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A STUDY ON CONSTRAINT FACED BY FARMERS IN TROPICAL TASAR SEED COCOON PRODUCTION

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ABSTRACT

The production of Tasar silk is an age-old traditional practice, providing employment and livelihood opportunities to farmers in tribal areas. Farmers are involved in both pre and post-cocoon stages of this sector. In the pre-cocoon stage, the production of seed cocoons is particularly crucial. Engaging in Tasar seed cocoon rearing offers a viable livelihood option for farmers in this sector. However, some farmers encounter challenges during this process. A study was conducted in Pali and Kartala blocks of Korba district, Chhattisgarh, to analyze the constraints faced by farmers in tropical Tasar seed cocoon production. A total of 100 farmers were selected using simple random sampling, with 50 farmers from each block participating in the study. Through discussions with farmers in pilot testing, extension personnel, and a review of existing literature, a list of 13 constraints was compiled. The findings of this study indicate that the majority of farmers encounter issues related to pests and diseases during rearing.

Keywords: constraints, tribal areas, pre-cocoon stage, Tasar seed cocoon.

Introduction

Sericulture is the origin of sustainable livelihood for sericulture farmers and it is an important subsidiary activity that provides year-round employment to family labour and helps in augmenting household income to large and weaker sections of the people in the rural areas Vishakanta (2018). More than 58 countries are practising sericulture in the world. In India, silk cultivation is spread over 22 states covering 1.72 lakh hectares across 54000 village looms operating, 258000 hand looms and 29340 power loom Dewangan *et al.* (2012). In India all four types of silk has been found and out of these tasar silk is very important because of their wild nature and special attachment to tribal communities. Keeping in view of above points the present study has been designed titled "A study on constraint faced by farmers in tropical tasar seed coon production" with the objective of to know the

constraint faced by farmers during tropical tasar seed cocoon production.

Materials and Methods

The current investigation was specifically carried out in the Pali and Kartala blocks of Korba district in Chhattisgarh to assess the challenges encountered by farmers in the production of tropical Tasar seed cocoons. A total of 100 farmers were chosen for this study through simple random sampling, employing the chit method. Fifty farmers were selected from each block. In this study, constraints experienced by farmers were defined as the difficulties encountered during seed cocoon production.

To conduct this study, discussions were held with farmers during pilot testing, consultation with extension personnel, and a review of available literature. Subsequently, a list of 13 constraints was

compiled. This list of statements was translated into the local language (Hindi) and provided to all farmers during interviews. They were then asked to rank these constraints in descending order of importance. The total score for each constraint was calculated, and the statements were organized based on their priority/importance in descending order.

Result and Discussion

The findings regarding the challenges encountered by farmers during tropical Tasar seed cocoon production, as reported by the respondents, are summarized in Table 1.

The most significant problem faced by farmers was the issue of pests and diseases in silkworms, followed by delays in input availability, a shortage of labor during cocoon production, lack of medical facilities, absence of basic amenities such as toilets and bathrooms, lack of climate mitigation arrangements, insufficient training in improved silkworm rearing

methods, inadequate knowledge about pruning and training host plants, low cocoon prices, lack of cocoon storage facilities, unavailability of high-quality plantation, absence of technical guidance and the least severe problem being a lack of knowledge in host plant maintenance, consistent with Singh's (2018) findings.

Furthermore, farmers provided suggestions for improving seed cocoon production, including ensuring timely availability of lime and bleaching for field application before and after rearing, providing high-quality dlf seeds for rearing, increasing seed cocoon prices, regularly supplying inputs to plants to ensure the availability of quality leaves for silkworm feeding, enclosing fields with boundary walls to protect plants from animal grazing, assigning at least one person to every government farm for plantation care, ensuring regular pruning and pollarding of plants to control their height, as taller plants are more difficult to use for rearing, and establishing chawki gardens in every government farm.

Table 1 : Distribution of respondents according to constraint faced by farmers during tropical tasar seed cocoon production

S. No.	Problems	Rank
1.	The problem of pests and disease in silkworm	I
2.	Unavailability of inputs in time	II
3.	Unavailability of labour during cocoon production	III
4.	Medical facilities for farmers were not available during rearing	IV
5.	Basic amenities such as toilet, bathroom, not available at rearing site	V
6.	Lack of technical guidance	VI
7.	Climate mitigation arrangement not available	VII
8.	Lack of training about improved method of rearing of silkworm	VIII
9.	Lack of knowledge about training and pruning of host plant	IX
10.	Low price of cocoon	X
11.	Lack of knowledge in the maintenance of the host plant	XI
12.	Lack of storage facility of cocoon	XII
13.	Unavailibility of good quality plantation	XIII

Conclusion

Tropical Tasar seed cocoon production presents a significant livelihood opportunity for farmers, particularly focusing on tribal communities. In this study, the researcher aimed to identify the challenges faced by farmers during seed cocoon production. The study revealed that the primary issue encountered by most farmers is pest and disease problems during silkworm rearing. This was followed by delays in the timely availability of inputs, a shortage of labor during cocoon production, and other constraints. Furthermore, some farmers provided valuable suggestions for improving Tasar silkworm seed cocoon production.

These suggestions included ensuring the timely availability of lime and bleaching agents for field application before and after rearing, providing farmers with quality dlf seeds for rearing purposes, advocating for an increase in seed cocoon prices, and ensuring the regular provision of inputs to plants to maintain the availability of high-quality leaves for silkworm feeding.

References

- Deepa, P. and Sujathamma, P. (2007). Information source and consultancy pattern of different sericultural technologies at field level and technology adoption in the semi-arid

- conditions of Chittoor district in Andhra Pradesh. *Indian Journal of Sericulture*, **46(1)**, 86- 88.
- Dewangan, S.K., Sahu, K.R. and Soni, S.K. (2012). Breaking of poverty through sericulture among the tribe- A Socio-Economic study of Dharamjaigarh block of Raigarh Dist, C.G., India. *Research Journal of Recent Sciences*, **1**, 371-374.
- Rao, P.R.M. and Kamble, C.K. (2009). Impact of demonstration of technology package in sericulture extension and future extension strategies. *Indian Journal of Sericulture*, **48(2)**, 178-180.
- Singh, V. and Kameswari, V.L.V. (2019). Constraints Faced by Farmers in Using ICT Enabled Web Portal (Krishnet). *Trends in biosciences*, **12(6)**, 476-479.
- Visakanta (2018). An Economic Analysis of Area, Production and Productivity of Sericulture in India and Karnataka. *International Journal for Research in Applied Science & Engineering Technology*. **1**, 3266-3272.