

Constraints in sericulture enterprise

V. SURIYANARAYANAN AND G. TAMILSELVI*

Department of Agricultural Extension, Faculty of Agriculture, Annamalai University,
ANNAMALAI NAGAR (T.N.) INDIA

ABSTRACT

Sericulture is a viable cottage industry catering to the economically small and marginal families and hence this enterprise is well accepted as an instrument for rural development. The present study was carried out in Dharmapuri district of Tamil Nadu with 120 sericulturists to assess the constraints encountered by them in sericulture. The major constraints experienced by the respondents in mulberry cultivation were high labour cost, labour scarcity, inadequate water supply during summer, pest and disease attack, non-availability of FYM and lack of awareness about application of bio-fertilizer. Non-availability of skilled labourers, lack of awareness on maintenance and regulation of room temperature, aeration and sunlight and lack of knowledge about disinfectants were the major constraints expressed by the respondent in silkworm rearing. The constraints experienced by respondents in marketing of cocoons were fluctuation in market price, distant location of market, more expenditure on transport and delayed payment from buyers.

Key words : Sericulture, Mulberry cultivation, Silkworm rearing, Constraints.

INTRODUCTION

Sericulture plays a predominant role in shaping the economic destiny of the rural poor. As an agro-based cottage industry, sericulture fits very well in India's rural structure, where agriculture continues to be the main occupation. The pursuit of sericulture offers gainful subsidiary employment to the rural poor. It is not only labour intensive but also an income levelling industry and plays a unique role in transferring wealth from richer sections of the society to the poor. It rightly fits in to the socio-economic structure of the rural areas and can serve as an effective tool for rural reconstruction benefiting the weaker sections of the society. The most important consideration is the effective utilization of family labour.

For the countries like India, with farming base, high population and small holdings, sericulture is a boon and tailor-made enterprise. Because of its small initial investment, short gestation period, labour intensiveness and high domestic demand, this could be properly exploited for rural development since sericulture has both on farm and non-farm activities and also decentralised for bringing a desired socio-economic change, at village level. This provides ample opportunity for increased employability of human resource.

MATERIALS AND METHODS

The present study was conducted in Dharmapuri District of Tamil Nadu as the District has nearly 18, 700 farmers who are engaged in sericulture activities and it

constitute first rank in the production of cocoons (3900 metric tonnes) among the districts of Tamil Nadu. Two blocks Pennagaram and Dharmapuri were chosen based on the maximum population of sericulturists. In both of these blocks, three villages each were selected again considering the maximum population criteria. A sample of 120 sericulturists was selected by following the proportionate random sampling procedure. The possible constraints were identified in consultation with sericulturists of non-sample area, functionaries of State Department of Sericulture and based on available literature. The respondents were asked to mention the constraints they experienced in mulberry cultivation, silkworm rearing and marketing of cocoons. Based on the frequency, the constraints were ranked and interpreted.

RESULTS AND DISCUSSION

Constraints in mulberry cultivation :

'High labour cost' and labour scarcity' were the constraints experienced by majority of the respondents (95.00 per cent and 93.33 per cent) (Table 1). Harvesting of mulberry leaves is a labour intensive operation and require frequent and more number of harvest. At present labour scarcity is a common problem due to their diversified employment opportunities. Eventhough they are available, they have to be paid with higher wages and hence majority of the respondents reported those as major constraints.

* Author for correspondence.

Table 1 : Constraints faced by respondents in mulberry cultivation

S.No.	Constraints	Number of respondents	Per cent*	Rank
1.	Lack of awareness about suitable varieties	26	21.66	VII
2.	Lack of awareness about application of bio – fertilizer	61	50.83	VI
3.	Non – availability of Farm Yard Manure	69	57.50	V
4.	Inadequate water supply during summer	110	91.66	III
5.	Pest and disease attack	102	85.00	IV
6.	High labour cost	114	95.00	I
7.	Labour scarcity	112	93.33	II

* Multiple responses

The third constraint experienced by 91.66 per cent of the respondents was 'inadequate water supply during summer'. During summer, the water level would go down and hence the availability of water for irrigation would be limited. Therefore, the farmers can not undertake cultivation of mulberry in larger area. This may be the reason for the above reported constraint. This finding is in conformity with the findings of Mathaiya (1997).

Pest and disease attack', was the constraint reported by 85.00 per cent of the respondents. Leaf eating caterpillars and stem borers are the major pest in mulberry causing reduction of yield. Hence, the above said constraint was reported. This finding is in line with findings of Ramkumar (1997) and Mishra (2001).

'Non-availability of Farm Yard Manure' was the constraint faced by 57.50 per cent of the respondents. This may be due to be fact that most of the farmers are not rearing cattles nowadays. Thus lead to reduction in cattle population in turn limiting the availability of FYM. Half the proportion of the respondents (50.83 per cent) reported a constraint viz., 'lack of awareness about application of bio-fertilizers'. Though bio-fertilizers are introduced long back, their usage is not wide spread due to lack of visual impact and hence awareness could not be made. 'Lack of awareness about suitable varieties' in mulberry was the constraint faced by 21.66 per cent of the respondents.

Constraints faced by respondents in silkworm rearing:

Majority of the respondents were facing the constraints of 'Non-availability of skilled labourers' (91.66 per cent), 'Lack of awareness on maintenance and regulation of the room temperature, aeration and sunlight' (88.33 per cent) and 'Lack of knowledge about disinfectants' (75.00 per cent) (Table 2).

Rearing of silkworms requires skill in various steps like cutting of mulberry leaves, feeding, changing of beds, maintenance of temperature and aeration and maintenance of hygienic environment. All these operations can be carried out properly only when the labourers are skilled and trained. The labourers can learn skills only after some years of their experience and training. Maintenance of optimum temperature, aeration and sunlight is very important for producing quality cocoons. Many of the respondents could not do it because of lack of awareness.

The disinfectant larvae should be culled out from the beds then and there so as to prevent the infection to other larvae. But majority of the farmers were not having adequate knowledge on the identification of disinfectants and hence lead to more infection.

Constraints faced by the respondents in marketing of cocoons :

First and foremost constraint experienced by more than seventy per cent of the farmers (73.33 per cent)

Table 2 : Constraints faced by respondents in silkworm rearing

S.No.	Constraints	Number of respondents	Per cent*	Rank
1.	Lack of knowledge about disinfectants	90	75.00	III
2.	Lack of awareness about maintenance and regulation of the room temperature, aeration and sunlight	106	88.33	II
3.	Non – availability of skilled labourers	110	91.66	I

* Multiple responses

Table 3 : Constraints faced by the respondents in marketing of cocoons

S.No.	Constraints	Number of respondents	Per cent*	Rank
1.	Distant location of market	42	40.00	II
2.	Fluctuation in market price	88	73.33	I
3.	Delayed payment from buyers	35	29.16	IV
4.	More expenditure on transport	45	37.50	III

* multiple responses

was 'fluctuation in market price'. The market price for cocoons is decided mainly based on the quality of cocoons. The poor quality cocoons may be produced due to various reasons such as improper feeding schedules, disinfectant larvae, maintenance of irregular room temperature etc. Only lower prices will be paid for poor quality cocoons and hence there may be fluctuation in market prices (Table 3).

The second and third constraints faced by 40.00 and 37.50 per cent of the respondents were 'distant location of market' and 'more expenditure on transport'. The respondents have to take their products to market centres for marketing. Some villages are far away from market centres and the farmers felt the difficulty to take their products to market.

As market centres are located in distant places, they faced the constraint of transport. Few respondents had the mode of transport on their own. But many of them depended only on hiring vehicles like, van, tempos and buses, for that they have to spend more money. Delayed payments from buyers was the constraint faced only by 30.00 per cent of respondents. As the marketing is mainly undertaken by government, sometimes there may be a delayed repayment from buyers.

The major constraints experienced by the respondents in mulberry cultivation were high labour cost, labour scarcity, inadequate water supply during summer, pest and disease attack, non-availability of FYM and lack of awareness about application of bio-fertilizer. Non-availability of skilled labourers, lack of awareness on maintenance and regulation of room temperature, aeration and sunlight and lack of knowledge about disinfectants were the major constraints expressed by the respondent

in silkworm rearing. The constraints experienced by respondents in marketing of cocoons were fluctuation in market price, distant location of market, more expenditure on transport and delayed payment from buyers.

In order to overcome the constraints of labour scarcity and high labour cost, it is necessary to utilise the labour saving implements and machinery to do the farm operations in mulberry cultivation. Hence awareness should be created on the availability and use of labour saving implements. Mass awareness campaigns may be organised to popularise the application of the biofertilizers. The State Department of Sericulture and other functionaries should conduct periodical training programmes and demonstrate the required skills regarding all the latest technologies in sericulture. The Government should arrange for the credit facilities through banks at lowest interest rates so as to encourage the emerging entrepreneurs in sericulture.

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