



**Manual of Catalytic Development Program**

**Introduction**





## CHAPTER I

# INTRODUCTION

### Preamble

**S**ericulture 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
<b>Total</b>	<b>889.00</b>	<b>426.87</b>	<b>536.49</b>	<b>1,852.36</b>

## 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
	<b>Total</b>	<b>205.16</b>	<b>291.00</b>	<b>200.00</b>	<b>109.32</b>	<b>83.52</b>	<b>889.00</b>

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.

