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SERICULTURE SHIFTING TO BIVOLTINE

Demand for the bivoltine hybrid is growing because of its ability to withstand high temperature and humidity.



Silk worms on mulberry leaves

In India, a large labour force is dependent on the agricultural sector. There is a need for diversification of this vital sector to ensure value addition, and enhance employment potential in downstream activities like mulberry garden management, leaf harvesting and silkworm rearing.

Mulberry sericulture is a land-based activity having good potential for generating productive employ-

ment. It has several advantages such as labour-intensive nature, low capital investment, short gestation and good market. Women and even the aged can be employed in this sector. Mulberry sericulture in one acre can, with related activities, provide employment to five persons throughout the year. The industry employs about 6 million people in various sericulture activities. Women constitute over 60 per cent of the total employees.

Nature and scope

Sericulture includes activities like mulberry farming, silkworm rearing, reeling, twisting, dyeing and weaving. Rural women have been engaged in this activity since time immemorial. In spite of technological advancement, sericulture can be taken up on an intensive scale for generating potential income and year-round employment.

All the four known types of silk, viz, mulberry, eri, mugs and tasar, are produced in India. Mulberry silk is the most popular variety, contributing more than 87 per cent of the country's silk production. Export potential of this sector is also promising.

Mulberry is grown mainly in five states, viz, Karnataka, Andhra Pradesh, Tamil Nadu, West Bengal and Jammu & Kashmir. These five states account for 97 per cent of the total area under mulberry cultivation and 95 per cent of raw silk production.

Sericulture suits both marginal and small farmers because of the requirement of low investments, high assured returns, rich opportunities for enhancing income and creation of timely employment round the year.

India, the world's second largest producer of silk, has recently converted to bivoltine or temperate sericulture, which is widely practised in countries like China, Japan and

Thailand. Bulk of the silk output in India is from the multi-voltine variety, which is capable of producing several generations in a season. The Natural Silkworm Seed Organisation (NSSO) and other agencies are keen on increasing the output of 'Jayalakshmi'—a crossbred variety created by mating a bivoltine and a multi-voltine.

The Central Silk Board is stepping up production of a variety of cocoons suited for the March-June summer months as demand for the bivoltine hybrid is growing because of its ability to withstand high temperature and humidity. The NSSO supplements the efforts of state governments in supplying high-quality silkworm seeds to farmers. Depending on the availability of mulberry, one can raise as many as three crops of cocoons during the summer months.

Raw silk production in India increased from 15,214 tonnes in 1999-2000 to 18,475 tonnes in 2006-07. In comparison, China's production in 2006-07 was 130,000 tonnes. Mulberry raw silk output increased from 13,944 tonnes in 1999-2000 to 16,525 tonnes in 2006-07.

Exports and imports

India exports silk items such as readymade garments, natural silk yarn, fabrics, scarves/stoles and carpets. The US is a major market for Indian silk items, accounting for about 22 per cent of the export kitty,



Silk yarn

Production of Raw Silk in India

Year	Mulberry	Tasar	Eri	Muga	Total
1999-2000	13,944	211	974	85	15,214
2000-01	14,432	237	1,089	99	15,857
2001-02	15,842	249	1,160	100	17,351
2002-03	14,617	284	1,316	102	16,319
2003-04	13,970	315	1,352	105	15,742
2004-05	14,620	322	1,448	110	16,500
2005-06	15,445	308	1,442	110	17,305
2006-07	16,525	350	1,485	115	18,475

followed by the UK, the UAE, Italy and Germany.

India imported raw silk worth Rs 2183.31 million in 1997-98. This increased to Rs 4732.61 million in 2000-01, and to Rs 6374.3 million in 2004-05. In 2006-07, it stood at Rs 6733.7 million.

Some problems

The second phase of trade reforms in India adversely affected the Indian handloom industry. Between 2000 and 2005, the average annual growth rate of handloom production was a negative -6.99 per cent. Sericulture and handloom silk have suffered greatly. There is threat from import of cheap Chinese silk yarn and fabric. In 1999-2000, the government allowed duty-free imports of Chinese plain-crepe fabric. In 2001, India also abolished its quantitative restrictions on silk imports on demand from the WTO.

In some states like Karnataka, which accounts for 70 per cent of silk production, there has been diversion of land under sericulture to other uses, especially when there is a prolonged spell of drought. The drought forces rearers to look for alternate crops like horticulture.

Future course

The Silk Board wants to boost acreage in non-traditional areas no-

tably in Maharashtra, Uttaranchal and other northern states. Higher acreage and improvement in productivity can help to meet targets.

There is a real threat from China. In order to protect the interests of our weavers and silkworm rearers, the commerce ministry, in December 2008, extended the antidumping duty (ADD) on Chinese silk yarn for another spell of four years, effective January 1, 2009. The reference price has also been changed and is placed at \$37.32 per metre against the prevailing level of \$27.92 per metre.

Sources said there was a need to change the reference rate given the currency movement. The ADD is aimed at preventing import of inferior varieties of Chinese raw silk and levied as differential duty payable if the price of imported Chinese raw silk falls below the rate of \$37.32. The measure is meant to curb import of inferior variety of silk.

The government can also seek the help of voluntary agencies. These can contribute significantly by organising supply of inputs such as suitable mulberry varieties, fertilisers and pesticides. They can also initiate sericulture service centres and mobilise government resources for the benefit of farmers.

The author is a regular contributor to FFY