Socio-economic Analysis among the Farmers Engaged in Sericulture Practices In Jorhat district of Assam

ABSTRACT

Sericulture is profitable and a labour intensive industry with very low input that gives employment generations and regular income to the farmers. Socio-economic factors play an important role in determining the knowledge and adoption levels of sericulture practices for production of eri, muga and mulberry Silk. An investigation has been conducted to know the socio-economic condition of seri farmers in Jorhat and Majuli (undivided) district of Assam. The study revealed that majority of the sericulture farmers of the study are belonged to middle age group (60.00%), high school passed (34.17%), other backward class (OBC) caste (30.84%), small size family (60.83%) and exclusively of farming category (45.83%) as their main occupation. Majority of the respondents are marginal farmers (61.67%) having operational land holding of below 1 hector, annual income (37.50%) were in the range of Rs.35001 to Rs.75000/-. About 50% of the respondents involved in eri culture, muga culture (25%) and in mulberry culture. (25%), have medium level of source of extension contact (67.50%), medium level of risk bearing ability (78.33%) and medium level of decision making ability (79.17%) and 42.50 % of the farmers got training exposure to sericulture practices. The study indicates that Sericulture can come out as the most vital opening, in generating income among the farmers in rural areas. Most of the farmers involved in sericultural activities have minimum educational qualification, so government and state sericulture department can organize effective training and development activities along with the line departments to uplift socio-economic status of the seri farmers in rural areas.

Keywords: *Adoption level; Sericulture practices; Seri farmers; Socio-economic factors;*

INTRODUCTION

Sericulture, the production of silk, is an important industry in the economy of our country. It can provide full time employment to entire family offering high income and better standard of living. Sericulture is potential practices which facilitate year-round income, livelihood and successively have key role in rural development *(Dewangan S.K. 2011*). The introduction of sericulture technology is directed towards achieving specific objectives like increase in production and productivity of crops and increase in the employment and income of the farmers. The success of any technology largely depends on its effective adoption and utilization in the field. Imparting sericulture knowledge to farmers is the pre-requisite for changing their attitudes, skills and adoption level which are essential components of rural development *(Gowda et al., 1992)*. In India, sericulture is considered to be a highly remunerative cash crop with minimum capital investment and yielding reasonably good returns over other enterprises Sericulture is predominantly practiced in North East India by small marginal farmers'. Assam enjoys a unique distinction by producing all the four commercial natural silks *viz.*, muga, eri, mulberry and tasar. The raw silk production in Assam during the year 2016-17 was 3811 MT which accounted for 12.55% of the country's total raw silk production *(Anon., 2016-17).*

The Jorhat district of Assam plays a major role in silk production. Sericulture has been practiced traditionally in the district and a large portion of rural people earn their livelihood from the sericulture sector. Presently, the culture is practiced in about 492 seri-villages of the district covering an area of 638 hector under silkworm food plants cultivation with engagement of nearly 10 thousand families in various sericultural activities. The district produced 84.81MT raw silk during the year 2016-17 which include 82.24 MT eri raw silk, 0.29 MT muga raw silk and 2.28 MT mulberry raw silk *(Anon., 2017)*. The socio-economic status of the farmers has been an important parameter in determining their level of technology adoption. This has been adjudged by various field studies involving parameters like age, caste, family form, main occupation, family size, education, land holding size, extension support etc *(Geetha et.al., 2001*). Keeping in view of the above facts in to consideration, the present study was undertaken to assess the socio-economic status sericulture farmers in Jorhat and Majuli (undivided) district of Assam.

METHODOLOGY

The present investigation was purposively conducted in Jorhat and Majuli (undivided) district of Assam. A multistage purposive cum random sampling design was followed for selection of the respondents. The 3(three) development blocks namely Baghchung (Jorhat), Titabar (Jorhat) and Jengrai (Ujoni Majuli) were selected because sericulture has been traditionally practiced in this region. From each selected development block, 2 villages were selected randomly. Twenty sericulture farmers were selected randomly from each of the villages namely Tamulbari, Pangiria form Jorhat, Kochukhat and Lahong kachari Gaon from Titabar under Jorhat district, Kumarbari and Chawrekia Gaon from Majuli (undivided) district thus a sample size of 120 respondents were selected. The respondents were interviewed with the help of structured schedule prepared for the purpose. According to the objectives of the present study, the data collected were subjected to statistical analysis *viz.*, simple frequencies, percentage, mean and standard deviation.

RESULTS AND DISCUSSIONS

Socio-economic status of the respondents

Perusal of data presented in Table 1. revealed that majority (60.00%) of the silkworm rearers belonged to the middle age group of 36-50 years, followed by old age group of above 51 years (25.83%) and (14.17 %) are young age group up to 35 years. In the present study, it is observed that the age group of 36-50 years as well as above 51 years shows a higher percent of involvement than the age group up to 35 years as they are matured and skillful in their jobs probably due to their adequate expertise. So, measures ought to be taken by the concerned agencies in order that the age group up to 35 are often more involved not only to take it as a livelihood option but conjointly to get the financial gain and earn additional profits by learning the correct skills and improved technologies. The results of the study are in consistency with *(Hadimani et al., 2017*). Majority (34.17%) were high school passed, followed by middle school passed (27.50%), higher secondary passed (22.50%), primary school passed (9.17%) and graduate (6.66%).On the other hand the per cent of illiterate respondents were found to be of zero, which might indicate that higher and formal education might have helped them to acquire knowledge concerning the new technologies and consequently adopt them to apply those technologies in the field. The data further revealed that majority (30.84%) belonged to the caste of Other Backward Class (OBC) followed by 28.33 per cent Schedule Caste (SC), 21.67 per cent Schedule Tribes (ST) and 19.16% belonging to the

General class. It was revealed from the Table 1.that majority (60.83%) of the respondents belonged to small sized family, followed by medium sized (33.33%) and large sized family (5.84%) in overall sample. *Hussain (2019)* studied on livelihood opportunities of muga silkworm rearers in Sivasagar district and revealed that majority (52.50%) of the respondents were belonged to small sized family.

The data with regards to family occupation indicated that majority (45.83%) of the respondents main occupation was exclusively farming category, followed by 25.00% belonged to farming + business category and 29.17 % were belonged to farming + service category. Majority (61.67%) of the respondents belonged to marginal farmer category in the overall sample below 1 ha of land holding followed by small farmers (26.66%) having 1-2 ha land and semi medium farmers (11.67%) with land holding capacity 2-4 ha. No farmers were found having medium (4-10 ha) and large size (10 ha and above) farmers category in respect of size of operational land holding. The data with regards to annual family income revealed that majority (37.50%) belonged to the group with an annual earning Rs. 35001- 75000 followed by 23.33 percent with annual income between Rs. 75001- 100000, 32.50% with annual income between Rs. 100001 and above and 6.67 % with an annual income up to Rs.35000 in overall sample. *Yadav and Sharma (2016)* conducted a study on socio economic status of sericulturists of Chattishgarh and revealed that majority of the sericulturists (70.37%) were having their income range of Rs.30,001 to Rs.60,000.Table1 further indicated that majority (50.00%) have adopted eri culture, while 25.00 per cent muga culture practices and 25.00 per cent mulberry practices. With regards to extension contact majority (67.50 per cent) of the respondents had medium range followed by 14.17 per cent high level and 18.33 per cent low level respectively. This findings corroborate the findings of *Sonowal (2016)* and *Pegu (2018)*. With regards to risk bearing ability majority (78.33%) of respondents had moderate level, followed by 13.34 per cent low level and 8.33 per cent high level. Majority (79.17%) of the respondents had moderate level of decision making ability, followed by 11.66 per cent high and 9.17 per cent low level. *Hadimani et al. (2017*) observed that majority (79.17%) of the respondents had moderate level of decision making ability. The data further indicated that 42.50 % of the respondents had attended training on different aspects of sericulture and majority (57.50%) of the respondents had not attended training on sericulture practices. *Pegu (2018)* studied on traditional knowledge and cultural practices in muga silk production in North Lakhimpur District of Assam found that 40.80 % of the muga farmers had received training in muga culture practices.

Table1. Socio-economic status of the respondents

n=120

Variable	Category	Frequency	Percentage (%)	Mean	S.D
Age	8-35 (Young)	17	14.17		
	36-50 (Middle)	72	60.00	-	-
	51 and above	31	25.83		
Education level	Illiterate	0	0		
	Primary school passed	11	9.17		
	Middle school passed	33	27.50	-	-
	High school passed	41	34.17		
	Higher Secondary passed	27	22.50		
	Graduate and above	8	6.66		
Caste	OBC	37	30.84		
	MOBC	0	0.00		
	SC	34	28.33	-	-

	ST	26	21.67		
	General	23	19.16		
Family Size	Small (2-4)	73	60.83		
	Medium (5-7)	40	33.33	-	-
	Large (8 and above)	7	5.84		
Family Occupation	Farming	55	45.83		
	Farming + Business	30	25.00	-	-
	Farming + Service	35	29.17		
	Farming+Business+service	0	0.00		
Size of operational land Holding	Marginal (Below 1 ha)	74	61.67		
	Small (1-2 ha)	32	26.66	-	-
	Semi medium (2-4 ha)	14	11.67		
	Medium (4-10 ha)	0	0		
	Large (10 ha and above)	0	0		
Annual family income	Up to Rs.35000	8	6.67		
	Rs. 35001 to 75000	45	37.50	-	-
	Rs. 75001 to 100000	28	23.33		
	Rs. 100001 and above	39	32.50		
Sericulture practices	Eri	60	50.00		
Adopted	Muga	30	25.00	-	-
	Mulberry	30	25.00		
Source of Extension	Low	22	18.33		
contact	Medium	81	67.50	24.23	3.94
	High	17	14.17		
Risk bearing ability	Low	16	13.34		
	Moderate	94	78.33	6.79	1.85
	High	10	8.33		
Decision making ability	Low	11	9.17		
	Moderate	95	79.17	9.90	2.35
	High	14	11.66		
Training exposure	Yes	51	42.50		
	No	69	57.50		

CONCLUSION

The study concludes that, majority of the sericulture farmers in the study area possess medium age group with small family size and had up to only high school level of education marginal farmer category with an annual earning Rs. 35001- 75000, had moderate level of extension contact, risk taking ability, decision making ability and majority of farmers did not attended training programme on sericultural practices. Development of sericulture can help in creating gainful employment and a steady source of income among the farmers. Hence, concerted efforts must made by the extension personnel in improvement of social and extension participation of farmers as these plays vital role in improving the knowledge and adoption level of sericulture technologies among the farmers for enhancing the productivity in sericulture.

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