII Plan			Zon	Zone-wise Unit Costs CSB	Costs		CSB
_	All Plan Physical Targets		(O)	Southern	North- western	Central and Westren	Eastern	North- eastren	Share (Rs. in crore)
Support for establishment of improved cottage basin reeling units									
a) 36 ends unit (6 basins of 6 ends each) No. 35	35			3,54,000	3,61,000	3,57,000	3,64,000	3,68,000	0.79
b) 48 ends unit (6 basins of 8 ends each) No. 15	15		(,)	3,93,000	4,00,000	3,96,000	4,04,000	4,08,000	0.34
Support for establishment of multi-end reeling units									
a) 6 basins unit (10 ends per basin) No. 25 11	25		Ξ	11,05,000	11,27,000	11,16,000	11,38,000	11,49,000	1.52
b) 10 basins unit (10 ends per basin) No. 200 14	200		14	14,05,000	14,33,000	14,19,000	14,47,000	14,61,000	15.27
c) Support for existing multi-end units for No. 50 3 procurement of additional equipment/ reconditioning	20		က	3,64,000	3,69,000	3,66,000	3,71,000	3,74,000	0.97
Support for establishment of automatic reeling units									
a) 200 ends unit No. 5 72	רט		72	72,97,000	72,97,000	72,97,000	72,97,000	72,97,000	2.26
b) 400 ends unit No. 15 Re	15		æ	Rs.1.35 cr	Rs.1.35 cr	Rs.1.35 cr	Rs.1.35 cr	Rs.1.35 cr	10.13
Support for establishment of automatic dupion No. 3 8 reeling units (142 ends)	n		œ .	85,00,000	85,00,000	85,00,000	85,00,000	85,00,000	1.28
Assistance for twisting units (480 ends) No. 125		125		7,86,000	8,02,000	7,94,000	8,10,000	8,17,000	7.45
Interest subisidy on working capital loan No. 295 sanctioned by banks to reeling units to	295		9	30,000 to 5,00,000	30,000 to 5,00,000	30,000 to 5,00,000	30,000 30,000 to 5,00,000 to 5,00,000	30,000 to 5,00,000	1.84
Incentive for production of bivoltine silk									
a) Gradable Bivoltine silk reeled on Kg. 10,00,000 multi-end reeling units (Rs.100 per kg.)		10,00,000		100	100	100	100	100	5.58
b) 2 A grade and above Bivoltine silk reeled on Kg. 10,00,000 Automatic reeling units (Rs.150 per kg.)		10,00,000		150	150	150	150	150	7.80
Sub-total for mulberry (A)		•							62.30
Vanya									
Support for Vanya reeling/spinning sector									
a) Reeling-cum-twisting machines No. 3,000		3,000		45,000	46,000	45,000	46,000	47,000	9.71

#### **ANNEXURE - 3**

(Unit cost in Rupees and physical units as indicated)

(Rs. in 76.03 12.87 Share 0.36 0.50 0.03 2.13 0.14 0.14 98.0 3.86 1.80 2.73 CSB crore) 67,000 19,000 53,000 7,000 1,44,000 1,44,000 1,44,000 33,000 48,000 15,000 50,000 Northeastren 1,44,000 15,000 19,000 33,000 47,000 66,000 50,000 52,000 7,000 Eastern **Zone-wise Unit Costs** 1,44,000 1,44,000 1,44,000 1,44,000 19,000 15,000 33,000 50,000 46,000 65,000 51,000 7,000 Westren Central and 1,44,000 47,000 65,000 52,000 7,000 19,000 15,000 33,000 50,000 western North-1,44,000 15,000 33,000 50,000 46,000 64,000 51,000 7,000 19,000 Southern 100 100 10 1,000 10 100 20 5,000 1,000 4,500 **Physical Targets Unit** ė. ė. Š. ė. è. ė. ė. ė. è. ė. b) Wet reeling machine (2 basins of 6 ends each) Providing services of master reelers/technicians Support for setting up of common facility centre b) Pneumatic lifting mechanism for handlooms a) Loom up-gradation through jacquards and Post-yarn (Mulberry- 70% and Vanya- 30%) General (Mulberry- 70% and Vanya- 30%) c) Two-in-one reeling-cum-twisting machine e) Motorised-cum-pedal operated spinning Name of the Scheme/Component other equipment developed by CSTRI d) Tasar cocoon sorting machine for f) Solar operated spinning machine Total for reeling and spinning Support for handloom sector Sub-total for general (C) Sub-total for Vanya (B) co-operatives / SHGs b) Master technicians developed by CSTRI a) Master reelers ii) 4 Looms unit i) 2 Looms unit 7 # Ξ 3 O

Continued ...

3,92,000 0.30 6,37,000 1.22

3,92,000

3,92,000

3,92,000 6,37,000

10

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b) Tub Dyeing - 25 kg. capacity unitsc) Tub Dyeing - 50 kg. capacity units

a) Computer aided textile designing

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for yarn dyeing and fabric processing (Special

technology package developed by CSTRI)

6,37,000

6,37,000

1.23

3,96,000

3,96,000

3,96,000

3,96,000

3,96,000 3,92,000 6,37,000

Physical targets, CSB Share and Zone-wise unit cost

#### CATALYTIC DEVELOPMENT PROGRAM

#### **ANNEXURE - 3**

## (Unit cost in Rupees and physical units as indicated)

Physical targets, CSB Share and Zone-wise unit cost

#### Share (Rs. in 115.00 20.70 18.27 crore) 11.94 1.33 2.10 1.52 0.14 2.42 1.18 1.08 0.55 1.00 7,00,000 17,12,000 27,15,000 4,00,000 1,44,000 1,44,000 1,89,000 63,000 1,44,000 1,37,000 84,000 22,88,000 North-Rs.1,50,00,000 for traditional states and Rs.70,00,000 eastren Depending on projects from states and 84,000 17,12,000 27,15,000 7,00,000 4,00,000 63,000 22,88,000 1,44,000 1,44,000 1,36,000 1,44,000 1,88,000 Eastern **Zone-wise Unit Costs** no specific unit cost. for non-traditional states 7,00,000 62,000 82,000 17,12,000 27,15,000 4,00,000 1,44,000 1,44,000 1,33,000 1,84,000 1,44,000 22,88,000 Westren Central and 7,00,000 17,12,000 4,00,000 62,000 27,15,000 1,44,000 1,44,000 1,44,000 1,34,000 ,86,000 83,000 22,88,000 western North-17,12,000 27,15,000 81,000 22,88,000 7,00,000 4,00,000 61,000 Southern 1,44,000 1,44,000 1,44,000 ,32,000 ,82,000 9 200 300 200 9 20 25 10 15 2 22 Demand Dependant Physical XII Plan **Targets** Lumpsum Agencies States / Unit è. . No Š. . گ ė. Š. Š. Š. ė. ė. <u>.</u> 9 marketing infrastructure for cocoon and raw silk ii) Discharge to ground type (5000 litres / day) Marketing (Mulberry- 70% and Vanya- 30%) e) Fabric Processing - 250 kg capacity units Total for post-yarn (Mulberry and Vanya) e) 2000 kg. capacity conveyor hot air dryer Support to states for creating / upgrading Name of the Scheme/Component f) Support for effluent treatment plant for yarn dyeing and fabric processing units ) Zero discharge type (5000 litres / day) d) Arm Dyeing - 50 kg. capacity units Providing services of master weavers/ Support for setting up of hot air driers d) 100 kg. capacity units (multi-fuel) b) 100 kg. capacity units (electrical) c) 50 kg. capacity units (multi-fuel) a) 50 kg. capacity units (electrical) (100% meant for Vanya sector) a) Master weavers / designers Total for Post-cocoon Sector Vanya silk market promotion (Existing and new units) designers / technicians c) Master technicians Total for marketing b) Master dyers (Imported) 12 16 # 4 7 ۵



## (Unit cost in Rupees and physical units as indicated)

#### (Rs. in 43.15 889.00 Share crore) 10.62 19.00 15.00 0.80 8.00 4.00 0.50 2.00 1.00 5,000 10,00,000 10,00,000 2,50,000 75,000 1,77,100 1,000 to 3,50,000 to 3,50,000 to 3,50,000 to 3,50,000 to 3,50,000 Northeastren All States Depending on projects from states. No specific unit cost. 5% to 7% of the sum assured is the premium Rs. 25,00,000 for non-traditional states Depending on projects from states 1,77,100 5,000 1,000 2,50,000 75,000 Eastern All States Depending on projects from states Rs. 50,00,000 for traditional and **Zone-wise Unit Costs** No specific unit cost. 10,00,000 10,00,000 10,00,000 and no specific unit cost. 1,000 2,50,000 75,000 1,77,100 1,77,100 5,000 Westren Central and 2,50,000 5,000 75,000 1,000 western North-1,77,100 1,000 5,000 2,50,000 75,000 Southern 150 16 1,000 4,000 All States 24,000 All States Demand 09 Dependant **Physical** XII Plan **Targets** SHGS Unit Policy Batch ė. <u>.</u> Š I Product design, development and diversification (Includes all training and exposure visit to CSB, Developing community based organizations Health insurance programme for sericulture c) Skill training and enterprise development Support for studies/consultancies/surveys Name of the Scheme/Component Crop insurance support (For all sectors) a) Beneficiary empowerment programme Capacity building for sericulture sector SPECIAL INITIATIVES (FLEXI FUND) Support for convergence activities for GRAND TOTAL FOR CDP (1 TO 5) in line with resham doot concept a) Cluster development projects SUPPORT SERVICE SECTOR states and other stakeholders) b) Sericutlure resource centre Publicity for sericulture sector organised by CSB and states Total for support services Sericulture development farmers and workers - Token provision 4 4 #



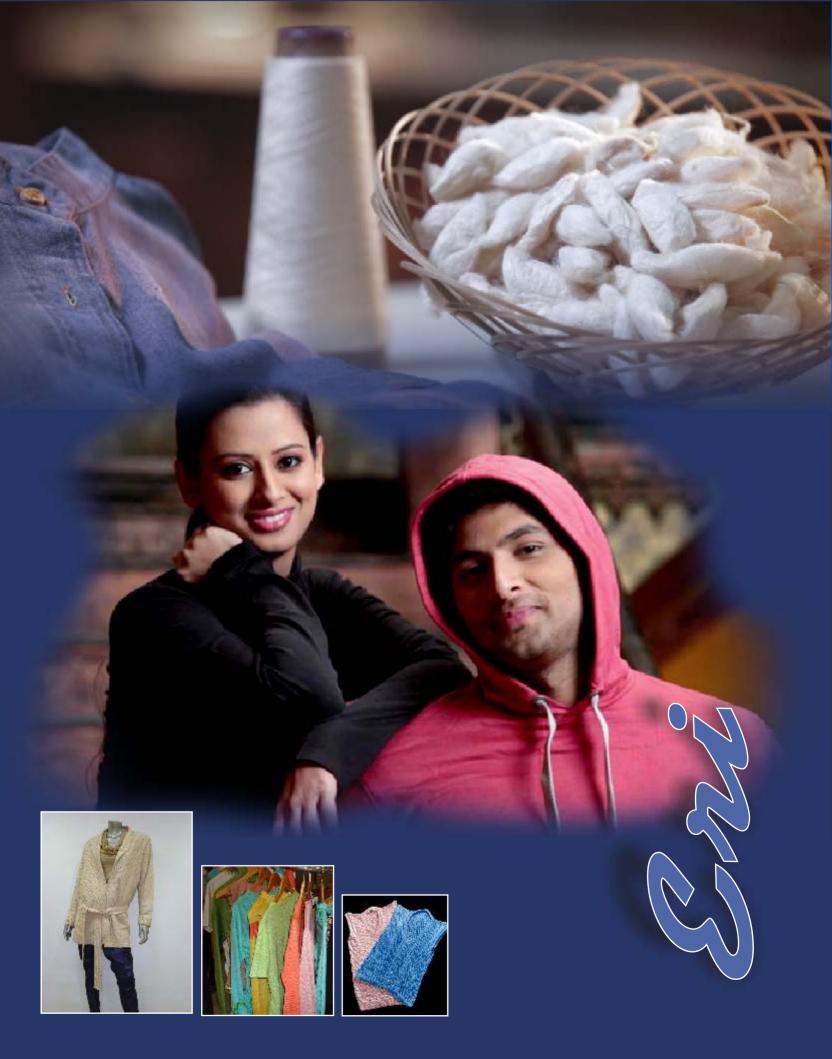
Physical targets, CSB Share and Zone-wise unit cost

#### **ABBREVIATIONS**

ac	Acre	CSR&TI	Central Sericultural Research and
AIFD	Army Institute of Fashion & Design		Training Institute
AIR	All India Radio	CSTRI	Central Silk Technological Research
AMC	Apex Monitoring Committee	OTDATI	Institute
APL	Above Poverty Line	CTR&TI	Central Tasar Research and Training Institute
ARM	Automatic Reeling Machine	DA	Dearness Allowance
ASR	Adopted Seed Rearer	DAVP	Department of Audio Visual Publicity
ATMA	Agriculture Technology Management Agency	DDA	District Development Agency
BADP	Boarder Area Development Program	dfls	disease free layings
BEP	Beneficiary Empowerment Program	DOH	Directorate of Handlooms
BIS	Bureau of Indian Standards	DOS	Directorate/Department of Sericulture
BPL	Below Poverty Line	DOT	Directorate of Textiles
BRGF	Backward Regions Grant Fund	DPR	Detailed Project Report
BRSF	Budget of Receipts and Sources of	DVD	Digital Versatile Disc
_	Financing	EDP	Entrepreneurship Development Program
BSF	Basic Seed Farm	ERR	Effective Rate of Rearing
BSM&TC	Basic Seed Multiplication and Training	ESSO	Eri Silkworm Seed Organization
	Centre	etc.	et cetera
BSP	Banker's Sensitization Program	ETP	Effluent Treatment Plant
BTC	Bodoland Territorial Council	F1	Commercial Silkworm Seed
BTSSO	Basic Tasar Silkworm Seed Organization	FYM	Farm Yard Manure
BV	Bivoltine	FYP	Five Year Plan
CATD	Computer Aided Textile Design	GFR	General Financial Rules
СВ	Cross Breed	GI	Galvanized Iron
СВО	Community Based Organization	GIA	Grants-in-Aid
CDMA	Cluster Development Management	Gol	Government of India
	Agency	GRC	Grievance Redressal Committee
CDP	Catalytic Development Programme	ha.	hectare
CFC	Common Facility Centre	i.e.	That is
CLA	Cluster Level Association	IAC	In-house Appraisal Committee
CMER&TI	Central Muga Eri Research and Training Institute	ISDS	Integrated Skill Development Scheme
Cr	Crore	IT	Information Technology
Cr CRC	Chawki Rearing Centre	JICA	Japan International Cooperation
	-		Agency
CRP CSB	Community Resource Person Central Silk Board	JRC	Joint Review Committee
USD	Gential Slik Boald	kg	Kilogram
		LAC	Local Authorization Committee

#### **ABBREVIATIONS**

≪LC	Letter of Credit	∞RDP	Resource Development Program
∞MDP	Management Development Program		Rashtriya Krishi Vikas Yojana
∞MGNREGS	Mahatma Gandhi National Rural	∞RMB	Raw Material Bank
	Employment Guarantee Scheme	∞RO	Regional Office
∞MKSP	Mahila Kisan Sashaktikaran Pariyojana	∞RSBY	Rashtriya Swasthya Bima Yojana
<i>∝</i> Mn.	Million	∞RSP	Registered Seed Producer
∞MNRE	Ministry of New and Renewable Energy	∞SC	Scheduled Caste
∞MoRD	Ministry of Rural Development	∡SCG	Sericulture Cluster Group
<b>∞</b> MoT	Ministry of Textiles	∞SCSP	Scheduled Caste Sub-Plan
∞MOU	Memorandum of Understanding	∡Seed Act	Central Silk Board (Amendment)
<b>∞MRMB</b>	Muga Raw Material Bank		Act, 2006
∞MRU	Multi-end Reeling Unit	∞SEZ	Special Economic Zone
∞MSSO	Muga Silkworm Seed Organization	∞SGSY	Swarnajayanti Gram Swarozgar Yojana
∞MT	Metric Tonne	∡SHEG	Self Help Eri Grainage
∞NABARD	National Bank for Agriculture and	∡SHG	Self Help Group
Rural	Development	∞SLPC	State Level Purchase Committee
≪NABARD-	National Bank for Agriculture and Rural	∞SPMC	State Project Monitoring Committee
≝TDF	Development - Tribal Development	∞SPV	Special Purpose Vehicle
	Fund	∡Sq. Ft.	Square Feet
∠NE	North-East	<b></b> ≤SQC	Sericulture Quality Club
∡NGO	Non-Governmental Organizations	∞SRLM	State Rural Livelihood Mission
∡NID	National Institute of Design	∞SSPC	Silkworm Seed Production Centre
∠NIFT	National Institute of Fashion Technology	∡ST	Scheduled Tribe
∠NPC	National Productivity Council	∞STEP	Skill Training and Enterprise Development
∞NRDC	National Research Development Corporation		Program
∡NSSO	·	<b>≰TA</b>	Travelling Allowance
≥NURM	National Silkworm Seed Organization	<b>≰TPA</b>	Third Party Agent
≥NONWI ≥P3D	National Urban Renewal Mission	∞TSP	Tribal Sub-Plan
ÆF3D	Product Design Development  Diversification	<b>≰TUP</b>	Technology Upgradation Program
<b>≝PAC</b>	Project Approval Committee	∞TWC	Tribal Welfare Commission
≈PEW	Para Extension Worker	∞UNDP	United Nations Development Program
≈PMB	Project Management Board	∡Vanya	Non-mulberry Silks - Tasar, Oak Tasar, Eri
≈PMC	Project Monitoring Committee		and Muga
∠PPC	Pilot Project Centre	∠VSO	Voluntary Service Organizations X, XI,
∠PPP	Public Private Partnership	XII Plan	X, XI, XII Five Year Plan
≈PRA	Participation Rural Appraisal	∠ZC	Zonal Rost assess Consuits
≈PRADAN	Professional Assistance for Development	∞ZPCC	Zonal Post-cocoon Committee
	Action	Ø.	



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