CHAPTER 11

SERICULTURE

India continues to be the Second largest producer of silk in the World. Sericulture is an important labour-intensive and agro-based cottage industry, providing gainful occupation to around 6.3 million persons in rural and semi-urban areas in India. Of these, a sizeable number of workers belong to the economically weaker sections of society. There is substantial involvement of women in this Industry.

Central Silk Board (CSB) is a statutory body, under the administrative control of the Ministry of Textiles, Govt. of India. Established in 1948, by an Act of Parliament, the CSB has been entrusted with the overall responsibility of developing silk industry covering the full gamut of sericulture activities in the country from development of food plants to silk cocoons for production of silk yarn including formation of policies governing Import & Export of silk. CSB is basically an R&D Organization. One of the important activities of the CSB is undertaking, assisting and encouraging scientific, technological and economic research in the Silk Sector. The programmes for the development of the sericulture and silk textiles industry are primarily formulated and implemented by the State Sericulture/ Textile Departments. However, the CSB supplements the efforts of the States by providing necessary support for research and development, extension and training through its countrywide network of centres. Besides, the CSB organize production and supply of quality silkworm seeds, mulberry cuttings/saplings, etc., and also implements various sericulture projects directly, as well as jointly, with the State Sericulture Departments. Also, CSB collects and compiles sericultural statistics both at National and Global level.

Under National Silkworm Seed Organization (NSSO) a network of 18 Basic Seed Farms (BSF) produce and supply the basic seed for production of commercial silkworm seed in the seed production centres functioning under CSB and State Departments. 20 Silkworm Seed Production Centres (SSPCs) are functioning under NSSO in different States to support the industry. Emphasis was given towards production of quality Disease Free Layings (DFLs) by adopting Quality Management System in seed production under ISO 9001:2000 certifications in eight SSPCs.

On the tasar side, the CSB has established 21 Basic Seed Multiplication & Training Centres (BSM&TC) and one Central Tasar Silkworm Seed Station (CTSSS) for supply of tropical tasar basic seed & 1 oak tasar grainage and 3 RECCum-BSM&TCs for supply of oak tasar basic seed. Under muga sector, 8 Basic Seed Farms and 1 Silkworm Seed Production Centre are functioning. For production and supply of eri seed, CSB has established 5 Silkworm Seed Production Centres.

The CSB is responsible to monitor, collect, compile and analyze the production statistics obtained from respective source i.e., Department of Sericulture and Allied Offices of the State Govt. (all the silk producing states of the country) to arrive at National Statistics pertaining to the Sericulture sector. For monitoring, collection, compilation and analyzing of Sericulture production statistics, CSB has developed and installed a web based application software, in Sericulture Management Information System (SMIS) which facilitated all the states for on-line updating of production returns on quarterly basis and submit the same to CSB in time.

The Japan International Cooperation Agency (JICA) and the Central Silk Board (CSB) have jointly worked in technical cooperation in the area of development and popularization of Bivoltine Sericulture Technology suited to Indian agro-climatic conditions for past fifteen years. In this cooperative endeavour, a good number of bivoltine silkworm breeds have been developed along with a comprehensive Bivoltine Sericulture Technology package and suitable model for Extension, Seed production system besides, generating welltrained manpower for sustained development of Bivoltine silk in the country. The success of the JICA Projects encouraged the farmers, reelers and the Sericultural organizations for taking up largescale promotion of bivoltine silk mainly in 3 Southern States.

Raw silk is of two kinds, viz., mulberry and non-mulberry. The distinction arises from the rearing of silk worms either upon mulberry leaves or on other plants. Mulberry silk is produced mainly in Karnataka, West Bengal, Jammu & Kashmir, Tamil Nadu and Andhra Pradesh although some other States have made some progress in this direction under their development plans. Non-mulberry silk comprising Tasar, Eri and Muga are produced in Assam, Bihar, Chattishgarh, Jharkhand, Madhya Pradesh, Orissa, Manipur and West Bengal. The different types of non-mulberry silk and spun silk and noil yarn are further defined as follows:

Tasar Silk – It is silk reeled from cocoons of silkworms belonging to saturniidae family, which are fed on leaves of oak, asan and arjuna trees. Tasar silk is mainly produced in Jarhkhand, Bihar, Chattishgarh, Madhya Pradesh, Orissa and West Bengal & Andhra Pradesh.

Eri Silk – It is spun from cocoons of silkworms belonging to saturniidae family, which are fed on castor leaves. Eri yarn is produced in Assam, Bihar, Manipur, Meghalaya, Nagaland and West Bengal. Unlike other kind of silk, this cannot be reeled and hence it is only spun. It has natural copperish colour.

Muga Silk - It is silk produced only in Assam from cocoons of silk worms belonging to saturniidae family, which are fed on Som and Soalu leaves. It has a rich golden colour.

Spun Silk Yarn - Yarn composed of silk filaments of lengths ranging from 1 to 8 inches produced by bleaching, dressing and spinning the silk waste which is the by-product of the raw silk reeling industry.

Noil Yarn – It is short-staple residue obtained during dressing operations in silk spinning from silk waste. It is a by-product of spun silk industry. This can be spun into Noil yarn of coarse counts.

The information /data pertaining to silk sectors cover all the states of the country. Periodicity and source of Sericulture Data are given below:

Sl.No	Particulars	Periodicity of Data	Source
1	Production	Monthly/Quarterly/ Annual	Department of Sericulture (States) & Allied offices of respective silk producing state.
2	Exports/Imports	Monthly/ Annual	DGCI&S, Kolkata
3	Prices	Daily/Monthly/ Quarterly/ Annual	Cocoon Market/ Silk Exchanges & Allied offices of respective silk producing state.

Highlights:

- Among the four varieties of silk produced during 2009-10, Mulberry accounts for 83.2% (16315 MT), Eri 12.6% (2460 MT), Tasar 3.7% (720 MT) and Muga 0.5% (105 MT) of the total raw silk production in the country.
- Among the two varieties of silk yarn produced during 2009-10, Spun silk yarn accounts for 66.5% (525 MT) and Noil yarn 33.5% (265 MT) of the total silk yarn production in the country.
- The export value of silk goods and silk waste increased from ₹2421.98 crore in 2000-01 to ₹3178.19 crore in 2008-09. The export value of mulberry silk goods enhanced from ₹2141.01 crore in 2000-01 to ₹2907.92 crore in 2008-09, whereas, the export value of tasar silk goods increased from ₹115.23 crore in 2000-01 to ₹208.67 crore in 2008-09. In contrast to above trend, the export value of mixed blended silk goods decreased from ₹105.26 crore in 2000-01 to ₹21.29 crore in 2008-09.
- The export value of raw silk & silk yarn increased from ₹14.99 crore in 2000-01 to ₹35.08 crore in 2008-09, whereas, the export value of silk waste decreased from ₹45.49 crore in 2000-01 to ₹5.23 crore in 2008-09.
- The export value of Mulberry silk goods registered 14.77 % growth in 2008-09 over 2007-08, whereas, the export values of raw silk & silk yarn and silk waste registered negative growth of 22.70% and 56.95% respectively in 2008-09 over 2007-08.

This chapter contains the following tables:

- **Tables 11.1:** presents year-wise production of raw silk and silk yarn since 2000-01 and state-wise production of raw silk and silk yarn during 2009-10.
- **Table 11.2:** presents certified export of silk goods and silk waste since 2000-01 and percentage growth of certified export of silk goods and silk waste in 2008-09 over 2007-08.