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# Constraints faced and suggestion by farmers to overcome constraints in adoption of improved sericulture production technologies of Bidar district of North Karnataka

**DK Hadimani, Manjunath, I Moulasab and Ashok J**

**Abstract**
The study was conducted to know the constraints faced and suggestions by farmers to overcome the constraints in adoption of improved sericulture production technologies in Bidar district of north Karnataka during the year 2016-2017. The findings revealed that, the major problem faced by the farmers are lack of knowledge regarding control of pests and diseases like uzifly, ants, pebrine, white muscardine and yellow Muscardine (100%), lack of marketing facility and fluctuation in price of cocoon, (100%), lack of information about crossbred races of silkworm (92.00%), lack of information about concentration of the disinfectant (88.00%), lack of knowledge regarding controlling of pest and diseases (82.00%) and inadequate training facilities (62.00%). With respect to suggestions to overcome the problems, training programmes should be given on Chawki rearing and late age rearing and management of pest and diseases of mulberry and silkworms are the most important suggestion made by 96.00 and 95.00 per cent of the respondents respectively followed by provide training on mulberry orchard management (85.00%), study tours to visit progressive sericulture farmers' (80.00%), The Government should give financial support (78.00%), the Subsidies on drip irrigation system may be increased (75.00%).

**Keywords:** Adoption, constraints, suggestions, improved sericulture production technologies

## Introduction
The Sericulture 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. In India, sericulture is not only a tradition but also a living culture. It particularly suits rural based farmers, entrepreneurs and artisans, as it requires low investment but, with potential for relatively higher returns. It provides income and employment to the rural poor especially farmers with small land-holdings and the marginalized and weaker sections of the society. India is the second largest producer of silk in the world next only to China. Karnataka is the leading sericulture state which contributes around 50 per cent of the total silk production in India. Sericulture has a complementary effect on other agricultural enterprises. It is estimated that the indirect effect of sericulture to the farm income is about 25 per cent. Sericulture plays an important role in transformation of rural economy as it assures regular employment and periodic returns round the year. Sericulture industry as a major income generating and labour intensive industry is mainly confined to the state of Andhra Pradesh, Karnataka, Tamil Nadu and West Bengal, with a very little production in Jammu and Kashmir, In the context of rural development, mulberry sericulture serves the social objectives like providing off-farm employment and preventing migration of rural people. Inspite of all the positive features, mulberry sericulture is still not adopted by the farmers up to the desired level. There is a wide gap in productivity of the cocoon between lab to land due to non or partial adaptation of improved sericulture technologies. As a result farmer's are getting low returns due to low productivity and poor quality of cocoon in comparison to other agriculture and looking for other crops or avenues for better income and proportionate return of their labour. To plans a suitable intervention strategy, to bridge this gap, it is necessary to understand extent of adoption of improved practices at farmer's level and constraints faced by the farmers in non-adoption of sericulture production technologies. It is, therefore, present study was conducted to know the extent of adoption of improved sericulture production practices and constraints faced by farmers of Bidar district of north Karnataka

**Methodology**

The study was conducted in Bidar districts of north Karnataka state during the year 2016-17. The two tehsils i.e. Humnabad and Balki from Bidar district were selected for the study. Thereafter, 5 villages were selected from each tehsil. 10 respondents were selected randomly from each village. 100 respondents were selected from the selected 10 villages by adopting simple random sampling. Ex-post facto design was employed for conducting the study. Data was collected by using a detailed interview schedule employing personal interview method.

A pre-tested interview schedule was used to collect the data through personal interview method. The data collected were tabulated and analyzed by using suitable statistical measures.

**Results and Discussion**

**1. Constraints faced by the sericulture farmers**

Constraints imply the problems or difficulties faced by sericulture farmers while adopting day-to-day mulberry cultivation and silkworm rearing technologies and taking entrepreneurship activities in their enterprise. As regards to mulberry cultivation in adoption of recommended mulberry cultivation technologies some important constraints faced by farmers are lack of knowledge regarding controlling of pest and diseases (82.00%), followed by high incidence pest and disease like stem borer (76.00%), lack of knowledge about training and pruning of mulberry plant (68.00%), lack of knowledge about of bio-fertilizers, VAM and vermi compost (68.00), lack of irrigation facilities (52.00%), high cost of manure, fertilizer, insecticide and fungicide (49.00%) and lack of technical information about selection of mulberry variety (44.00%). The probable reasons for the above results could be most of the sericulture farmers were educated up to primary to middle school, limited participation in extension activities and limited exposure to print and electronic media. (Table 1).

With regard to silkworm rearing constraints, Cent per cent of the farmers expressed lack of knowledge regarding control of pests and diseases like uzifly, ants, pebrine, white muscardine and yellow muscardine (100.00%) and lack of marketing facility and fluctuation in price of cocoon were major problem faced in silkworm rearing. The probable reasons might be due to lack of awareness about the regulated market, commodity, farmers interest groups and limited contact with the developmental departments and other institutions involved in the extension activities. The other important problem expressed by farmers are lack of information about crossbred races of silkworm (92.00%), lack of information about concentration of the disinfectant (88.00%), lack of supply of disease free laying (DLFs) from govt. sources (83.00%), high cost of establishment at initial stage (78.00%), cumbersome procedure to get credit from banks (72.00%), inadequate training facilities (68.00%), lack of technical guidance from extension personnel (62.00%), lack of support from government (54.00%) and non-availability of equipments (nylon net, brushing beg) for silk worm rearing (44.00%). The above results are in line with the findings of Philip and Qadri (2004) [2] and Dar *et al.* (2009) [1] (Table 1)

**Table 1:** Constraints faced by the sericulture farmers (n=100)

| Sl. No. | Constraints | No. | % |
|---|---|---|---|
| **I.** | **Mulberry cultivation constraints** | | |
| 1. | Lack of technical information about selection of mulberry variety | 44 | 44 |
| 2. | Lack of irrigation facilities | 52 | 52 |
| 3. | Lack of knowledge about of bio-fertilizers, VAM and vermi compost | 66 | 66 |
| 4. | High cost of manure, fertilizer, insecticide and fungicide | 49 | 49 |
| 5. | Non availability of plants for propagation | | |
| 6. | Lack of knowledge about training and pruning of mulberry plant | 68 | 68 |
| 7. | High incidence pest and disease like stem borer | 76 | 76 |
| 8. | Lack of knowledge regarding controlling of pest and diseases | 82 | 82 |
| **II.** | **Silkworm rearing constraints** | | |
| 1. | Lack of supply of disease free laying (DLFs) from govt. Sources | 83 | 83 |
| 2. | Lack of knowledge regarding control of pests and diseases like uzifly, ants, pebrine, white muscardine and yellow muscardine | 100 | 100 |
| 3. | Lack of information about concentration of the disinfectant | 88 | 88 |
| 4. | Lack of information about crossbred races of silkworm | 92 | 92 |
| 5. | Non availability of equipments (nylon net, brushing beg) for silk worm rearing | 44 | 44 |
| 6. | Lack of marketing facility and Fluctuation in price of cocoon | 100 | 100 |
| 7. | Cumbersome procedure to get credit from banks | 72 | 72 |
| 8. | Lack of technical guidance from extension personnel | 62 | 62 |
| 9. | High cost of establishment at initial stage | 78 | 78 |
| 10. | Inadequate training facilities | 68 | 68 |
| 11. | Lack of support from Government | 54 | 54 |

**2. Suggestions to overcome from the constraints faced by the sericulture farmers**

Suggestions were sought on the various aspects from the respondents. They were asked to offer suitable constructive suggestions to overcome the constraints encountered by them in adopting cultivation practices and entrepreneurship activities.

A critical look at Table 2 revealed that among the various suggestions made by the respondents training programmes should be given on Chawki rearing and late age rearing and management of pest and diseases of mulberry and silkworms are the most important suggestion made by 96.00 and 95.00 per cent of the respondents respectively followed by provide training on mulberry orchard management (85.00%), study tours to visit progressive sericulture farmers' (80.00%), the Government should give financial support (78.00%), the subsidies on drip irrigation system may be increased (75.00%), provide information about market prices of different markets fields and imparting technical training and guidance on various entrepreneurial activities (65.00%). Mainly in the study area, most of the respondents not aware about the chawki rearing & late age rearing and management of pest and diseases of mulberry and silkworms Hence to get

technical information and guidance they stated training programme should arrange regularly.

**Table 2:** Suggestions to overcome from the constraints faced by the sericulture farmers (n=100)

| Sl. No. | Suggestions | No. | % |
|---|---|---|---|
| 1. | Provide training on mulberry orchard management | 85 | 85.00 |
| 2. | Training programme should be arranged on management of pest and diseases of mulberry and silkworms | 95 | 95.00 |
| 3. | Provide information about market prices of different markets | 65 | 65.00 |
| 4. | Training programmes should be given on Chawki rearing and late age rearing. | 96 | 96.00 |
| 5. | The Subsidies on drip irrigation system may be increased | 75 | 75.00 |
| 6. | The practical knowledge regarding plant protection and fertilizers application at proper time should be given | 50 | 50.00 |
| 7. | The Government should give financial support. | 78 | 78.00 |
| 8. | Supply of planting material by the department of sericulture at subsidized rates | 62 | 62.00 |
| 9. | Regular and timely supply of fertilizers and other inputs with subsidy | 55 | 55.00 |
| 10. | Study tours to visit progressive sericulture farmers' fields | 80 | 80.00 |
| 11. | Imparting technical training and guidance on various entrepreneurial activities. | 65 | 65.00 |

## Conclusion

It could be concluded from the results that, lack of knowledge regarding control of pests and diseases like uzifly, pebrine and muscardine, lack of marketing facility and fluctuation in price of cocoon, lack of information about crossbred races of silkworm, lack of information about concentration of the disinfectant, lack of supply of disease free laying (DLFs) from government sources, lack of knowledge regarding controlling of pest and diseases, and inadequate training facilities are the major constraints expressed by the sericulture farmers. Hence, policy makers and administrators of developmental departments, agricultural universities and other organizations involved in the rural development and extension activities have to formulate suitable extension programmes to overcome the constraints faced by the sericulture farmers in adoption of improved production technologies.

## References

1. Dar HU, Farhat Iqbal Qadri, Munshi NA, Abdul MT, Sheikh ND. Constraints of silkworm rearers in Kashmir valley for adoption of rearing technologies. Indian J Seric. 2009; 48(1):86-90.
2. Philip T, Qadri SMH. Study on the level of adoption and constraints for non-adoption of improved sericulture technologies by farmers in Kerala. Indian J Seric. 2004; 43(1):83-87.