



Women Participation in Eri culture with Special Reference to Kamrup District of Assam

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ABSTRACT

A study was conducted during 2017-18 in Kamrup district of Assam to know the participation of women in eri culture. Data were collected purposively from 120 women engaged in eri culture through personal contact method by using the pre-structured interview schedule from three development blocks viz., Chhaygaon, Rampur and Chayani Borduwa. It was revealed that all the women were involved in eri silkworm rearing, followed by feeding, bed cleaning and moulting care (95.83%), leaf harvesting (91.67%), cooking of cocoon and spinning (88.33%) and disinfection (85.00%). A total of 81.67 per cent women faced the problem of leaf crisis during winter months. Participation of women in decision making varied from procurement of disease free laying (85.83%) to nutrient management (27.50%). The study also inferred that training need is prominent in most of the activities of eri culture.

INTRODUCTION

Women comprise almost half of the world's population and make up at least 40 per cent of the workforce in many countries, but share is lower in the Middle East, North Africa and India (Anonymous, 2021a). India has 48.04 per cent female population compared to 51.96 per cent male population. India is at 189th position out of 201 countries in terms of female to male ratio (Anonymous, 2021b). Contribution of the women in the rural economy is enormous and majority are involved in the agricultural sector. Sericulture being eco-conservative activity is an employment generating industry. Qualities of women folks like instinctive behavior, care, concentration, devotion and dedication prove to be very essential for successful rearing of the delicate silkworm and other related activities. Sericulture being a labour intensive agro-based industry provides employment not only to the agriculturists but also to the landless labourers. People employed in other sector can also take sericulture as an additional income source. It is an occupation by women and for women because women form more than 60 per cent of the workforce and 80 per cent of silk is consumed by them (Bukhari et al., 2019). In India women have

played crucial role in the progress and prosperity of silk industry from days beyond recall. Women folk is engaged in sericulture as a part time occupation along with their household activities and earned a part of their livelihood. Sarkar et al., (2017) stated that sericulture was providing stable income to many rural agricultural families and a livelihood to scores of landless farm and non-farm women labourers giving much economic strength.

Sericulture industry constitutes an important aspect and holds a unique position in the economy of Assam and produces all the varieties of silk viz., eri, muga, temperate tasar and mulberry. Among all the varieties of silk produced in Assam, eri occupies the first position in terms of production and generation of employment. In 2018-19 total eri silk production of Assam was 4764 MT (Anonymous, 2019). Kamrup district is situated between 25.46° and 26.49° North Latitude and between 90.48° & 91.50° East Longitude. It is located on southern bank of river Brahmaputra. There are total 477 nos. of sericulture villages and 18,054 nos. of families engaged in the eri sector in Kamrup district of Assam. During the year 2017-18 the district has produced 145 MT of eri silk (Anonymous, 2018). Kamrup district plays a major role in sericulture in terms of production and employment generation in the state. Small scale

industry like sericulture particularly eri culture is largely dependent on female population. Therefore, an effort is done to assess the participation of women in different activities of eri culture in the Kamrup district of Assam.

METHODOLOGY

Kamrup district of Assam was purposively selected for the study, based on the potentiality and production of eri silk. The primary data was collected from 120 women eri rearers following the personal interview method using standardized structured interview schedule. For the present study two villages were selected from each block *viz.*, Ratanpur and Langkhar from Chhaygaon development block, Karipara and Sujanpara from Rampur development block and Rajapara and Loharghat from Chayani Borduwa block. Twenty respondents were taken from each village. Simple statistical method was used to assess the participation of women in eri culture in Kamrup district of Assam.

RESULTS AND DISCUSSION

Participation of women in eri culture activities

Table 1 reveals the participation of women in various eri culture activities. It was found that the women participation in silkworm rearing is highest (100%) followed by feeding, bed cleaning and moulting care (95.83%), leaf harvesting (91.67%), cooking of cocoon and spinning of silk (88.33%), disinfection (85.00%), collection of matured worm and mounting (78.33%), harvesting of cocoon (75.83%), seed production (65.00%), marketing of cocoon and silk (59.17%), pit digging (55.83%), seed sowing (49.17%), irrigation (40.83%), plant protection (37.50%), manuring at pit (36.67%), land preparation (34.17%) and cultural operation (29.17%). Bhol et al., (2020) observed that Lodha women of Odisha were involved more in farm activities than their male counterparts. Mech and Ahmed (2012) revealed that participation of women in the Udalguri district of Assam was significantly higher against men in the activities relating to silkworm rearing, cocoon harvesting, marketing and spinning of spun yarn. Pathare and Hiware (2017) while conducting a research in Ahmednagar observed that out of 148 numbers of farmers, 81.75 per cent were male farmer and 18.24 per cent were female. Women were mainly engaged in cutting of mulberry leaves,

Table 1. Participation of women in eri culture activities

S.No.	Activities	Percentage
1	Land preparation	34.17
2	Pit digging	55.83
3	Manuring at pit	36.67
4	Seed sowing	49.17
5	Irrigation	40.83
6	Cultural operation	29.17
7	Plant protection	37.50
8	Leaf harvesting	91.67
9	Disinfection	85.00
10	Rearing of silkworm	100.00
11	Feeding, bed cleaning and moulting care	95.83
12	Collection of matured worm and mounting	78.33
13	Harvesting of cocoons	75.83
14	Cooking of cocoons and spinning	88.33
15	Marketing of cocoon and silk	59.17
16	Seed production	65.00

cleaning of rearing house, silkworm rearing, maintenance of mulberry garden, sorting of cocoon, care against pest and diseases and harvesting of cocoon. Goswami and Bhattacharya (2013) reported that women involvement was high in the activities like maintenance of hygienic conditions, spinning, bed cleaning, chowki rearing, harvesting, sorting and planting in Goalpara district of Assam. Present study also supports the previous works that women were mainly involved in light works.

Problems encountered by women in carrying out eri culture

A number of problems were faced by the women involved in eri culture activities. Data presented in Table 2 revealed that leaf crisis during winter months and disease and pest attack (81.67%) were the major problems faced by women involved in eri culture. Almost seventy nine percent women pointed out that they lack knowledge and skill about quality maintenance of raw silk. 75.83 per cent women mentioned about the problem of separate rearing house, 71.67 per cent women faced the problem of irrigation facility whereas 70.83 per cent women pointed out that the lack of marketing facility is also one of the major problems in eri culture. 68.33 per cent women did not have the proper knowledge about grading system of cocoon. On the other hand, 59.17 per cent women pointed out that lack of appliances and machineries was also one of the major problems in eri culture. 57.50 per cent women pointed out that they lack knowledge and skill for operating machineries. Lack of land for host plant cultivation was pointed out by 55.83 per cent women whereas 37.50 and 23.33 per cent women pointed out lack of fund and lack of seed, respectively were also another two problems in conducting eri silkworm rearing.

Table 2. Constraints of eri culture pointed out by the women involved in eri culture (N=120)

S.No.	Activities	Frequency	Percentage
1.	Lack of seed	28	23.33
2.	Lack of fund	45	37.50
3.	Lack of land for host plant cultivation	67	55.83
4.	Lack of separate rearing house	91	75.83
5.	Lack of appliances or machinery	71	59.17
6.	Leaf crisis during winter season	98	81.67
7.	Lack of irrigation facility	86	71.67
8.	Lack of marketing facility	85	70.83
9.	Lack of knowledge and skill for operating machineries	69	57.50
10.	Lack of knowledge about grading system of cocoon	82	68.33
11.	Lack of knowledge and skill about quality maintenance of raw silk	95	79.17
12.	Disease and pest attack	98	81.67

Das (2015) reported that the success of sericulture industry depends on a proper and highly efficient marketing which assures good prices to the farmers, reelers, weavers and the co-operatives. Neog and Giridhar (2014) also mentioned that there was lack of appropriate system for cocoon and silk marketing in muga sector. Present study is in agreement with the findings of Goswami and Bhattacharya (2013) who reported that pest and disease was the major problem in sericulture faced by the women of Goalpara district of Assam. But along with these another major constrain pointed out by the respondents was leaf scarcity during winter

period might be because of utilizing castor as the primary food plant of eri silkworm and it is annual in nature. Assam being the highest eri silk producer of India used to rear eri silkworm throughout the year. Popularization of perennial food plants may help in solving this issue.

Decision making ability of the women involved in eri culture

Data presented in Table 3 indicates that participation of women in decision making varied from procurement of disease free laying (85.83%) to nutrient management (27.50%). Decision making ability of women in various activities *viz.* cultural practices, marketing of cocoon and silk, adoption of new technology was 71.67, 70.83 and 45.83 per cent, respectively. Mech and Ahmed (2012) found that among the respondents, 48.90 per cent women alone took decision against 33.60 per cent men in various activities of eri culture. But Pegu (2018) in her study on the traditional knowledge and cultural practices of muga silk production in North Lakhimpur district of Assam reported that the respondents had medium level of decision making ability and Buragohain (2019) also found that 62.50 per cent of the eri rearers of Jorhat district had moderate level of decision making ability followed by 20.00 per cent had low and 17.50 per cent of respondents had high level of decision making ability. In the present investigation women were found to be somewhat less confident in regards of decision making ability in nutrient management and adoption of new technology might be due to lack of proper knowledge and information. Training and motivation may change the mindset of the respondents and it will lead to improve the production level.

Table 3. Decision making ability of the women involved in eri culture (N=120)

S.No.	Activities	Frequency	Percentage
1	Procurement of disease free laying	103	85.83
2	Marketing of cocoon and silk	85	70.83
3	Adoption of new technology	55	45.83
4	Nutrient management	33	27.50
5	Cultural practices	86	71.67

Training needs of the women involved in eri culture

Training is a means to bring desirable changes in knowledge, skills and attitude of a person for doing a particular job in a better way. It is evident from the data presented in Table 4 that majority of the women involved in eri culture needs training in by product utilization (88.33%). On the other hand, 84.17 per cent women need training in grading of cocoon and silk. For successful rearing, pest and disease management is very important, 80.00 per cent and 73.33 per cent women need training on disinfection, pest and disease management of silkworm. Data in the table also clearly indicates that 71.67 per cent women needs training in plant protection, 69.17 per cent in spinning of silk in modern machineries and 52.50 per cent women needs training in disease free laying preparation. Mech et al., (2010) reported that level of knowledge and skill of the women farmers in eri culture was considerably low and the training need was more prominent almost in all the improved practices. Ganie et al., (2018) suggested that sericulture farmers need to be trained and demonstrated about the latest methods of silkworm rearing and

Table 4. Training needs of the women involved in eri culture (N=120)

S.No.	Activities	Frequency	Percentage
1	Plant protection	86	71.67
2	Disinfection	96	80.00
3	Pest and disease management of silkworm	88	73.33
4	Disease free laying preparation	63	52.50
5	Grading of cocoon and silk	101	84.17
6	By product utilization	106	88.33
7	Spinning of silk in modern machines	83	69.17

consequently they will adopt the avocation of sericulture as an income augmenting and employment creating venture by selling their produce (cocoon). Yadav and Dahiya (2020) also revealed that training of women farmers was important to overcome the problems or constraints during the time of marigold cultivation in Gurugram district of Haryana. Nain & Kumar (2010) also emphasized that the empowerment of women should be formulated as a development policy and at the same time as a precondition for achieving sustainable development.

Annual income of the women involved in eri culture

It was evident from the Table 5 that majority of the women (62.50%) involved in eri culture belong to the income level upto Rs. 15,000 followed by 23.33 per cent women in the range of Rs. 15,001- Rs. 25,000 and 10.83 per cent in the range of Rs. 25,001- Rs. 35,000. It was observed from the present study that only 3.33 per cent women earned annual income of Rs. 35,001 and above. Bharaty (2013) reported that a family involved in eri culture earned annually Rs. 3,300-13,200 in Kamrup district of Assam where majority of people belong to tribal communities *viz.*, Bodos and Rabhas. Goswami and Bhattacharya (2013) mentioned that a women involved in eri culture earned annually Rs 12,800 in Goalpara district of Assam. Rani and Lal (2019) revealed that 45 per cent of the rural women vegetable growers of Haryana had a monthly income between Rs. 5,001- 10,000 followed by 28 per cent had upto Rs. 10,001 – 20,000 and only 17 per cent of the respondents earned income above Rs. 20,000.

Table 5. Annual income of the women through eri culture (N=120)

S.No.	Annual Income	Frequency	Percentage
1	Upto Rs.15,000	75	62.50
2	Rs. 15,001-25,000	28	23.33
3	Rs. 25,001-35,000	13	10.83
4	Rs. 35,001 and above	4	3.33

CONCLUSION

The study indicates that eri culture can emerge as the paramount in women's income generation in the study area. Participation of women in the important cash crop like sericulture particularly eri culture has always been an important strategy for poverty alleviation and attainment of food and income security in the state like Assam. In case of sericulture, women can be firmly believed to perform their responsibility with great care and attention. Sericulture creates equal opportunities for women and makes them independent socially, economically and politically. In

all the activities of eri culture women have shown their caliber and performed their duty skillfully. Proper training and timely guidance to the women involved in eri culture will lead to economic development and empowerment of women. Therefore, government should formulate the sericulture policy more women oriented.

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