

CHAPTER I

INTRODUCTION

Sericulture has a long back history before the commencement of the Christian era. It has been held that mulberry culture came from China to India around 140 BC. There are many references to the use of silk in our epics to show its existence in India some 2000 years before the Christian era. Even as far back as the second century BC. India's export of silk goods to European countries was speculated.

Sericulture is an agro-based industry as par excellence with its agriculture base. Sericulture stands for livelihood opportunity for millions of people due to the high employment-oriented, low capital intensive and remunerative nature of its production. The nature of the sericulture industry is with its rural-based on-farm and off-farm activities and high employment generation potential has attracted the attention of planners and policy makers to recognize the industry among one of the most appropriated routes for socio-economic development largely agrarian economy like India, silk has been blended with the life and culture of Indians. India has a very good rich and complex history in silk production and its trade dates back to the 15th century. Sericulture enterprise is along with chain industry from cultivation to fabric making. In India, during 2020-21 the sericulture industry provides 8.7 million of employment to the rural and semi-urban people. Contribution to the national GDP is 2.72 per cent during 2017-18 (Anon, 2020). Of these, a considerable number of workers belong to the economically weaker section of the society, including women. India's traditional and cultural bound domestic market and silk garment have its amazing diversity that reflects geographic specificity has helped the country to achieve a leading position in the silk industry.

India has the unique distinction of being the only country producing all the known commercial silks, viz., Mulberry, Tasar, Eri, and Muga, of which Muga with its golden yellow glitter was unique and prerogative of India. Mulberry sericulture is mainly practiced in many states of India. Major contributing states are Karnataka, Andhra Pradesh, Tamil Nadu, Assam, West Bengal, and Jharkhand. North East has the unique distinction of being the only region producing four varieties of silk viz., Mulberry, Tasar, Muga, and Eri. India is the second-largest producer of silk in the world next to China. Overall North-East region contributes 18.00 per cent of India's total silk production (Anon, 2020). The overall

silk production in India during 2019-20, Mulberry contributes 70.46 per cent (25,239 MT), Tasar contributes 8.75 per cent (3,136 MT), Eri contributes 20.11 per cent (7,204 MT), and Muga contributes 0.67 per cent (241 MT) (Anon, 2019).

The silk production has been reduced in the country during 2020-21 due to the disruptions caused by the COVID-19 pandemic. COVID-19 had impacted drastically the human life worldwide and presents an exceptional challenge to public health, food system and agriculture. Economic and social disruption is caused by the present ongoing crisis. The crisis caused by COVID-19 has resulted in a sudden disruption of businesses across the country and the Indian sericulture sector was not an exception to this. COVID-19 has also affected the disruption of all the activities in the sericulture industry. Sericulture sector has a long silk value chain; due to the nationwide lockdown the demand-supply chain of silk WAS disrupted. Hence, the overall silk production of the country in 2020-21, Mulberry contributes for 68.24 per cent (16,398 MT), Tasar was 4.81 per cent (1,156 MT), Eri 26.10 per cent (6,273 MT) and Muga 0.84 per cent (202 MT) of the total raw silk production of 24,029 MT (Anon, 2021).

Assam is famous for its scenic beauty, embedded with nature's gift of flora and fauna. Especially the tea gardens in Assam are one remarkable sight to behold. Similarly, Muga silk is endemic to Assam which adds to its royalty and uniqueness. The golden silk or Muga silk has been a tradition since the beginning of ancient times in Assam and now it surfaces as a trend in the fashion world. In Assam, sericulture is an agro-based industrial as well as a commercial activity that plays a significant part in the cultural heritage of the Assamese people.

Sericulture is a major cottage industry in Assam, comprising of both Mulberry and Non-Mulberry silkworm rearing and production of its natural silk. Non-mulberry silk in general includes Muga and Eri silk, in particular, are closely associated with the rituals and traditions of Assam, and thus, silk production and its uses have been important household activities leading to the economic development of a large section of rural people. It is practiced in more than 10,532 villages and provides self-employment to 2.60 lakh of family's approx, amongst these, Muga, the non-mulberry silkworm rearing, and its silk production stand a unique position not only in Assam but also in the global map of sericulture. 94.00 per cent of Muga silk and 62.00 per cent of Eri silk are produced in Assam and placed in 3rd position in silk production in the country (Anon, 2014).

Mysore silk has been registered as Geographical Indicator under Property Rights. Karnataka is the homeland of Mysore Silk. Karnataka sericulture features a history of quite 215 years. In 1785, the Tiger of Mysore Tippu Sultan established sericulture in the Mysore Kingdom. He wanted Mysore to be the foremost among silk-producing nations. The dream of this great ruler became true during the later period. During these years Karnataka sericulture has seen many ups and downs in its long journey. It has transformed into a model in mulberry sericulture within the country. During early 19th century while the world sericulture was collapsing, Mysore Sericulture industry sustained. Though, most of the exotic silkworm varieties perished remained stable through this era, and even today it is the backbone of mulberry sericulture in India (Anon, 2016). Sericulture is a crucial industry in Karnataka. Which was considered as a subsidiary occupation during past is being considered as a major activity (Siddappaji *et al.* 2014). In Karnataka, mainly Mulberry cultivation is practiced commercially; the area under mulberry cultivation is 98,134.61 hectares (Anon, 2018).

India has made a phenomenal growth in silk production both horizontal and vertical through planned approaches and emerged as the second-largest producer of silk in the World. New technologies accelerate the production process only if they are effectively disseminated in the field. The challenge under Indian conditions has been more about the dissemination and rate of adoption of new sericultural technologies by the sericulture farmers. More than ever, at this stage, efficient training; effective extension planning, communication, and implementation besides effective motivation to sericulture farmers would play an important role. The extension is an organization set up to plan, execute and evaluate programmes, to teach people, motivate them to action besides development of individuals in their day-to-day living, development of their leaders, their society, and their world as a whole. Extension efforts are essentially directed towards ensuring concentrated attention on farmers' problems and provide solutions by utilizing the limited resources and improving the productivity and technical capability of sericulture farmers (Awatade *et al.* 2019).

1.1 Statement of the problem

A sericultural extension system plays a crucial role in providing advisory supportive service to the silkworm rearers for producing and earning polite livelihoods for themselves and their families as well as to satisfy their needs in a timely and effective manner by informing, motivating and educating the silkworm rearers about the available

latest technological and marketing information. The Indian public sericulture extension system is one of the largest information and knowledge providing institute. During earlier period, sericulture extension system has played a very crucial role and still performing best to improve organizational performance, but the quality and reliability of the extension system are still limited. Due to limited resources and the limited number of extension personnel's in the departments, various type of work, extension services are not provided up to the desired level. During earlier period public sector line department, mainly the department of sericulture was the main sericulture extension agency, however, in today's Indian context, the extension includes all those agencies in the public, private, NGO, and community based initiatives that provide a range of advisory services and facilitate technology application, transfer and management.

With the better understanding of these core issues will boost the future extension programmes and delivery system. Hence, present study was conducted to assess the satisfaction level of farmers and entitled with Extent of Farmers' Satisfaction from Sericultural Extension Services: A Comparative Study among the Silkworm rearers of Assam and Karnataka. Hence, the present investigation was designed with the following objectives:

1.2 Objectives of the study

1. To find out the profile characteristics of the silkworm rearers.
2. To analyze the level of satisfaction of silkworm rearers from sericultural extension services.
3. To identify the problems and difficulties faced by the silkworm rearers to adopt improved technologies of silkworm rearing practices recommended by the State Department of Sericulture.

1.3 Scope and importance of the study

There are no adequate research studies conducted earlier on the extent of Farmers' Satisfaction from Sericultural Extension Services in Assam and Karnataka. The finding could be utilized by administrators, scientists, and development workers to understand the existing status of satisfaction level of the silkworm rearers and problems faced in adopting recommended technologies which will facilitate in planning and organizing effective education programs to increase the production and productivity in the sericultural sector. Such findings will reveal the extent of Farmers' Satisfaction with the

Sericultural Extension Services, which are very useful to the state Department of Sericulture, Agriculture, Animal husbandry, the Central Silk Board, and other concerned departments working on the development of sericulturists. The Agricultural Universities and Developmental departments are now seriously thinking about Sericultural Farmers' Satisfaction and it will also reveal the problems faced by the silkworm rearers in adopting improved technologies recommended by the State Department of Sericulture. The findings of the study could be successfully use in other areas where similar situation exists.

1.4 Limitations of the study

The researcher being a post-graduate student, the investigation had limited time and financial problems have stick to this study to confine only one district from each state of Assam and Karnataka.

The area of investigation was restricted to six villages from three developmental blocks from the Chikkaballapur districts of Karnataka and the Lakhimpur district of Assam. Hence, the implications made in this study may not be generalized for the large area. The results apply to places where a similar situation exists.

1.5 Organization of the Thesis

The thesis has been organized in five chapters as per the guidelines of Assam Agricultural University (Refer Clause No. 3.17.04 of PG Regulations and the Academic Guidelines; Clause No. 2.0 with each relevant sub clauses).

Chapter 1: Introduction (first chapter gives background and brief introduction to this study, statement of the problem, objectives of the study, scope and importance of the study and the limitations of the study).

Chapter 2: Review of literature (second chapter consists of various literatures reviewed by the researcher well before and during the time of investigation to gain mastery over the methodology and other aspects to carry out the investigation in a scientific and systematic way).

Chapter 3: Materials and Methods (this third chapter consists of the materials and methods used to carry out the research work in a scientific and systematic way).

Chapter 4: Findings and Discussion (in this chapter findings obtained from the investigation were given properly with appropriate headlines, tables and figures along with the proper discussions).

Chapter 5: Summary and Conclusion (this fifth chapter had summarization of the results, conclusions and the implications drawn from those obtained results).