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Constraints and problems faced by the muga farmers in Goalpara district of Assam

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Abstract

The study was conducted with a sample of 120 sericulture farmers in Goalpara district of Assam in the year 2020-21. Data were collected purposively through personal contact method by using the pre-structured interview schedule from 6 (Six) villages in 3 (three) Development Blocks under Goalpara district viz. Rangjuli Development Block, Lakhipur and Kusdhowa Development Block. Constraints faced by the muga farmers were ranked with the help of frequency and percentage. The results from the study depicted that lack of capital, lack of own land, lack of disease free seeds, lack of marketing information, high cost of hiring vehicle, lack of need based training and lack of modern machineries for post cocoon were the chief problems faced by the muga farmers of Goalpara district.

Keywords: Sericulture, problem, constraints, muga culture, farmers

Introduction

Sericulture is a farm based small scale industry providing gainful employment particularly to the small and marginal farmers. India is the second largest producer of silk after China. Assam occupies a unique position in the world sericulture map by producing all the varieties of silk namely eri, muga, tasar and mulberry. Assam is the third largest contributor to the country's raw silk production. Sericulture industry plays indispensable role in the economy of Assam. With the richest tradition of silkworm rearing, the state contributes almost 82.29 per cent of muga silk and 70.09 per cent of eri silk production in India and shares about 14.17 per cent of total silk production of the country (Anonymous, 2020) ^[1]. Sericulture provides stable income to many rural agricultural families and a livelihood to scores of landless farm and non-farm women laborers giving much economic strength (Sarkar *et al.* 2017) ^[2].

Muga silk with its golden glitter is unique and prerogative of India (Pandey *et al.* 2010; Borah and Borgohain, 2018) ^[3,4]. Geographical Indication rights have been conferred to the stunning muga silk yarn and its products (Unni *et al.* 2009) ^[5]. Muga culture is intermingled with the life and culture of the Assamese people. Muga silk industry has played a major role in uplifting the rural economy of Assam but lately the muga silk sector is dealing with some issues such as marketing problem, post cocoon problem, transportation problem and institutional problem because of which the people are finding it difficult to continue the age old culture. Muga culture broadly comprises interlinked activities such as food plant cultivation, silkworm rearing, reeling the cocoons for unwinding the silk filament, yarn making, weaving and processing of fabric. Goalpara district of Assam plays an important role in silk production. Mainly muga culture and eri culture are practised in the district. About 273 seri-villages and 2097 families of the district are associated with muga culture and area under muga food plant cultivation is 573 hectare (Anonymous, 2021) ^[6]. It is playing an important role in mitigating the problem of unemployment and also in uplifting the socio-economic status of sericulture farmers of Goalpara district.

Methodology

The present study was carried out in Goalpara district during the year 2020-21 as it plays a very important role in production of silk, more particularly muga and eri. The study was carried out purposively in 3(three) Development Blocks under Goalpara district viz., Rangjuli Development Block, Lakhipur Development Block and Kusdhowa Development Block. A total of 120 respondents were selected for the present study selecting 20 respondents randomly from each of the 6 villages under the 3 Developmental Blocks. The primary data were collected by following the personal interview method using standardized structured interview schedule.

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A set of common problems faced by the muga farmers were prepared after studying and consulting available literature, discussion with experts and pretesting in a non sampling area. The problems were found out and classified into seven classes as shown below:

1. Personal problems
2. Land utilization problems
3. Pre-cocoon problems
4. Post cocoon technology problems
5. Marketing problems
6. Transportation problems
7. Institutional Problems

Results and Discussion

The various problems and difficulties faced by the muga farmers are presented under the sub-head. A number of problems were faced by the farmers during rearing. There were seven major problems which are again having thirty four sub-problems.

Table 1: Rank wise distribution of personal problems faced by the respondents (n=120)

Problems	Frequency	Percentage	Rank
Lack of self confidence	11	9.16	VI
Lack of formal education	21	17.50	III
Lack of time	31	25.83	II
Lack of expertise	13	10.83	V
Lack of communication with the fellow farmers	17	14.16	IV
Lack of capital	38	31.66	I

Table 1 revealed that 'lack of capital' is the major problem faced by the respondents whereas "lack of self confidence" ranked last among the personal problems. Providing financial assistance will highly benefit the muga farmers in the district. Government and public sector banks must come up with new policy for providing loans at subsidized rate to the muga farmers. Islam *et al.* (2010) [7] also reported that inadequate capital is one of the major problem of the silk industry in Bangladesh.

Table 2: Rank wise distribution of land utilization problems faced by the respondents (n=120)

Problems	Frequency	Percentage	Rank
Lack of own land	51	42.50	I
Lack of land utilization knowledge	26	21.66	III
Lease of the host plant land area for rearing	43	35.83	II

Data presented in the table 2 revealed that the problem 'lack of own land' is the major problem and 'lack of land utilization knowledge' ranked last among the land utilization problem faced by the respondents. Proper guidance and method demonstration of integrated farming for proper utilization of the farm land may be disseminated for increasing the farmer's income in the same piece of land. Government forest land may be utilized for vanya silk cultivation as these are considered as forest activity as per the forest (conservation) act 1980.

Mir (2013) [8] revealed that majority of the sericulturists in Jammu and Kashmir state belong to marginal land holding. Roy and Sarkar (2015) [9] observed that sericulture was mainly practiced by the weaker section with very small land

holding size in Alomtola village, West Bengal.

Table 3: Rank wise distribution of pre-cocoon problems faced by the respondents in pre-cocoon technology (n=120)

Problems	Frequency	Percentage	Rank
Lack of dfl (Disease free layings)	27	22.50	I
Lack of capital for seed procurement	16	13.33	IV
Lack of availability of host plants for rearing	13	10.83	V
Impact of environmental pollution	11	9.16	VI
Incidence of pests in silkworm	21	17.50	III
Incidence of disease in host plants	8	6.66	VII
Incidence of disease in silkworm	24	20.00	II

Table 3 revealed that the problem 'lack of disease free layings' ranked first and 'incidence of disease in host plants' ranked last among the pre-cocoon problems faced by the respondents. Supply of adequate quantity of dfls mostly in the commercial muga crop will sort out the problem. Identifying the seed zone of Assam for muga culture and establishment of grainage unit at each seed zone will help to provide quality muga seed during the commercial crop i.e. *Jethua* and *Katia*. Saikia *et al.* (2016) [10] also reported that shortage of seed is one of the major problem for large scale production in the muga silk industry.

Table 4: Rank wise distribution of marketing problems faced by the respondents (n=120)

Problems	Frequency	Percentage	Rank
Lack of marketing facilities	18	15.00	IV
Fluctuation of price	25	20.83	III
Lack of marketing information	33	27.50	I
Lack of knowledge about proper techniques of marketing	15	12.50	V
Involvement of Middleman	29	24.16	II

It is observed from the data presented in table 4 that 'lack of marketing information' ranked first and 'lack of knowledge about proper techniques of marketing' ranked last among the marketing problems faced by the respondents. Adequate marketing information must be provided to the farmers for getting the proper price of the products. Regulated markets can be introduced in the district or in nearby areas. Markets can be enhanced by forming Farmers Producer Organization (FPO). Online platform may be developed for dissemination of marketing information.

Bhat and Choure (2014) [11] reported that lack of marketing information is another bottleneck faced by the silk industry due to which reelers are not getting remunerative for their produce.

Table 5: Rank wise distribution of transportation problems faced by the respondents (n=120)

Problems	Frequency	Percentage	Rank
Poor condition of road	35	29.16	III
Non availability of own vehicle	39	32.50	II
High cost of hiring vehicle	46	38.33	I

It is revealed from the table 5 that 'high cost of hiring vehicle' ranked first and 'poor condition of road' ranked last among the transportation problems faced by the respondents. Regulated markets can be formed nearby the major rearing areas. Government subsidy can be provided to the sericultural rearers to get a vehicle of their own so that vehicles need not be hired. Government schemes for providing vehicles at subsidized rate to the muga farmers must be introduced. Elumalai *et al.* (2020) ^[12] reported that transportation is the second major problem faced by different types of silk reeler in traditional areas of Tamil Nadu.

Table 6: Rank wise distribution of institutional problems faced by the respondents (n=120)

Problems	Frequency	Percentage	Rank
Lack of training	67	55.83	I
Lack of co-ordination among farmers	53	44.16	II

It is observed from the table 6 that the lack of training ranked first among the institutional problems faced by the respondents. Training exposure is a very important factor which plays a vital role and influences the overall activities of the muga farmers. It was observed that majority of the muga farmers did not get proper opportunities for training exposure, so there is a need for need based training to be imparted to them. Such training opportunities only will make them skilled as well as confident to perform the muga culture activities efficiently. It will also uplift and encourage new generation towards the sector.

Mech *et al.* (2016) ^[13] reported that the traditional muga farmers expressed immense training needs on improved technologies in almost all the activities from soil to silk.

Table 7: Rank wise distribution of problems faced by the respondents related to post-cocoon technology (n=120)

Problems	Frequency	Percentage	Rank
Stifling and storage of cocoons	33	27.50	III
Lack of availability of reeling and spinning machinery	48	40.00	I
Lack of availability of proper space for post cocoon operations	39	32.50	II

It is evident from the table 7 that 'lack of availability of reeling and spinning machinery' ranked first and 'stifling and storage of cocoons' last among the post-cocoon technology problems faced by the respondents. Establishment of cocoon bank/raw material bank/common facility centre in all the traditional districts throughout the state will help in easy marketing of the sericulture products. Strengthening information support from the concerned departments for educating the farmers is very much essential for all round development of the industry. Facility must be provided for processing and value addition to get high profits. Chowdhury (2019) ^[14] reported that lack of modern equipment is one of the major problems among the silk weavers of Sualkuchi.

Conclusion

The findings related to the problems faced by the muga farmers revealed that the major problems faced by the respondents included lack of capital, lack of own land, lack of disease free seeds, lack of marketing information, high cost of hiring vehicle, lack of need based training and lack of modern machineries for post cocoon. Extension agency should be ever

watchful to help the muga farmers to solve problems such as pest and disease management, and also providing various scientific practices because most of the rearers depend on the sericulture demonstrator and other officers of sericulture department. Extension agency should involve more people while organizing extension activities so as to increase their knowledge level.

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