

ORIGINAL ARTICLE

Constraints faced by the women silkworm rearers of District Baramulla of North Kashmir in adoption of sericulture

Ishtiyahq Ahmad Bhat *, Ravinder Kumar Sharma, M.R. Mir, I.L.Khan¹.

College of Temperate Sericulture Skuast-K Mirgund

Post Box No. 674, GPO Srinagar: 19001. India

¹Faculty of Agriculture Skuast-K Wadoora.

*Corresponding Author E-mail: ishtiyahqbhat12@gmail.com

ABSTRACT

The present study is an attempt to evaluate and analyze the constraints faced by women silkworm rearers of district Baramulla of north Kashmir during 2021-22, a total of 120 women silkworm rearers were selected from the five sericulture zones of district Baramulla. Results of study indicated that lack of soil testing facilities, non-availability of scientific cocoon driers are the main constraint faced by all the respondents, knowledge about different components of mulberry cultivation as per package of practices as one of the major constrain faced by 97.50 per cent, 93.33 per cent of the families are facing lack of non-availability of improved mulberry varieties, non-availability of improved silkworm hybrid in local area. Whereas non-availability of rearing kits, non-availability of improved rearing house/space for rearing faced by 81.67 per cent, 76.67 per cent of rearers had lack of plant protection equipments, 100 per cent of the respondents are facing constraints of wide gap between production and marketing of final produce, 96.66 per cent are facing volatility of price, 100 per cent have no provision of Insurance facilities, non-availability of finance and Complicated loan procedure. Considering above facts 100 per cent of the respondents suggested that there is requirement of disease resistant races/hybrids, need for scientific cocoon dryers and need of disease monitoring team, 93.33 per cent suggested need of female extension workers, 88.33 per cent suggested requirement of latest rearing equipments and 86.67 per cent suggested need of skill oriented training programmes for women silkworm rearers etc.

Key Words: Knowledge, Non-availability, Constraints, Women, silkworm, Baramulla.

Received 20.01.2023

Revised 17.02.2023

Accepted 17.04.2023

INTRODUCTION

Sericulture, the practice of rearing silkworms for the production of silk, has been an important economic activity in Jammu and Kashmir for centuries. The region is known for its high-quality silk products, which are famous for their intricate designs and vibrant colors. Sericulture has also played a significant role in the cultural and traditional heritage of the region. Despite facing several challenges, the industry has survived and continues to thrive, providing employment opportunities and contributing to the region's economy. According to Bhat and Ganie [2], the sericulture industry in Jammu and Kashmir has a long history and has been an important source of income for the local people. The industry provides employment opportunities to a large number of people, especially in the rural areas. Sericulture in Jammu and Kashmir is subsidiary source of income which is praiced by about 27000 families in the region [1]. The industry has also led to the development of several small-scale and cottage industries such as spinning, weaving, and dyeing, which have contributed to the region's economic growth [3]. Silk production in Jammu and Kashmir is not just an economic activity but also a cultural and traditional practice. Silk weaving and embroidery are integral parts of the region's handicraft industry, and silk products such as shawls, sarees, and carpets have been a part of the region's culture for centuries. These silk products are highly valued for their quality, designs, and colors, which have earned them a worldwide reputation [7]. Despite the industry's significance, it faces several challenges, such as inadequate infrastructure, limited research and development, lack of access to credit, and competition from synthetic fabrics [8]. In recent years, the government of Jammu and Kashmir has taken several initiatives to promote sericulture in the region. These initiatives include the introduction of new varieties of mulberry plants suitable for the local climate and soil conditions, setting up silk worm rearing centers, and

providing training and technical support to farmers to help them adopt modern methods and techniques of silk production [1].

MATERIAL AND METHODS

The study was conducted in district baramulla of north Kashmir to find out the constraints faced by sericulture farmers in adoption of recommended sericulture technologies. A total of 120 farmers from 5 sericulture zones over the entire barmulla district viz Pattan, Tangmarg, Sopore, Uri and Baramulla were selected using proportionate allocation method. Primary data were collected using well structured and pretested interview schedule by personal interview. Frequency, percentage and rank were used as statistical measures to analyze the data.

RESULTS AND DISCUSSION

Constraints faced by women Silkworm rearers in adoption of sericulture production technologies are tabulated in table 1 and are discussed below:

Table: 1. Rank wise distribution of respondents according to the constraints faced in practicing sericulture practices (N=120)

S.No.	Type of Constraints	Frequency	Percentage	Rank
A	Production constraints			
1	Lack of Soil testing facilities	120	100.00	I
2	Non-Availability of scientific cocoon driers	120	100.00	I
3	Non-Availability of improved mulberry varieties	112	93.33	II
4	Non-Availability of improved silkworm hybrid in local area.	112	93.33	II
5	Non-Availability of rearing kits	98	81.67	III
6	Non-Availability of improved rearing house / space for rearing	98	81.67	III
7	Lack of plant protection equipments	92	76.67	IV
8	Non-Availability of land for mulberry cultivation	40	33.33	V
9	Irrigation facilities	35	29.17	VI
10	Untimely availability of disinfectants	00	00.00	VII
B	Technical Constraints			
1	Knowledge about different components of mulberry cultivation as per package of practices.	117	97.50	I
2	Awareness about pre and post disinfection practices.	63	52.50	II
3	Awareness about feeding schedule	47	39.17	III
4	Skills required for practices of silkworm rearing	43	35.83	IV
5	Awareness about leaf quality	38	31.67	V
C	Marketing Constraints			
1	Gap between production and marketing of final produce	120	100.00	I
2	Volatility of price	116	96.66	II
3	Non-Availability of marketing channels near by	95	79.16	III
4	Number of cocoon buyers / purchasers	90	75.00	IV
5	Delay in payment	60	50.00	V
6	Middleman exploitation	00	00.00	VI
7	Availability of support price	00	00.00	VI
D	Economic Constraint			
1	Non-Availability of finance	120	100.00	I
2	No provision of Insurance facilities	120	100.00	I
3	Complicated loan procedure	120	100.00	I
4	High charge of labour for collecting leaf	76	63.33	II
5	High cost of leaf	00	00.00	III
6	High interest rates on loan	00	00.00	III
E	Social Constraint			
1	Support from N.G. O's	120	100.00	I
2	Support from neighbour's	85	70.83	II
3	Support from relatives	75	62.50	III
4	Support from family members	13	10.83	IV

Production constraints

Among the production constraints, the major constraints were related to soil testing facilities and scientific cocoon driers (rank I) as cocoon driers are very costly and none of the rearers of selected area had access to the Govt. installed cocoon driers. Also, majority of the respondents faced constraints regarding non-availability of improve mulberry varieties and silkworm hybrids(rank II), non-availability of rearing kits and improved rearing house/space for rearing rank III, lack of plant protection equipments and non-availability of land for mulberry cultivation figured at rank IV and V respectively. Availability of irrigation facilities ranked at VI. The reason for this might be the subsidiary nature of sericulture in the region. The findings are supported by Todmal *et al.* (2013) and Dar *et al.* [3].

Technical constraints

The women silkworm rearers were facing constraints regarding lack of knowledge about different components of mulberry cultivation (rank I) due to poor exposure to sources of information. The constraints *viz.* lack of awareness about disinfection, lack of awareness about feeding schedule, skill required for practices of silkworm rearing, awareness about leaf quality got rank II, III, IV and V respectively which could be due to lack of female extension workers in the field. The women feel shy to interact with male extension workers. These findings are in harmony with the results of Mir [6] and Srinivasa *et al.* (1998).

Marketing Constraints

The respondents showed dismay about marketing facilities and amongst them gap between production and marketing of final produce, volatility of price, non-availability of marketing channels nearby, number of cocoon purchasers, delay in payment exhibited I-V ranks in that order. Data recorded from the respondents showed that marketing poses grave concerns in sericulture and needs to be dealt with appropriately.

Dar *et al.* [3] and Dhane & Dhane [4] have also identified marketing constraints in sericulture.

Economic constraints

Regarding economic constraints, it was found, that all the respondents are facing the problems of insurance support to crop loss due to diseases or sometimes due to poor quality seed provided to the rearers by the government, non availability of finance for infrastructure development and complicated loan procedure got I rank. Also, high charge of labour for collection of leaf to carry out sericulture activities ranked II. The findings are in conformity with the findings of Mir [6] and Dar *et al.* [3].

Social constraints

It was observed respondents do not receive any support from NGOs due to their non availability (rank I) in the area. A good percentage of respondents are also facing constraints *viz.* support from neighbours and relatives hence figured at rank II and III respectively. The findings are supported by Mir (2013).

Table-2: Suggestions of the respondents regarding sericulture technology [N=120]

S. No.	Suggestions	Frequency	Percentage	Rank
1	Need for scientific cocoon dryers	120	100.00	I
2	Requirement of disease resistant races/ hybrids	120	100.00	I
3	Need of disease monitoring team	120	100.00	I
4	Need of female extension workers	112	93.33	II
5	Requirement of latest rearing equipments	106	88.33	III
6	Skill oriented training programmes for women silkworm rearers.	104	86.67	IV
7	Awareness about latest sericulture technology.	98	81.67	V
8	Need of separate rearing house	96	80.00	VI
9	Need of timely marketing and payments	60	50.00	VII
10	Information about marketing of cocoons.	42	35.00	VIII

Suggestions can help to overcome the constraints for great extent. Majority of the respondents opined, availability of disease resistant races, scientific cocoon dryers, disease monitoring by experts, timely marketing, latest rearing equipment's skill-oriented training programmes for silkworm rearers, female extension workers and information about marketing of cocoons. It was observed from Table-2, that Cent per cent of the respondents suggested that there is requirement of disease resistant races/ hybrids, need for scientific cocoon dryer and need of disease monitoring team stands at rank I, followed by 93.33 per cent suggested need of female extension workers, 88.33 per cent suggested requirement of latest rearing equipments, 86.67 per cent suggested need of skill oriented training programmes for women silkworm rearers got II, III, IV ranks respectively. The awareness about latest sericulture technology suggested by 81.67 per cent stand at rank V and need of separate rearing house suggested by 80.00 per cent stands at

rank VI. However, the least ranked suggestions are need of timely marketing and payments as suggested by 50.00 per cent and only 35.00 per cent rearers suggested that there is need of information about marketing of cocoons thus ranked VII and VIII respectively.

CONCLUSION

The study revealed that women silkworm rearers in the investigated area were facing numerous challenges, including insufficient rearing space, lack of disease management strategies, limited access to finance for infrastructure development, and inadequate support from government and NGOs. These challenges have led to low cocoon production and returns, making it difficult for women to adopt sericulture as a viable livelihood option.

To overcome these challenges, there is a need for increasing awareness about the latest know-how about disease-resistant races/hybrids and the latest rearing equipment. Women silkworm rearers also require access to separate rearing houses, timely marketing and skill-oriented training programs to improve their knowledge and adoption level. The government should provide insurance support/compensation and finance for infrastructure development to support the growth of the sericulture industry in the region.

Despite facing challenges, sericulture has been an integral part of the economy, culture and tradition of Jammu and Kashmir. It provides employment opportunities and contributes to the region's economic growth. The government and local communities should continue to work together to promote sericulture and ensure that the traditional art of silk production thrives in the region.

REFERENCES

1. Anonymous, (2022). Jammu and Kashmir Govt an Economic Survey. A report by PD&MD, J&K 2022-23.
2. Bhat, B. A., &Ganie, S. A. (2012). Status and potential of sericulture in Jammu and Kashmir state of India. *Asian Journal of Agricultural Research*, 6(1), 1-8.
3. Dar, H. U., Farhat, I. Q. S., Munshi, N. A., Tantray, A. M. and Shiekh, N. D. (2009). Constraints of silkworm rearers in Kashmir valley for adoption of rearing technologies. *Indian Journal of Sericulture*, 48(1): 96-99.
4. Dhane V P, Dhane A V (2004). Constraints faced by the farmers in mulberry cultivation and silkworm rearing. *Indian Journal of Sericulture* 43: 155-15
5. Dar, A. H., &Reshi, Z. A. (2013). Sericulture in Jammu and Kashmir: A Review. *Journal of Agriculture and Veterinary Science*, 2(2), 20-23.
6. Mir, M. A. 2013. Studies on the impact of adoption of sericulture technologies on cocoon production and productivity in Kashmir. Ph. D Thesis, Sher-e-Kashmir University of Agricultural Sciences & Technology Kashmir pp. 26-53.
7. Nazir, N. (2016). Silk Weaving in Kashmir: An Overview. *Journal of Advances in Humanities and Social Sciences*, 2(1), 43-47.
8. Shyam, S. S. (2007). Sericulture in India. New Delhi: APH Publishing Corporation.
9. Srinivasa, G., Doddagadad, C.B., Jayaram, H. and Geetha Devi, R.G. 1998. Technological practices of sericulturists in non-traditional region of Karnataka. *Indian journal of sericulture*. 37(1): 57-60.
10. Todmal, S. B., Khalache, P. G., Gaikwad, J. H. and Jadhav, R. M. 2013. Constraints faced by the sericulturists in adoption of sericulture production technology, *Advanced Research Journal Social of Science*, 4(1): 112-114.

CITE THIS ARTICLE

Ishtiyag A B, Ravinder K S, M.R. Mir, I.L.Khan. Constraints faced by the women silkworm rearers of District Baramulla of North Kashmir in adoption of sericulture. *Res. J. Chem. Env. Sci.* Vol 11 [2] April 2023. 04-07