

## Constraints faced by farmers in adoption of sericulture production technology

■ S.B. Todmal, P.G. Khalache, J.H. Gaikwad and R.M. Jadhav<sup>1</sup>

Department of Extension Education, Mahatma Phule Krishi Vidyapeeth, Rahuri, AHMEDNAGAR (M.S.) INDIA

<sup>1</sup>College of Biotechnology, LONI (M.S.) INDIA

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### ABSTRACT

In Ahmednagar district, 65 sericulture villages were selected where the sericulture farming is exercised. This study was carried out in Ahmednagar district of Maharashtra. In all, 65 villages from 13 tahsils with maximum area under sericulture and production were selected for the study purpose and sample of 160 respondents was selected from the selected sixty five villages of Ahmednagar district. The constraint faced were shortage of irrigation water, lack of labours, insufficiency of capital high cost of chemical fertilizer, lack of knowledge about of bio-fertilizers, lack of information about application of VAM, lack of information about concentration of the bed disinfectant and rearing house disinfectant, whereas suggestions were fertilizers should be provided at subsidized rates, chemical fertilizers and other required chemicals should be made timely available, knowledge should be providing regarding use of bio-fertilizer and VAM, in time credits at lower interest rates should be provided.

## INTRODUCTION

The word 'Sericulture' is derived from the Greek word *i.e.* 'Sericos' which means 'silk' and the English word *i.e.* 'culture' which means 'rearing'. It is a multidisciplinary programme. It involves the cultivation of mulberry to produce leaf, rearing of silkworm to convert leaf to cocoon, reeling of the cocoon to obtain silk yarn and waving to convert yarn to fabrics. Silk is a natural fibre where two independent fibroins called brins are completely covered with sericin. Since the independence, India has witnessed manifold increase in the area and production of mulberry silk due to introduction of improved varieties of mulberry and improved breeds of silkworm. There has been tremendous increase in the silk production in last five decades due to introduction of improved sericulture practices but still there exists a gap between what has been achieved and what could have been achieved. This gap might be due to limitations in the dissemination of improved practices by the extension workers and non-adoption of recommended package of sericulture practices by the sericulturists. Silk occupies a supreme position in the field of natural fibres since it has

high export value and used for manufacturing of many luxurious products like Saree, Silk carpets, Kurta, Salwar, interior decoration materials etc.

### Objective:

– To study the constraints faced by sericulturists in adoption of sericulture production technology.

## METHODS

This study was carried out in Ahmednagar district of Maharashtra. All fourteen tahsil were purposively selected. From these, one tahsil Kopergaon was not included because of more irrigated area, the farmers from this tahsil have not adopted the sericulture production technology. In all, 65 villages from 13 tahsils with maximum area under sericulture and production were selected for the study purpose and sample of 160 respondents was selected from the selected sixty five villages of Ahmednagar district for studying the impact of sericulture production technology on the socio-biography of the sericulturists.

## OBSERVATIONS AND ANALYSIS

The findings of the study are presented in Table 1 and results were discussed accordingly.

### Supply constraints:

Majority (98.12 %) of the respondent sericulturists faced constraints regarding shortage of irrigation water, lack of labours (90.62 %), timely unavailability of fertilizers and other chemicals (68.75 %), insufficient FYM at the disposal (56.25 %), lack of improved variety of mulberry, planting material (23.12 %) and trustworthy DFL sources (21.87 %).

### Economic constraints:

Most of the respondent sericulturists faced constraints related to the insufficiency of capital (48.75 %), high cost of planting material (16.25 %), high cost of FYM (18.75 %), high

labour charges (68.75 %), high cost of chemical fertilizers (84.37 %), unavailability of loans from banks in time (38.75 %) and high initial establishment cost of sericulture unit (75.00 %). Only few of them faced the problems related high transportation charges (17.50 %).

### Technical constraints:

The respondent sericulturists were facing the constraints regarding lack of knowledge about of bio-fertilizers (97.50 %), lack of information about application of VAM (96.87 %), lack of information about concentration of the bed disinfectant and rearing house disinfectant (95.00 %). They were also facing the constraints *viz.*, lack of information about Uzifly control (91.87 %), lack of knowledge about disease control in mulberry (59.37 %) plants and lack of information about crossbred races of silkworm (51.25 %). Only few respondent sericulturists faced problems related to the lack of technical information about

**Table 1 : Distribution of the sericulturists by their constraints in adoption of selected sericulture production technologies**

Sr. No.	Constraints	Respondents (n=160)	
		Frequency	Percentage
<b>Supply constraints</b>			
1.	Lack of improved variety of mulberry	37	23.12
2.	Shortage of irrigation water	157	98.12
3.	Scarcity of labourers	145	90.62
4.	Timely unavailability of fertilizers and other chemicals	110	68.75
5.	Insufficient FYM at disposal	90	56.25
6.	Lack of trustworthy DFL sources	35	21.87
<b>Economic constraints</b>			
1.	Insufficient capital	78	48.75
2.	High cost of planting material	26	16.25
3.	High cost of FYM	30	18.75
4.	High labour charges	110	68.75
5.	High cost of chemical fertilizers	135	84.37
6.	Unavailability of loans from banks	62	38.75
7.	High transportation charges	78	48.75
8.	High initial establishment cost	120	75.00
<b>Technical constraints</b>			
1.	Lack of technical information about selection of mulberry variety	18	11.25
2.	Lack of knowledge regarding planting method	17	10.62
3.	Lack of knowledge about of bio-fertilizers	156	97.50
4.	Lack of information about application of VAM	155	96.87
5.	Lack of information about crossbred races of silkworm	82	51.25
6.	Lack of information about concentration of the disinfectant	152	95.00
7.	Lack of information about Uzifly control	147	91.87
8.	Lack of knowledge about disease control in mulberry	95	59.37
<b>Marketing constraints</b>			
1.	Markets are far away from sericulture units	60	37.50
2.	Lack of information about market prices	80	50.00
3.	High transportation cost	78	48.75

selection of mulberry variety (11.25 %) and lack of knowledge regarding planting method (10.62 %).

#### Marketing constraints :

In the present investigation, it was observed that majority of the respondent sericulturists faced the problems related to the lack of information about market prices (50.00 %), high transportation cost (48.75 %) and markets far away from sericulture units (37.50 %). Philip and Qadri (2004), Dar *et al.* (2009) and Patil (2010) have also made studies on constraints and management practices silkworm rearing, respectively.

#### Conclusion:

The constraints faced were shortage of irrigation water, lack of labours, insufficiency of capital, high cost of chemical fertilizer, lack of knowledge about of bio-fertilizers, lack of information about application of VAM, lack of information about concentration of the bed disinfectant and rearing house disinfectant, whereas suggestions were like fertilizers should

be provided at subsidized rates, chemical fertilizers and other required chemicals should be made timely available, knowledge should be providing regarding use of bio-fertilizer and VAM and in time credits at lower interest rates should be provided.

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