

CHAPTER III : MINISTRY OF TEXTILES

Central Silk Board

3. Catalytic Development Programme of Central Silk Board

Highlights

- CSB proposed withdrawal of four components under XI Plan due to lack of proper survey before planning.

(Paragraph 3.2.1)

- Poor planning led to huge releases of ₹ 20.66 crore for construction of rearing houses in the first two years (2007-09) of the XI Plan period against allotment of ₹ 7.50 crore for the full Plan period. Such diversion affected performance in the remaining components of Eri sector.

(Paragraph 3.2.3)

- Achievement in Mulberry seed sector was only 15 per cent of target envisaged for 2007-09

(Paragraph 3.4.1)

- Failure of CSB and state Governments to monitor the progress after extending assistance for construction of rearing houses resulted in discontinuance of rearing of Bivoltine silkworm by beneficiaries leading to decline in growth of Bivoltine silk yarn production

(Paragraph 3.4.2.1)

- In contravention of the scheme guidelines, CSB extended “Interest subsidy on working capital loan” sanctioned by banks to reeling units beyond stipulated period of five years.

(Paragraph 3.4.3.1)

Summary of recommendations

- *CSB and the state Governments should fix targets on the basis of reliable data arising from grass root level survey.*
- *A suitable mechanism should be devised to ensure that assistance extended to the beneficiaries is utilised in accordance with the scheme guidelines.*
- *CSB should ensure implementation of all components for comprehensive development of sericulture and silk industry.*

3 Introduction

3.1.1 Sericulture and Silk

Silk is made of proteins secreted in the fluid state by a caterpillar, popularly known as 'silkworm'. The silkworms feed on selected food plants and spin cocoons as a protective shell to perpetuate their life. Silkworm has four stages in its life cycle viz., egg, caterpillar, pupae and moth. Man interferes with this life-cycle at the cocoon stage to obtain the silk. There are four major types of silk of commercial importance obtained from different species of silkworms which in turn feed on a number of food plants. These are:

- | | |
|----------|---|
| Mulberry | Accounts for 90 <i>per cent</i> of the total silk production (multivoltine and bivoltine silk) in the country. This silk comes from the silkworm which feeds on mulberry leaves. The major producing states are Karnataka, Andhra Pradesh, West Bengal, Tamil Nadu and Jammu and Kashmir |
| Tasar | It is a coarse variety mainly used for furnishing interiors. It is generated from the silkworm which thrives on food plants Asan, Arjun and Oak. It is produced in Jharkhand, Chhattisgarh, Orissa, Maharashtra, West Bengal and Andhra Pradesh. The Oak Tasar is generally produced in Manipur, Himachal Pradesh, Uttar Pradesh, Assam, Meghalaya and Jammu and Kashmir. |
| Muga | This silk is the pride of Assam. It is obtained from semi domesticated multi voltine silkworm which feeds on aromatic leaves of Som and Soalu plants. |
| Eri | A multivoltine silk spun from open ended cocoons. It is a product of domesticated silkworm that feeds on Castor leaves. It is produced mainly in the north-eastern states. It is also found in Bihar, West Bengal and Orissa |

Except mulberry, other varieties of silk are generally termed as non-mulberry silk or Vanya silk. India has the unique distinction of producing all these commercial varieties of silk.

3.1.2 Catalytic Development Programme

The entire gamut of sericulture activities can be divided into three sectors – (i) Silkworm Seed Sector, (ii) the Cocoon Sector and (iii) the Post-Cocoon Sector. As part of developmental initiatives, the Ministry of Textiles through Central Silk Board has been implementing the Centrally Sponsored Scheme viz., 'Catalytic Development Programme' (CDP) in collaboration with the respective state sericulture departments. The CDP implemented in IX Plan period (1997-2002) was continued during X (2002-07) and XI (2007-12) Plan periods. It consisted of various components and sub-components for promotion of all varieties of silk in India. The CDP continued during X plan consisted of 40 components which included 12 additional components under "Additional Inputs" sanctioned during 2005-06 to accommodate the expanding programme of Bivoltine silk, Vanya silk and to induct new technologies. During XI Plan, the CDP was continued with certain additional components. Under the XI Plan a total 57 components were proposed to be implemented

through project mode approach in the form of packages under the three sectors viz. (i) Seed, (ii) Cocoon and (iii) Post-cocoon sectors supported by the Service sector in order to benefit all categories of beneficiaries like farmers, reelers and weavers. The details of components are given in **Annexure-1**. As the components under CDP were beneficial for both existing and new farmers for practicing sericulture, the state departments were to identify existing as well as new farmers and offer the components according to their requirements. Schemes/components under CDP were proposed to ensure forward and backward linkages between seed, cocoon and yarn production. The number of components under the various sectors under X and XI Plans were as below.

Table 1

Sl. No	Particulars	Number of components									
		Seed sector		Cocoon sector		Post cocoon Sector(for all types of silk)		Support services(common to all packages)		Others	
	Plan Period	X*	XI	X*	XI	X*	XI	X*	XI	X*	XI
1	Mulberry	1	4	12	10		-	-		-	
2	Tassar	2	4	3	3		-	-		-	
3	Eri	1	1	1	3		-	-		-	
4	Muga	2	2	2	1		-	-		-	
5	Silk Reeling& Spinning		-		-	8	15	-		-	
6	Silk weaving		-		-		2	-		-	
7	Wet processing		-		-		1	-		-	
8	Support services		-		-		-	6	10	-	
9	Corporate participation in sericulture		-		-		-	-		-	1
	Total	6	11	18	17	8	18	6**	10	-	1
Grand total		95									

* includes components of Additional Inputs

** No allocation was made for two components under support services. Hence not included in Additional Inputs

3.1.3 Objectives of the Catalytic Development Programme

The main objectives were

- Catalyze the efforts of states to increase production of raw silk including superior quality Bivoltine silk, exports and reduce import of raw silk.
- Facilitating linkages amongst stakeholders and strengthening the supply-chain for silk production

3.1.4 Organisation Set up

The CSB was headed by Member Secretary assisted by Directors, Joint Secretaries, Deputy Secretaries and Assistant Secretaries. At the state level, the Directors of Sericulture and implementing units were responsible for implementation of the programme.

3.1.5 Audit Objectives

Performance audit was taken up with a view to examine whether:

- planning of various components of the programme was effective and based on proper survey.
- allocation, release and utilization of the funds earmarked for each component was adequate.
- the implementation was in accordance with the prescribed guidelines in an efficient and effective manner.
- the programme resulted in development of high quality silk yarn.

3.1.6 Audit Criteria

The audit criteria used were with reference to the operational guidelines and targets prescribed for schemes.

3.1.7 Scope and Methodology

3.1.7.1 Scope and coverage of audit

The performance audit was conducted in nine states practising sericulture, based on the expenditure during 2004-09. In each state, based on expenditure, 25 *per cent* of districts were selected. Thus, performance audit was conducted in 48 districts. State-wise list of the selected districts is given in **Annexure-II**.

3.1.7.2 Audit Methodology

The performance audit was carried out between November 2009 and March 2010 by examining the documents in the CSB and in the departments of sericulture practising states for the period 2004-09. The performance audit commenced with an entry conference with the CSB in October 2009, wherein the audit methodology, scope, objective and criteria were explained. Exit conference was held with the CSB to discuss audit findings during May 2010.

Audit findings

The audit findings, conclusions and recommendations are discussed in subsequent paragraphs.

3.2 Planning of Catalytic Development Programme

CSB formulated the schemes for sanction by the Government of India (GOI) and released the central share of funds to states based on their proposals and monitored implementation and progress. GOI released funds as grant in aid under the head 'Development of Silk Industries under Plan/NE Plan Schemes and Projects'. In turn, CSB released funds to end beneficiaries through state Governments as assistance in the ratio prescribed under scheme guidelines. The share of CSB ranged from 25-50 *per cent* of unit cost in general states and 45-90 *per cent* in special status (north eastern) states. The share of CSB for support services was almost 100 *per cent*. Planning for the various components was reviewed in audit to assess their effectiveness. The sector wise financial targets and achievements of CDP during the years 2004-09 were as below:

Table 2

Sl. No.	Name of the Sector	Target and achievement during the period 2004-05 to 2008-09 (₹ in crore)		Percentage of achievement over the targets
		Target	Achievements	
A	Seed sector			
1	Mulberry*	5.04*	1.18	23.41
2	Tasar	12.46	11.87	95.26
3	Eri	1.45	2.00	137.93
4	Muga	8.74	8.61	98.51
B	Cocoon sector			
1	Mulberry	167.78	193.24	115.17
2	Tasar	6.66	6.94	104.20
3	Eri	7.62	36.98	485.30
4	Muga	7.64	8.16	106.80
C	Post cocoon sector	65.17	41.63	63.87
D	Support and extension services	8.28	9.73	117.51
E	Additional Inputs			
	Seed sector(Mulberry)	5.25	2.69	51.23
	Cocoon sector (Mulberry)	24.05	17.20	71.51
	Post- Cocoon sector	28.24	10.09	35.72
	Support and Extension services	19.45	2.83	14.55
Grand Total		367.83	353.15	

* Seed sector for Mulberry was introduced only in XI Plan. Hence, the figures are for the years 2007-09.

Audit scrutiny revealed that

- CDP did not provide for any expenditure for pre- project survey.
- There was mis-match in targets set for pre cocoon(seed and cocoon sector) and post cocoon sectors indicating deficiencies in planning for forward and backward linkages.
- The target of “Additional Input” component introduced mid way for the years 2005-06 and 2006-07 of the X Plan period was not achieved indicating deficient planning.

During exit conference, CSB stated that the mis-match between pre-cocoon and post-cocoon sectors was as per state proposals/requirements and added that the pre-cocoon sector required more assistance while post-cocoon sector had considerable private investment. The reply indicated that states/beneficiaries were not identified through grass root survey resulting in inadequate planning. Further, the reply was not consistent with CSB’s response to an audit query on short achievement in post cocoon sector wherein they had stated that the reelers were unable to avail of the assistance for the reeling units when the beneficiaries share was increased by GOI from ten *per cent* to fifty *per cent* during X plan indicating the need for CSB intervention.

3.2.1 Proposal for withdrawal of components after approval

Of the 57 components of CDP approved by GOI under XI plan period (2007-12) four components were proposed for withdrawal at the early stage of implementation as detailed below:

Table 3

Sl. No.	Sector/component	Scheme	Objective	Outlay (₹ in crore)		Remarks
				Total	CSB share	
1.	Corporate participation in sericulture	Scheme for Integrated sericulture project under the Corporate sector	To ensure large scale quality bivoltine production for meeting the demand of export oriented units and power looms.	89.45	35.78	The component was introduced to produce 80 M.T of international grade bivoltine raw silk. However, no allocation was made during the first two years (2007-09) of XI plan period. The project was proposed for withdrawal during 2009 due to poor response from the states.

Sl. No.	Sector/component	Scheme	Objective	Outlay (₹ in crore)		Remarks
				Total	CSB share	
2.	Support services	Emphasis on Tribal Areas	Building confidence, knowledge, information and skills to understand the activity concerned, creating cost effective and efficient mechanism by involving village based resource persons, providing door delivery of input/spare parts for processing machines etc	1.18	1.00	The component was implemented only in Mizoram for which ₹ 0.88 lakh was released but the same was proposed for withdrawal during 2009 citing poor response from the states.
3.	Post-Cocoon/ -Silk reeling and spinning	Support for setting up of certified dupion silk reeling units	To produce international grade dupion silk, by using sorted out defective cocoons (i.e. double, flimsy, Uzi affected, urinated, thin-end and melted cocoons).	2.00	1.15	Funds amounting to ₹19 lakh was released during 2007-09 to Andhra Pradesh, West Bengal, Madhya Pradesh, Maharashtra, Kerala, Tripura and Chhattisgarh. As against the target of 30 units (₹ 36 lakh) for 2007-09, 18 units (₹ 19 lakh) were established. The component was proposed for withdrawal during 2008-09 due to poor response from traditional sericulture states of Karnataka, Tamilnadu and Andhra Pradesh.
4.	-do-	Popularization of new slow-speed certified multi-end reeling machines.	To produce warp quality yarn and to facilitate production of bigger lots of high quality raw silk to meet the requirements of the power loom industry.	4.00	2.00	This was not implemented during 2007-09. CSB proposed withdrawal during 2008-09 due to poor response from traditional sericulture states of Karnataka, Tamilnadu and Andhra Pradesh.

CSB stated during exit conference that the schemes had not taken off due to lack of response from the stakeholders and hence the proposal for withdrawal. The reply indicated lack of proper survey before planning.

3.2.2 Improper planning leading to release of huge funds under Eri sector (Cocoon sector)

Keeping in view the steady progress made in this sector, an outlay of ₹ 26.43 crore towards support for Castor/Tapioca cultivators with start- up tools, augmentation of perennial Eri food plants with supply of start- up tools and construction of rearing houses was provided for during XI Plan period (2007-12) as against ₹ 16.60 crore incurred during X Plan. Out of ₹ 26.43 crore, ₹ 7.50 crore was earmarked for construction of 2081 rearing houses in the plan period. Of the above a sum of ₹ 1.20 crore was earmarked for construction of 300 rearing houses during the year 2007-08 and 2008-09.

It was, however, seen in audit that against the above target, CSB released ₹ 20.66 crore for construction of 5801 rearing houses during the year 2007-08 and 2008-09 to Eri practising states. The reasons for releasing such a huge sum in just two years against the allocated funds of ₹ 7.50 crore for the full plan period was not found on record. The other two components under this sector viz (i) support for Castor/Tapioca cultivators with start-up tools (half acre units) and (ii) augmentation of parental Eri food plants with supply of start-up tools got the least attention with only ₹ 2.78 crore released during 2007-08 and 2008-09 against the earmarked funds of ₹ 5.22 crore. Consequently, physical achievement of these two components was only 7046 units against the target of 32787 units.

CSB, stated (March 2010) that it was necessary to cover all Eri farmers with assistance for construction of Eri rearing houses as almost all Eri rearing had been conducted in the dwelling houses. It further stated that separate rearing houses with adequate space, sufficient ventilation and light would help farmers in getting good cocoon crops and hence the increased assistance during first two years of XI Plan. During exit conference also CSB stated that there was heavy demand from Eri practicing states during 2007-09 for rearing houses and funds, were therefore, diverted from other components with poor response. The reply established the fact of poor planning at the stage of framing target for XI Plan period which also resulted in under-achievement of targets in the remaining two components of the Eri sector.

3.2.3 Inclusion of women sericulturist under health insurance scheme (Support services)

During XI Plan period, Women Development component was introduced with the objective of providing health insurance to women workers in private and co-operative reeling units and grainages. The scheme covered healthcare facilities to the women worker including her family consisting of her spouse and two children.

It was seen in audit that out of the total 27 States (five traditional and 22 non-traditional), the CSB implemented this component in seven states (five traditional and two non-traditional) during the year 2008-09 by providing coverage to 26040 beneficiaries involving assistance of ₹ 1.67 crore. However, in February, 2009, the scheme was extended to all women sericulturists. Thereafter the physical and the financial coverage of the scheme during the year 2009-10 increased to 115800 beneficiaries and ₹ 7.27 crore against the target of 7250 beneficiaries and ₹ 58 lakh respectively.

The huge variation in target and achievement indicated non collection of validated data leading to poor planning.

Recommendation

- CSB and state Governments should fix targets on the basis of reliable data arising from grass root level survey.

3.3 Financial Management

3.3.1 Utilisation of funds

Allocation of funds and utilisation on CDP during the years 2004-05 to 2008-09 was as given below:

Table 4

(₹ in crore)			
(₹ in crore) Year	Budgeted allocation for CDP	Expenditure on CDP	Percentage of expenditure to allocation
2004-05	38.51	48.44	125.79
2005-06	42.28 ¹	68.56	162.15
2006-07	55.37 ²	64.59	116.65
2007-08	79.85	80.82	101.21
2008-09	113.21	90.74	80.15

The excess expenditure on CDP over allocation was met from the other grants received by CSB for development of silk industry. The increase in expenditure during 2005-06 was due to excess expenditure on assistance to construction of rearing houses in Mulberry and Eri sectors. There was a sharp decline in expenditure during 2008-09 due to non achievement of targets in components of seed sector and support services.

3.3.2 Surrender of funds for Additional Inputs under X plan

Under the X Plan period an additional outlay of ₹ 76.99 crore was sanctioned (March 2006) for 10 Additional Inputs³ to CDP to induct new technologies

¹ Includes grant of ₹. 9.62 crore received for Additional Inputs

² Includes grant of ₹. 28.76 crore received for Additional Inputs.

³ (i) support for construction of Vermi Compost Sheds, (ii) Supply of rearing appliances, (iii) setting up of Eri raw material bank, (iv) Post-cocoon sector, (v) Support for by-product

during 2005-06 and 2006-07. The CSB could, however, utilise only ₹ 23.40 crore up to November 2006 and the Ministry therefore re-examined the issue and restricted (January 2007) the amount to ₹ 38.38 crore. The details of expenditure for the period 2005-07 was as below.

Table 5

<i>(₹ in crore))</i>				
Sl. No	Name of the sector	Outlay	Expenditure	Percentage of Expenditure
1	Seed sector(Mulberry)	5.25	2.69	51.23
2	Cocoon sector (Mulberry)	24.05	17.20	71.51
3	Post- Cocoon sector	28.24	10.09	35.72
4	Support and Extension services	19.45	2.83	14.55

It could be seen from the above that the percentage of utilization ranged from 14.55 to 71.51 of funds received for implementation of components of “Additional Inputs”. Among the components, support for byc-product utilization was not implemented and other components such as supply of rearing appliances, post cocoon sector, I.T. initiatives, Silk Mark of India etc. were partially implemented.

Thus, partial/non implementation of the scheme components resulted in approval of surrender of ₹ 38.61 crore by Ministry of Textiles in January 2007.

The CSB replied (March 2010) that delay in approval of the scheme by GOI and non-release of funds to states for non-submission of utilisation certificates for previous releases resulted in partial implementation of the scheme. The reply indicated that the CSB was not ready with a full fledged action plan for implementation of components of Additional Inputs leading to drastic restriction on funds especially in post cocoon sector.

3.3.3 Incorrect/non-submission of Utilisation Certificates

As per General Financial Rules, utilisation certificates (UC) in respect of grants was to be submitted by the grantees to the Ministry.

Test check of records of state departments showed that there were instances of incorrect submission/ non-submission of UCs as detailed below.

utilisation, (vi) Vanya silk mark promotion cell, (vii) Drip irrigation, (viii) Assistance to private licensed silkworm seed producers, (ix) I.T. initiatives for future and on-line trading and (x) promotion of silk mark

Andhra Pradesh	For conducting a pilot project on Introduction of Eri culture by the Department of Sericulture, Andhra Pradesh, the CSB released ₹1.61 crore during 2003-04 to 2006-07. The department submitted UCs for the entire amount during July 2004 to December 2006. However, the project completion report received during July 2007 indicated unspent balance of ₹ 45 lakh which had not been surrendered till date. Thus, there was incorrect submission of UCs. The CSB replied that necessary steps would be taken for adjustment of unspent balance.
Uttar Pradesh	Though UC for ₹75 lakh was not submitted by the implementing units in three test checked districts of Uttar Pradesh (Varanasi, Saharanpur and Bahraich), the state Department, however, furnished UCs during 2005-06 and 2007-08 for the entire amount received resulting in incorrect submission of UCs

3.4 Implementation of Schemes

The deficiencies noticed in Audit in sector wise implementation of components were as under.

3.4.1 Seed sector

Silkworm seed plays a significant role in increasing productivity. Cost effectiveness of sericulture activities lies in increased productivity and higher returns. This was introduced as a specific component in XI Plan to be covered in the first three years itself instead of spreading over to the entire five years to facilitate production of required quantity of silkworm seed in time. The target and achievement under this sector for the year 2007-08 and 2008-09 of XI Plan period is given below.

Table 6

(₹ in crore)

Sl. No.	Sector	Target for XI plan	Target for 2007-08 & 2008-09	Target to be set for 2007-08 & 2008-09	Achievement for 2007-08 & 2008-09	Percentage of achievement w.r.t. column 4	Percentage achieved w.r.t column 5
1	2	3	4	5	6	7	8
1	Mulberry	11.56	5.04	7.71	1.18	23	15
2	Tasar	12.18	2.46	8.12	3.03	123	37
3	Eri	2.0	0.79	1.33	0.79	100	59
4	Muga	12.68	3.43	8.45	1.80	52	21

It may be seen from the above table that in none of the sectors the targets envisaged were achieved affecting the objectives stated above.

Audit scrutiny revealed that

- under Mulberry seed sector, achievement during 2007-09 was only 23 *per cent* of target fixed. Scrutiny further revealed that against the target of 150 units of grainages and seed testing facilities, only 39 units were assisted (26 *per cent*) despite the fact that CSB had to ensure that the seed was not deficient.
- the package under seed sector included components for seed production in the public / private sector and/or with public-private partnership. Of the 16 components of seed sector and one component under “Additional Inputs” implemented during 2004-09, there was non-implementation/partial implementation under four components as detailed below.

Table 7

Sl. No.	Type	Scheme	Physical (in numbers)		Remarks
			Target	Achievements	
1.	Additional Inputs (2005-07) Mulberry	Assistance to private licensed silkworm seed for production of Bivoltine disease free layings.	75 producers	161 producers	Though the achievement made was more than the target fixed, there were savings of ₹ 2.56 crore against allotment of ₹ 5.25 crore. In view of the savings, the target could have been increased. CSB, in its reply stated that delay in approval of the scheme by GOI coupled with non-release of funds to states for non-submission of UCs for earlier releases resulted in non-utilisation of funds.
2.	Mulberry	Support to establish large scale Bivoltine seed production grainages in public / private sector	02 units	---	CSB stated that non receipt of proposals from the states with sufficient information during 2007-09 was the reason for non implementation of the component with allotment of ₹ 1.20 crore.
3.	Muga	Assistance to Muga private grainages	277 units	150 units	Against allotment of ₹ 2.43 crore for the period 2007-09, an amount of ₹ 1.29 crore was utilised. CSB replied that the Assam state department could not spend the amount released during 2007-08 which affected subsequent fund flow, resulting in non achievement of target.

Sl. No.	Type	Scheme	Physical (in numbers)		Remarks
			Target	Achievements	
4.	Muga	Assistance to state department for strengthening of Muga seed multiplication infrastructure like grainage equipment.	07 units	04 Units	Against allotment of ₹ 1.00 crore for the period 2007-09, an amount of ₹ 51 lakh was only utilised. CSB replied that the Assam state department could not spend the amount released during 2007-08 which affected subsequent fund flow, resulting in non achievement of target.

So far as deficiencies in achievement in Mulberry seed sector are concerned, the CSB did not furnish specific replies.

3.4.2 Cocoon sector

The cocoon sector is oriented towards horizontal expansion through increased area under cultivation and vertical growth by increasing the production and productivity of cocoons both under Mulberry and Vanya silk sectors quantitatively and qualitatively. Under Mulberry, special emphasis had been made on Bivoltine. This sector consisted of components for food plant development, irrigation facilities, construction of rearing houses, supply of rearing equipments including improved mountages, supply of disinfectants to Bivoltine seed farmers, chawkie rearing centre with essential insurance coverage etc. Against allocation of ₹ 213.75 crore for the period 2004-09, an amount of ₹ 262.52 crore was released which constituted 122.82 *per cent* of total allocation of cocoon sector. Of the 32 components of cocoon sector and three components of 'Additional Inputs' implemented during 2004-09, deficiencies noticed in implementation of four components were as below.

3.4.2.1 Assistance for construction of Rearing Houses and supply of Rearing Appliances

During the X Plan, the component of construction of separate Rearing Houses to ensure hygienic conditions and to prevent contamination during silkworm rearing was introduced and was continued in XI Plan period. Under this component 50 *per cent* of the unit cost was provided as assistance for states under general category and 90 *per cent* for states under special category. This assistance was to be shared equally by the Centre (through CSB) and the concerned state Governments. The financial limit of the assistance was in the range of ₹ 15000 to ₹ 50000 for the rearing houses of areas ranging from 375-1000 sq ft under X Plan period. These limits were increased to the range of ₹ 25000 to ₹ 75000 in XI Plan period. The details of allocation and expenditure under the components of "Rearing Houses and Rearing Appliances" for 2004-09 were as below.

Table 8

Sl no	Name of Component	Physical (numbers)		Percentage of achievement	Financial (₹ in crore)		Percentage of achievement
		Target	Achievement		Target	achievement	
1	Rearing houses	35292	58893	166	89.19	100.65	113
2	Rearing Appliances	27400	33068	121	40.73	36.49	90

It could be seen from the above table that CSB incurred expenditure on the component of Rearing Houses in excess of the budgeted allocation. Audit scrutiny revealed that CSB had not devised suitable controls to ensure that the assistance was provided in accordance with prescribed guidelines. The deficiencies noticed in implementation were as detailed below.

(A) Karnataka:

As per guidelines, the assistance was restricted to Bivoltine silkworm rearing farmers and the farmer assisted would continue to rear Bivoltine silkworm for a minimum period of five years failing which, assistance would be recoverable as arrears of land revenue. The Department of sericulture was to ensure that the beneficiaries continued with production of Bivoltine silkworm cocoons.

Test check of records in selected districts revealed that 3772 beneficiaries availed assistance of ₹ 17.50 crore during 2004-09. Out of the above

- 1907 beneficiaries availing assistance of ₹ 8.25 crore had not taken up Bivoltine silkworm rearing in the succeeding years
- 528 beneficiaries availing assistance of ₹ 2.22 crore reared Bivoltine silkworm only for one year and
- 121 beneficiaries availing assistance of ₹ 46 lakh reared Bivoltine silkworm for two years after availing of assistance

However, no action was taken as per guidelines, either by CSB or by the state Department. This ultimately resulted in steady decline of share of Karnataka in the overall production of Bivoltine raw silk from 2004-05 as detailed below.

Table 9

(in M.T)

Year	All India	Karnataka	Percentage
2004-05	893	498	56
2005-06	971	396	41
2006-07	1100	358	33
2007-08	1175	401	34
2008-09	1250	374	30

Similar to the above component, 'Supply of Rearing Equipment' was applicable to states assisting Bivoltine cocoon production. Test check of

records of selected districts showed that ₹1.97 crore was released to 1273 beneficiaries during 2004-09. Of the above, 906 beneficiaries availing assistance of ₹1.43 crore discontinued Bivoltine production. However, no action was initiated either by CSB or by state department.

Thus, the basic objective of the component of producing high quality raw silk was defeated.

(B) Tamil Nadu:

Assistance of ₹ 6.12 crore for purchase of rearing equipment was provided to 2904 beneficiaries of seven test checked districts during 2004-09. Of these 356 beneficiaries after availing assistance of ₹60 lakh discontinued production of Bivoltine cocoons

(C) Andhra Pradesh:

Assistance of ₹ 21.68 crore for construction of rearing sheds was provided to 6038 beneficiaries of six test-checked districts during 2004-09. However, 1535 rearing sheds involving assistance of ₹ 3.10 crore remained incomplete rendering the assistance unfruitful.

(D) Chattisgarh:

Against the assistance of ₹ 56 lakh released during 2007-09 for construction of 50 Mulberry rearing houses, 13 Tasar private graineur units and two Eri rearing units, construction of only two Mulberry rearing houses and one Tasar private graineur unit was completed. The reason for non achievement of target was attributed to delay in opening bank accounts by beneficiaries.

3.4.2.2 Extension of assistance to Drip Irrigation

Assistance for Drip Irrigation was extended to farmers also in other departments like agriculture and horticulture. It was the responsibility of the state department to ensure that the identified beneficiary had not availed of assistance for the same component in other departments. To ensure the same, the beneficiary had to obtain a certificate from the other departments declaring that the beneficiary in question had not availed of the subsidy from them and enclose the same while submitting the proposals to the district/taluq level officers of the sericulture department to enable the state to submit the certificate to the CSB .

During the period of 2007-09, ₹ 15.65 crore being assistance for drip irrigation was extended to the states of Karnataka, Tamilnadu and Andhra Pradesh as detailed below.

Table 10

Sl. No.	Name of the State	Period	Area (in Hectares)	Assistance extended by CSB (₹ in crore)
1	Andhra Pradesh	2007-09	1656	4.14
2	Tamilnadu	2007-09	805	2.00
3	Karnataka	2007-09	3785	9.51
Total			6246	15.65

It was observed that the certificates required from the other departments were not found enclosed by the beneficiaries. The CSB released funds without insisting on the same. Therefore, availing of assistance by the beneficiary for the same component from other departments could not be ruled out.

The CSB stated that the states were constantly being pursued to furnish the certificates to CSB for further necessary action. However, release of funds when the certificates were not received was not as per guidelines.

3.4.2.3 Construction of Vermin compost sheds

Application of Vermin Culture technology in the recycling of sericultural waste had potential for transforming sericulture waste into nutrient rich manure. For the aforesaid objective, a component named “Support for construction of Vermin Compost Sheds” was included (March 2006) under “Additional Inputs” of CDP for implementation during the years 2005-06 and 2006-07. Provision of ₹ 1.05 crore for the construction of 1500 Vermin compost sheds was made. Against the same, 3552 sheds were constructed utilizing ₹ 1.86 crore. Test check of records of four selected districts in Karnataka showed that out of the 33 beneficiaries involving assistance of ₹ three lakh, 23 beneficiaries, after availing assistance of ₹ two lakh during 2005-07, discontinued production of vermin compost. Similarly, test check of records of six districts of Andhra Pradesh revealed that out of 406 Vermin compost units with the assistance of ₹27 lakh, 182 units involving assistance of ₹ 12.31 lakh were defunct. However, no action was taken either by the CSB or the state Department against the defaulting beneficiaries.

3.4.2.4 Extension of assistance in contravention of guidelines

Scrutiny of records of showed that assistance was extended to beneficiaries in contravention of the guidelines as discussed below

West Bengal CSB released assistance of ₹ 35 lakh during 2008-09 for rearing equipments for Bivoltine silkworm rearing. However, in view of production stagnating at 1-2 M.T. of Bivoltine raw silk during the years 2006-09 against the target of 10-25 M.T. assistance was not justified. CSB stated (March 2010) that funds were released as a special case. The reply was not in consonance with the actual achievement vis-à-vis target set.

Assam An amount of ₹32.40 lakh was released (July 2003) by CSB towards upgrading 12 state farms under the component 'Equipment up gradation of existing State /Parastatal/Co-operative infrastructure in seed and reeling' of Mulberry sector. As the units proposed for strengthening were in dilapidated condition, CSB accorded (June 2004) approval for utilization of entire amount for civil works though there was no provision for the same. CSB stated (March 2010) that the purpose of strengthening the units with equipments would not be served unless the buildings were repaired. The reply was not in line with scheme guidelines and CSB should have ensured the status of existing infrastructural facilities before release of the assistance for up-gradation of equipment.

3.4.2.5 Partial implementation of components

The following components were partially implemented during 2007-09 as detailed below.

Table 11

Sl. No.	Variety	Sector/Component	Target	Achievement	Remarks
1	Mulberry	Cocoon sector/ Providing assistance for training of lead farmers	40 lead farmers	6 lead farmers	Against allotment of ₹ 32 lakh for the period 2007-09, an amount of ₹ four lakh was only utilised. CSB stated that there was no demand for the component except in West Bengal and Maharashtra and that there were no identified lead farmers in North Eastern and non-traditional States.
2	Mulberry	Cocoon sector/ Door-to-door service agents for disinfection and inputs supply and assistance for sericulture polyclinics	26 numbers	7 numbers	Against allotment of ₹ 22 lakh for the period 2007-09, an amount of ₹ five lakh was only utilised. CSB stated that due to delay in approval of the scheme by GOI and also due to non receipt of proposals from both traditional and non traditional states, there was short fall in establishment of polyclinics.

Thus, the two important components of XI Plan intended for improving quality in cocoon sector activities were not given the needed attention.

3.4.3 Post-cocoon sector

The objectives of this sector related to value addition and to boost exports through quality up-gradation, technology absorption, productivity improvement and investment generation. Apart from the schemes of the X Plan, new components were also added in XI Plan to give thrust to the overall development of the post-cocoon sector. The post-cocoon sector related mainly to reeling. Against allocation of ₹ 93.41 crore including Additional Inputs for

the period 2004-09, an amount of ₹ 51.72 crore was incurred constituting 55.37 *per cent* of the total allocation for this sector. CSB replied (March 2010) that the drastic increase in the beneficiary share to 50 *per cent* for setting up Multiend reeling units in X Plan from 10 *per cent* in IX Plan, due to which the beneficiaries had to contribute nearly ₹ four lakh against assistance of ₹ 60,000 was the major reason for poor implementation. The reply further added that during XI Plan the share of CSB was again increased to 50 *per cent* and above for the components of post cocoon sector resulting in achievement of stated targets.

In the test-checked states, deficiencies noticed in implementation of the components were as below.

3.4.3.1 Interest subsidy on working capital loan

The component 'Interest subsidy on working capital loan' sanctioned by banks to reeling units reduced the interest burden of entrepreneurs. Based on the recommendations of the state Governments or banks, CSB was required to keep the amount of assistance in the fixed deposits and the interest earned thereon was to be credited to the working capital loan account of the unit/beneficiary after reviewing the performance of the unit on annual basis for a maximum period of five years as stipulated in the guidelines.

Audit observed that assistance of ₹3.68 crore in the form of fixed deposit was extended to 142 beneficiaries in the states of Karnataka, Andhra Pradesh, Tamilnadu, Jammu and Kashmir, Orissa, Uttar Pradesh, Uttarakhand, Madhya Pradesh, Punjab, Himachal Pradesh, Maharashtra and Chattisgarh during the period January 1999 to January 2007. Test check revealed that in 60 cases involving fixed deposit of ₹ 1.67 crore, interest subsidy was extended beyond the stipulated period of five years. The interest amount that should have been credited to CSB was not quantifiable in audit.

CSB stated that in anticipation for continuation of the scheme, the working capital subsidy was continued beyond five years. The reply is not in consonance with the scheme guidelines.

3.4.3.2 Support for establishment of Cottage basins

The component was implemented under X Plan and was continued in XI Plan with modifications. The objective of this component was to achieve better quality silk and improving working conditions as reeling took place in unhygienic conditions creating environmental pollution and health hazards.

During 2005-06, an amount of ₹ 1.53 crore for establishment of 250 units was allotted against which 122 units were established utilizing ₹ 75 lakh in both traditional and non-traditional states. During 2007-09, an amount of ₹ 69 lakh (against ₹ 1.40 crore allotted) was incurred for establishing 47 units against 100 units. Though guidelines did not prohibit release of funds to the traditional states, the component was not implemented in traditional states like

Karnataka, Tamilnadu etc., despite proposals received from them in 2007-09 as the Apex Monitoring Committee did not recommend release of funds.

CSB stated (March 2010) that it was decided not to implement in the traditional states in view of the thrust being provided to bivoltine production. This view was also endorsed by the CSB during exit conference. The reply is not in consonance with guidelines and led to inadequate implementation and avoidable savings.

3.4.3.3 Extension of assistance in contravention of guidelines

Scrutiny of records of showed that assistance was extended to beneficiaries in contravention of the guidelines as discussed below:

Assam	CSB released ₹ 12 lakh as assistance for 6 units of improved cottage basin in 2007-08. Audit scrutiny revealed that the Department of Sericulture procured (October 2009) 36 improved country charka for ₹ 13 lakh against assistance for improved cottage basin reeling units amounting to diversion.
North Eastern States	The objective was to provide assistance to state Governments to set up facilities like market yard, storage, silk exchange, hot air drying facilities etc. The project proposal received from the North Eastern States did not furnish requisite details and purpose envisaged in the component. However, pending receipt of detailed proposals, funds of ₹ 49.50 lakh was released during 2007-08 to Assam, Arunachal Pradesh, Mizoram, Nagaland and Tripura. Further, physical and financial progress on quarterly basis was also not submitted by the states for the amount released (March 2010). CSB stated (March 2010) that the matter was being pursued with the concerned states. The fact remained that funds were released in contravention of prescribed guidelines.

3.4.3.4 Partial implementation of components

Review of the implementation of the components of post-cocoon activities showed that five sub-components of post cocoon sector were partially implemented indicating deficiencies in achievement of backward and forward linkages between pre and post cocoon sectors. The details were as below.

Table 12

Sl. No.	Scheme	Target (Units)	Achievement (Units)	Remarks
1.	Establishment of Automatic Reeling Machines under "Additional Inputs" under X plan	6	3	Against allotment of ₹ three crore for establishment of six units, three units were only established the states of Andhra Pradesh (1) and Tamilnadu (2) utilizing ₹ 1.50 crore. CSB stated that delay in financial approval in 2005-07 led to less achievement.
2.	Hot Air Dryers – Electrical / Multifuel / Ushnakoti(50 kg/day) under "Additional Inputs" under X plan	500	118	This component was meant for Northern and North-Eastern States. In addition to two North Eastern States (Mizoram & Nagaland) and two Northern State (J&K and Himachal Pradesh), the component was also taken up in the States of Tamilnadu (₹ 15 lakh), Andhra Pradesh (₹ one lakh) Karnataka (₹ five lakh) and Maharashtra (₹ four lakh) in contravention of the scheme guidelines. Against allotment of ₹2.29 crore for 500 units, ₹1.48 crore was utilized for establishing 118 units by the end of 2006-07. CSB attributed the reason for partial implementation to late receipt of approval of funds in the year 2005-07.
3.	Scheme to dissuade child labour through use of improved technologies under "Additional Inputs" under X plan	2250	54	During 2005-07, the component was implemented only in Karnataka, Tamilnadu and Maharashtra utilising ₹8.52 lakh against allotment of ₹2.72 crore. CSB replied that delay in financial approval was the reason for poor progress.
4	Setting up of Common Facility Centre (CFC) for Vanya silk yarn processing linked to mechanized spun silk system Under "Additional Inputs" under X plan	4 mills and 7 CFC	2	Against the allotment of ₹ 10.06 crore for establishing four mills and seven CFCs during the year 2005-06 and 2006-07, the CSB utilized only ₹ 2.25 crore for establishing two spun silk mill units in Andhra Pradesh and Assam. CSB attributed delay in receipt of financial approval in 2006-07 as reason for partial achievement of the component.
5	Establishment of pupae oil extraction production and by-product utilization units under silk reeling and spinning sector under XI plan	02	-	Against the allotment of ₹ 21 lakh for establishing two pupae oil extraction production and by-product utilization units (2007-09), no unit was established. CSB stated that the component was not implemented due to lack of response from the entrepreneurs.

3.4.4 Support Service Sector

The components under this sector supplemented programmes common to seed sector, cocoon sector and post cocoon sector. Against allocation of ₹ 27.73 crore for the period 2004-09, an amount of ₹ 12.56 crore was incurred constituting 45.29 *per cent* of the total allocation for this sector. Out of the 16 components under this sector implemented during 2004-09, there was

non/partial implementation under five components which resulted in non achievement of stated objectives as detailed below.

Table 13

Sl. No.	Scheme	Objective	Target (₹ in crore)	Achievement (₹ in crore)	Remarks
1.	Assistance towards studies /consultation/ Surveys / Monitoring / Supervision / Evaluation etc.,	To focus on the effectiveness of the projects and identify the constraints/ bottlenecks in the implementation process	1.75	-	No proposals were received from states
2.	Assistance to NGOs/SHGs and agencies other than Board and State departments for meeting administrative expenditure towards project implementation	To organize farmers for activities like technology absorption, narrowing the gap between lab to land, acting as trouble shooters at the field level at proper time	1.00	0.10	The component was implemented in Karnataka and Kerala despite the guidelines stating that preference should be given to non-traditional states.
3.	Project design and development - generic promotion of Indian silk / sericulture including exhibitions, buyer-seller meets etc.,	Quality up-gradation, investment generation, technology absorption, and employment generation	0.14	0.11	The component was implemented in Assam and Karnataka during 2008-09 as against 15 states to be covered.
4	IT initiatives for futures and online trading under "Additional Inputs".	To promote on-line trading for cocoons and raw silk to bring in the concept of quality based pricing	7.50	0.35	For non-achievement of targets, CSB stated (March 2010) that existing state laws wherein licenses were required for any trading activity in silk were big hindrance for the smooth implementation of the scheme.
5	Vanya marketing promotion cell under "Additional Inputs".	To develop marketable designs and products through R&D, market survey etc	3.05	0.86	Against allocation of ₹3.05 crore, GOI released ₹1.50 crore to the Board during 2006-07. While ₹ 86 lakh was utilized for promotional activities, balance amount was proposed for utilization during 2007-08. However, the un-utilised funds were re-appropriated for other components "Additional Inputs".

Audit scrutiny further revealed that during 2007-09 under the component 'Beneficiary Training Programme' against the allotment of ₹ 41 lakh, CSB released ₹ 2.32 crore to nine states. It was seen that no detailed progress reports indicating the requisite details like number of training programmes/exposure visits organized, location, duration, list of farmers/stake holders trained, programme-wise expenditure etc were received from the states by CSB. Scrutiny also revealed that Assam which received ₹ one crore could utilise only ₹ 16 lakh for the component and diverted ₹ 84 lakh for other sectors. However, the entire amount of ₹ one crore was shown under the component in the progress report of CSB.

Recommendations

- *A suitable mechanism should be devised to ensure that assistance extended to the beneficiaries is utilised in accordance with the scheme guidelines.*
- *CSB should ensure implementation of all components envisaged for comprehensive development of sericulture and silk industry.*

3.5 Monitoring and Evaluation

Monitoring of financial and physical progress was important to ensure that resources provided were utilized for the intended purposes. As per X plan, Programme Approval Monitoring Committees (PAMC) should have been constituted by each state during 2002 to oversee the implementation of the programme. However, Chhattisgarh constituted the Committee in 2003-04 while Karnataka, Madhya Pradesh and Tamilnadu constituted the same in March 2004. The CSB however released the funds without insisting constitution of PAMC.

Apex Monitoring Committee (AMC) at CSB along with Project Monitoring Committees (PMC), at state level was to be constituted at the beginning of commencement of XI plan with the responsibility to recommend proposals to the Ministry of Textiles for release of funds, and to issue directions and guidelines to PMCs. The Committee was required to meet once in a quarter to review implementation of the CDP. The AMC was, however, constituted only during February 2008 and met once during 2007-08 and three times during 2008-09 as against the stipulated four meetings per year. So far as PMCs were concerned, Uttar Pradesh constituted the same in March 2009 after delay of 10 months.

The AMC and PMCs were not effective in monitoring implementation of certain components under seed, cocoon and post cocoon sectors leading to deficiencies as detailed above.

3.6 Impact of Catalytic Development Programme

The objective of CDP was to focus on complete and holistic development of silk industry involving states and beneficiaries for sustainability and improvement in output of silk in terms of quality and quantity. Keeping in view the importance of production of higher grade raw silk especially bivoltine raw silk, special emphasis had been made to improve the production and productivity of Bivoltine cocoons. The overall production details of raw silk were as below.

Table 14

(Quantities in MT)

Year	Mulberry (Bivoltine)	Muga	Tasar	Eri	Total
2004-05	14620 (893)	110	322	1448	16500
2005-06	15445 (971)	110	308	1442	17305
2006-07	16525 (1100)	115	350	1485	18475
2007-08	16245 (1175)	117	428	1530	18320
2008-09	15610 (1250)	119	603	2038	18370

During the review period, overall production had not shown any substantial increase. In respect of Bivoltine production, it was observed that against the target ranging from 1100 M.T in 2004-05 to 2380 M.T. in 2008-09, actual production decreased from 81 per cent (2004-05) to 53 per cent (2008-09) of target set indicating poor impact of CDP on production of high quality silk yarn.

From the table below, it could, further, be seen that in respect of traditional states except, Tamilnadu, in other major silk producing states mainly, Karnataka and Andhra Pradesh production of Bivoltine raw silk yarn was declining. In Jammu & Kashmir, there was no substantial increase in the production while in West Bengal production was negligible.

Table 15

(Quantities in MT)

Year	Traditional States									
	Karnataka		Tamilnadu		Andhra Pradesh		Jammu & Kashmir		West Bengal	
	T	A	T	A	T	A	T	A	T	A
2004-05	600	498	60	59	250	150	85	90	1	1
2005-06	700	396	60	176	250	177	100	95	2	1
2006-07	650	358	190	296	450	193	100	102	10	1
2007-08	800	401	300	322	408	150	103	105	15	2
2008-09	950	374	430	377	440	130	106	102	25	1

T Target A Achievement

3.6.1 Import and Export

Details of import of raw silk is given below.

Table 16

(Quantities in MT)

Year	Imports (in quantity)	Value (₹ in crore)
2004-05	7948	607.21
2005-06	8383	NA
2006-07	5565	673.37
2007-08	7922	734.44
2008-09	8369	900.63

It may be seen from the above that only in the year 2006-07, import decreased and there after showed an increasing trend. So far as exports were concerned during the period under review, the value of export of silk yarn and finished products increased from ₹ 2880 crore in 2004-05 to ₹ 3338 crore in 2006-07. However, in 2007-08 and 2008-09 it decreased to ₹ 2727 crore and ₹ 3166 crore respectively.

It is evident that despite implementation of CDP at a cost of ₹ 353.15 crore during the years 2004-05 to 2008-09, the import of raw silk increased gradually while exports registered a declining trend. Thus, the basic objective of CDP of increasing exports and decreasing imports of silk was not met.

3.7 Conclusion

Implementation of CDP depended on preparation of realistic plans and achievable targets which were location specific based on credible survey. A number of approved components were either not implemented or partially implemented which indicated that planning was made without feed back from the grass root level.

Weaknesses in financial management such as unrealistic allocation of funds, non-utilization of funds, incorrect submission of utilisation certificates, release of funds in contravention of guidelines and mis-match of expenditure between cocoon and post-cocoon sectors were noticed. Existing monitoring mechanism was not effective as there was significant shortfall in achievement of targets in respect of various components of post-cocoon sector. Also the basic objective of CDP to catalyze the efforts of states to increase production of raw silk including superior quality bivoltine silk with the motive of decrease in import and increase of export of silk was not achieved.

Acknowledgement

We thank the management of the CSB and State departments for extending their cooperation and support during the course of audit.

The matter was reported to the Ministry in June 2010; their reply was awaited as of July 2010.

Annexure-I
(Referred to in paragraph 3.1.2)
Components under X plan

	Mulberry Sector
1.	Support for raising nurseries of high yielding Mulberry varieties
2.	On-Farm training and start-up tools to new Mulberry sericulturists
3.	Rearing appliances and farm equipment to farmers (for Bivoltine silkworm rearing)
4.	Assistance for installation of drip Irrigation system
5.	Support to use of quality disinfectants
6.	Assistance to farmers for construction of rearing houses.
7.	Chawkie rearing centres – Assistance to quality service clubs / Non-Government Organisations/Self-Help Groups for construction of chawkie rearing building and procurement of chawkie rearing equipment.
8.	Crop insurance support – Mulberry
9.	Support for upgrading equipment in existing state /parastatal / co-operative owned seed production and reeling Units
	Tasar Sector
10.	Assistance for raising and maintaining systematic plantations of Tasar / Oak Tasar food plants
11.	Assistance for maintenance of Tasar / Oak Tasar seed multiplication infrastructure in states.
12.	Support for setting up of Tasar grainages by private graineurs.
13.	Support to Tasar commercial rearers for procuring rearing equipment
14.	Crop insurance support – Tasar
	Eri Sector
15.	Support for raising Eri food plants, training and start-up tools
16.	Assistance to states for strengthening of Eri farm-cum-grainages
	Muga Sector
17.	Assistance for raising of systematic plantation of Muga food plants and maintenance of plantation by Muga seed rearers.
18.	Support for strengthening Muga seed multiplication infrastructure in states.
19.	Support to Muga private graineurs
20.	Crop insurance support – Muga
	Post Cocoon Sector
21.	Support for Setting up multiend silk reeling units
22.	Support to silk reeling units
23.	Assistance to quality service clubs for procurement of cocoon quality grading and raw silk testing equipment
24.	Providing services of master reelers / weavers / dyers to State Governments / NGOs / Co-op.Societies / SHGs
25.	Installation of Common Facility Centres (CFCs)
26.	Quality linked price support for cocoons and silk Yarn
27.	Support to agencies (NGOs / Co-operative Societies) for upgradation and popularisation of improved reeling / spinning devices
28.	Support Services

	Components under Additional Inputs sanctioned in 2005-06
1	Support for construction of Vermi-Compost Sheds
2	Supply of rearing appliances-improved montages
3	Setting up of Eri Raw Material Bank
4	Post Cocoon sector
5	Support for bye product utilization
6	Vanya Silk Market Promotion Cell
7	Drip irrigation
8	Assistance to private Licensed Silkworm Seed producers
9	IT Initiatives for Futures and On-line Trading
10	Promotion of Silk Mark

Components under XI plan

Sl. No	Name of the package/Sector	Details of components
1	Package for Seed sector	<p>Mulberry:</p> <ul style="list-style-type: none"> • Support for upgrading existing Seed/grainage Units under Mulberry Sector. • Support to establish large scale Bivoltine seed production grainages in public /private Sector. • Assistance for seed testing facilities in public/private grainages (for quality seed production). • Assistance for mulberry silkworm seed production units (support to get ISO / BIS quality seed certification for silkworm seed units) P1 Grainages and P2 Grainages. <p><u>Vanya:</u></p> <p>Tasar:</p> <ul style="list-style-type: none"> • Assistance to private Tasar graineurs • Assistance to strengthening of Tasar seed multiplication infrastructure • Assistance for strengthening of seed Multiplication/Infrastructure for Oak Tasar in the State • Assistance to seed rearers <p>Eri:</p> <ul style="list-style-type: none"> • Assistance to state departments for strengthening of existing Eri farm cum grainages including assistance to seed rearer cum private graineurs <p>Muga:</p> <ul style="list-style-type: none"> • Assistance to Muga private graineurs • Assistance to state departments for strengthening of Muga seed multiplication infrastructure

Sl. No	Name of the package/Sector	Details of components
2	Package for Cocoon Sector	<p>Mulberry:</p> <ul style="list-style-type: none"> • Support for Mulberry plantation development • Assistance for irrigation and other water conservation and usage techniques • Supply of rearing appliances (including improved mountages)/farm equipments to farmers) - for Bivoltine sericulture farmers • Supply of quality disinfecting materials and other crop protection measures for Bivoltine seed farmers • Assistance for construction of rearing houses - Models of ₹150,000/-, ₹1,00,000/- & ₹ 50,000/- • Assistance for maintenance of Chawki gardens, construction of Chawki Rearing Centre (CRC) buildings and procurement of Chawki Rearing equipments • Insurance support (for all sectors) • Setting up of production units for biological inputs (inoculants, biological control agents etc.) • Assistance for farmers training • Door to door service agents for disinfection and inputs supply & assistance for sericulture poly-clinics <p><u>Vanya:</u></p> <p>Tasar:</p> <ul style="list-style-type: none"> • Support to rearers for augmentation of Tasar host plantation. • Assistance for raising and maintenance of systematic plantation of Oak Tasar. • Assistance for construction of cocoon storage houses in Tasar sector. <p>Eri:</p> <ul style="list-style-type: none"> • Support for Castor/Tapioca cultivators with Start-up tools • Augmentation of perennial Eri food plants with supply of start-up tools • Construction of rearing houses. <p>Muga:</p> <ul style="list-style-type: none"> • Raising of nursery of Muga food plants/augmentation of Muga plantations with supply of farming tools / assistance to Muga silkworm rearers & seed rearers

Sl. No	Name of the package/Sector	Details of components
3	Package for Post Cocoon Sector	<p>Silk Reeling & Spinning:</p> <ul style="list-style-type: none"> • Popularization of new slow-speed, (Twenty-end per Basin) certified Multi-end Reeling Machines (18 basins - equivalent to 360 ends) • Support for establishment of certified (10 ends per Basin) multi-end Reeling Machines:(10 & 20 Basins) • Establishment of automatic/semi automatic Reeling Units (imported) • Support for establishment of improved cottage basin Reeling Units • Support for existing Charkha reeling units to dissuade child labour (motorized charkhas) • Support for setting up of certified dupion silk Reeling Units (10 KG. / 20 KG. - prorate basis) • Support for hot air driers- electrical / multi-fuel/ushnakotis for Reeling Units (50 kg. & 100 kg. cap) • Assistance for twisting units • Support for establishment of pupae oil extraction production and bye - product utilisation units • Incentive for production of Bivoltine silk • Quality linked price support system for Cocoons and raw silk - for State Govts. / Co-operatives/ NGOs / SHGs • Establishment of Cocoon Banks / Market Support to Vanya Sector - RMBs for Tasar, Oak Tasar, Eri & Muga • Providing services of Master Reelers/Weavers/ Dyers to reeling/weaving/dyeing Units - through/for State Governments/NGOs/ Coop Soc./SHGs • Support for Vanya reeling/Spinning sector <p>a) Spinning b) Reeling-cum-Twisting</p> <ul style="list-style-type: none"> • Support for establishment of Spun /Spinning Mills <p>Silk Weaving:</p> <ul style="list-style-type: none"> • Support for establishing shuttle-less looms (each unit with 8 looms and 1 sectional warping machine) • Support for Handloom Sector for Loom Up-gradation <ol style="list-style-type: none"> 1. Support for Certified Handlooms specially designed for silk [Parallel beat-up / Swing beat-up, Negative let off, 5 - Wheel take up, Separate cloth ruler along with Jacquard (240 hooks)] 2. Loom Up-gradation through Jacquards (or Dobby / Pneumatic lifting mechanism / Ball to beam conversion device etc.) 3. Computer Aided Textile Designing (CATD) <p>Wet Processing:</p> <ul style="list-style-type: none"> • Support for setting up of Common Facility Centre for yarn dyeing / Fabric processing : <ol style="list-style-type: none"> 1. Yarn Dyeing : 25 Kg. capacity 2. Yarn Dyeing : 50 Kg. capacity 3. Arm Dyeing : 50 kg. capacity 4. Fabric Processing Facilities.

Sl. No	Name of the package/Sector	Details of components
4	Support Service Sector	<ul style="list-style-type: none">• Product design and development• Vanya Silk Market Promotion Cell• Entrepreneurship and Management Development Programme• Beneficiary empowerment programme• Publicity for the sector• Assistance towards studies/consultancies/surveys/monitoring/ evaluation etc.• Assistance to NGOs / SHGs and other agencies for meeting administrative expenditure towards project implementation.• Cluster Development Projects to support SGSY / SFURTI and similar other projects.• Women Development Components (New component)• Emphasis on Tribal Areas (New component)
5	Corporate participation in sericulture	<ul style="list-style-type: none">• Scheme for integrated sericulture project under the corporate sector

Annexure II

(Referred to in paragraph 3.1.7.1)

Selected States and Districts

Name of State	District Selected	
	No.	Name
Tripura	1	West Tripura
Chattisgarh	3	Raigarh, Kobra, Ambikapur
Uttar Pradesh	5	Varanasi, Sonbhadra, Saharanpur, Kanpur, Bahraich
Tamil Nadu	7	Coimbatore, Dharmapuri, Erode, Krishnagiri, Namakkal, Salem, Thiruvannamalai
Andhra Pradesh	6	Ananthpur, Chittoor, Kurnool, Prakasam, Guntur, Kadappa
Assam	7	Cachar, Goalpara Kamrup, Kokrajhar, Nagan, North Lakhimpur, Sibsagar
Madhya Pradesh	6	Balghat, Betul, Harda, Hoshangabad, Narasingapura, Vidhisa
Karnataka	8	Bangalore(Urban),Banglore(Rural), Tumkur, Kolar, Mysore, Mandya, Hassan & Belgaum
Jammu & Kashmir	5	Anantnag, Baramullah, Khatua, Rajouri, Udhampur

GLOSSARY

Bivoltine	Cocoons built by a silkworm race with two generations (life cycles) in a year
Charka (silk)	A simple hand operated indigenous crude contrivance for reeling raw silk.
Cocoon (silk)	The silken shell spun by the silkworm larvae that serve as protective covering to the insect during its pupa stage of existence
Mountages	Used to support silkworm for spinning cocoons
Raw silk	The silk reeled by drawing together the required number of filaments from the cocoons and contains its original gum or sericin.
Rearer	persons engaged in rearing silkworms for production of silkworm cocoons whether for reproduction or reeling
Reeler	A person in charge of reeling establishment carrying on the business of reeling cocoons
Silkworms	Silkworms" are not actually worms but are caterpillars. These are the caterpillars of the silk moth
Silkworm seed	Silkworm seed or seed means all kinds of silkworm seeds produced from silkworm races including the hybrids produced from two or more pure races, silkworm seed cocoons of all kinds and moths thereof intended to be used or reared for the purpose of or for commercial exploitation