IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

Role of Sericulture in Empowering Rural Communities: A Study of Rasulpur Village in Nabagram C.D. Block, Murshidabad, West Bengal

Banti Das
State Aided College Teacher,
Department of Geography,
Nagar College, Murshidabad, West Bengal, India

Abstract:

Sericulture plays an important role in employment generation and sustainable livelihood opportunities in rural villages in India. The present study aims to examine the impact of sericulture in empowering rural communities in Rasulpur village of Nabagram C.D. block, Murshidabad. To prepare the study, necessary primary data were collected from 100 sample households by the field survey method, and secondary data were collected from government reports, journals, theses, websites, etc.

Findings reveal that sericulture has a significant contribution to employment generation, income generation, women empowerment and overall community development. However, farmers face several challenges like the spreading of diseases, infrastructural unavailability, lack of credit facilities, interference of middlemen, lack of proper training and less wage rate in their working environment. But proper maintenance of hygiene, access to infrastructure, proper training and credit facilities from government and non-government organisations and awareness among sericulturists can remove these problems and make sericulture practice more secure and resilient for the rural communities in the study area.

***Keywords*:** sericulture, community development, employment generation, sustainable livelihood opportunities, women empowerment

Introduction:

The art and science of rearing silkworms to produce silk is known as sericulture. It is an agro-based, labour-intensive cottage industry and creates employment opportunities for rural people throughout the year. Sericulture has the potential for the empowerment of rural communities. The whole process is divided into two parts: the first part is known as 'sericulture', which includes mulberry plant cultivation, silkworm egg production, silkworm rearing and production of raw silk. The second part is known as the 'silk industry', which includes silk reeling, twisting, weaving and printing (Bhat, 2014).

Sericulture is suitable for rural small and marginal farmers because it can be practised on small landholdings and less investment is required (Savithri et al., 2013). It can be the source of regular income because it is done multiple times annually. From the stage of land preparation to the stage of raw silk production, it requires intensive care that creates employment generation for rural people, especially for women in these areas (Kasi, 2013).

India is primarily based on rural economy because almost 65% of the population resides in rural areas and depends on agriculture and allied activities for their livelihoods (Patel et al., 2023). It is the second largest producer of silk in the world after China, which contributes 18% of the total silk production of the world (Bukhari et al., 2019). It is the only country where all four types of important natural silk i.e., mulberry, tasar, eri and muga are produced. There are many rural areas of this country where only agriculture is not sufficient for income generation. In that case, sericulture acts as a supplementary livelihood activity and provides additional income to the people suffering from backwardness in this area. It can reduce the dependence on agriculture and check seasonal migration and improve the standard of living of rural households (Hoque & Hasmi, 2023). Development in sericulture also promotes agro-based industries like handloom industries and creates employment opportunities and reduces the tendency to rural to urban migration (Mookherjee, 1982). In the year 2021-22, among the four varieties of silk produced in India, mulberry accounted for 74.03% (25,853 MT), tasar 4.17% (1,456 MT), eri 21.07% (7,359 MT) and muga 0.73% (255 MT) of the total raw silk production of 34,923MT and sericulture industry creates employment generation to approximately 8.7 million persons in rural and semi-urban areas in this country (Central Silk Board**,** 2022).

History of sericulture:

Historical evidence showed that silk was discovered in China, and then it spread from China to other parts of the world. It is believed that around 2700 BC, an ancient Chinese empress, Si-Liang Chi (Leizu), wife of emperor Huang-Di, was resting in her garden. At that moment, a silk cocoon fell in the cup of tea from the tree, and when it was tried to take out, it began to unravel. Thus, the process was discovered, and the Chinese empress started this process commercially to produce silk. Later, she was known as 'the goddess of silkworm'. At that time China maintained the monopoly of sericulture, and silk was commercially traded from China to Europe, Central Asia and the Middle East through the path of the 'Silk Route' (Hoque, 2020). The whole process was unknown for centuries because China did not reveal the secret of silkworm rearing and making silk. After a long time, it is believed that Buddhist monks brought silk eggs and the process of making silk from China to India. According to the mediaeval historians, sericulture was prevalent in Jammu and Kashmir, West Bengal, Karnataka and other parts of India. It had a prosperous time during the Mughal period. In southern India, sericulture was introduced by Tippu Sultan. In eastern India, especially in West Bengal, sericulture took place during the Mughal period. Cossimbazar in the Murshidabad district of West Bengal became an important trade centre of 'Murshidabad Silk', which attracted European companies, and Indian silk products became famous worldwide (Chowdappa, 2003). In the present day, Karnataka is the largest producer of silk in India, followed by Andhra Pradesh, Tamil Nadu, West Bengal and Assam.

Objectives:

The main objectives of the study are:

- To show the role of sericulture in employment and income generation in Rasulpur village.
- To assess the contribution of sericulture in women empowerment and overall community development in the study area.
- To find out the challenges faced by sericulturists and suggest few measures to improve this sector for rural development.

Database and Methodology:

The present study is based on both primary and secondary data. Both quantitative and qualitative data are collected to prepare the study. Primary data have been collected by conducting field survey with the help of survey schedules in the study area. 100 sericulture-based households were selected as sample population through random sampling technique. Necessary secondary data have been collected from the office of the Deputy Director of Textiles, Berhampore, Murshidabad, and from various journals, reports, theses, websites, etc.

Study Area:

The present study is done at Rasulpur village, located in 24º10′00″ North latitude and 88º00′18″ East longitude under the Nabagram C.D. Block, Murshidabad district, where mulberry sericulture is practised. There are 22 C.D. blocks in this district that produce silk, and Nabagram CD Block ranks 2nd in block wise area under sericulture (2103.54 Acres) and ranks 1st in block-wise sericulture-adopted villages, i.e., 63 (Office of the Deputy Director of Textiles (Sericulture), Murshidabad, West Bengal, 2018). The total geographical area of Rasulpur village is 883.10 hectares, having 2645 households. It is the westernmost village of this district and is surrounded by the Brahmani River on the western and southern sides, making this region very fertile for agriculture. Total population of this village is 9954; among them, male population is 5087 (51.1%), and female population is 4867 (48.9%). Literacy rate is 59.9% whereas male literacy rate is 64.48% and female literacy rate is 55.06% (Directorate of Census Operations, West Bengal, 2011).

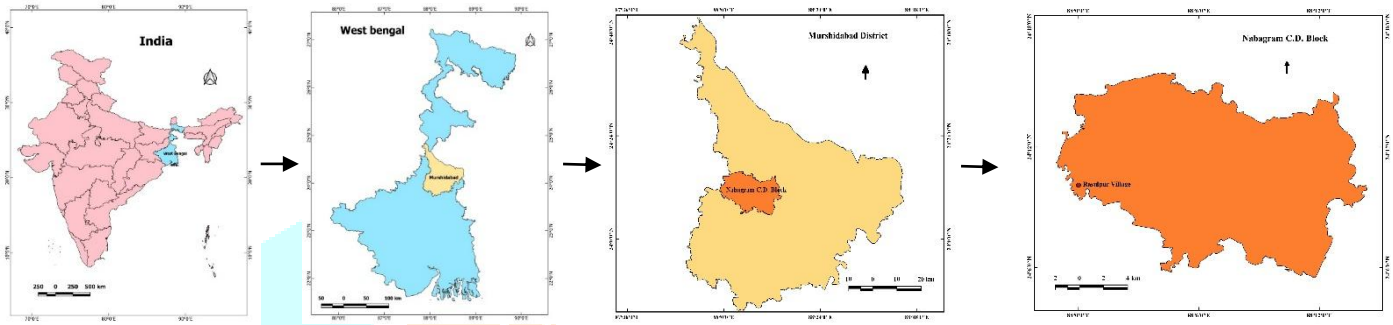


Figure 1: Location Map of The Study Area

Source: https://onlinemaps.surveyofindia.gov.in/ *; Software used: QGIS-3.22 (Open Source); Prepared by Author*

Sericulture practices in Rasulpur village:

Rasulpur village is one of the famous sericulture-based villages in Nabagram C.D. block, Murshidabad. Mulberry plant cultivation, silkworm rearing, and production of silk cocoon and raw silk - all are done here by the rural communities. Sericulture is done by them as a subsidiary source of income, that strengthens their economic condition.

Employment generation: Sericulture has the potential to provide employment in different ways throughout the year. The study (Primary survey, January, 2026) reveals that in the study area, all the respondents have been engaged in sericulture process more than 15 years. Figure 2 shows various roles played by the respondents in this process. 89% of respondents are involved in mulberry leaf planting, 73% engage in silkworm rearing and silk reeling, 87% engage in cocoon and raw silk marketing, and 6% of respondents are engaged in other jobs.

In figure 3 the annual employment pattern from sericulture has been shown at Rasulpur village. 10% of respondents are employed for 201-250 days, 42% are employed for 151-200 days, 45% are employed for 100-151 days, and the remaining 3% are employed for 100 days or less. It is clear that sericulture plays an important role in the economy of sericulturists, as it provides year-round work, which is more consistent than the MGNREGA scheme in this area.

Figure 2: Role Played in Sericulture

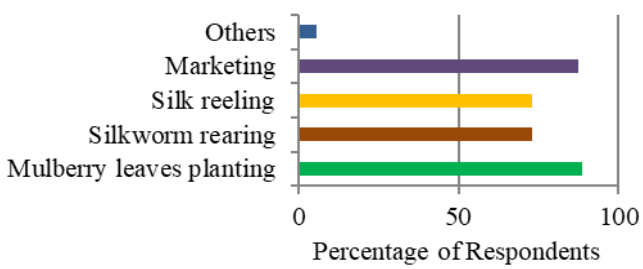
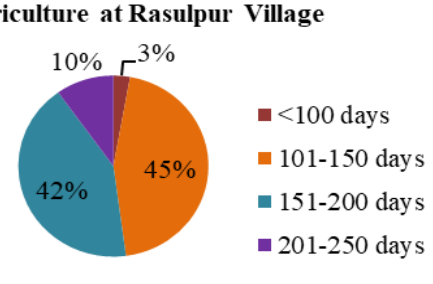
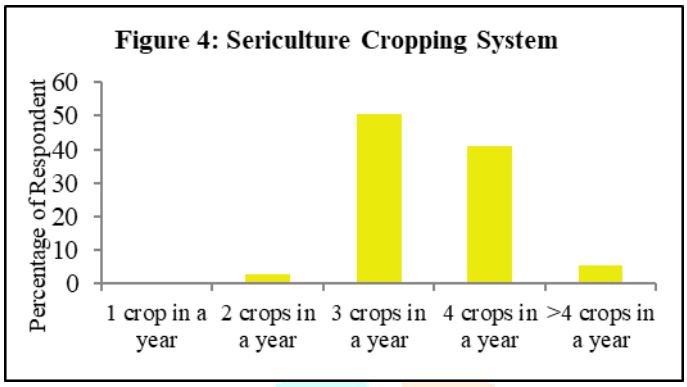
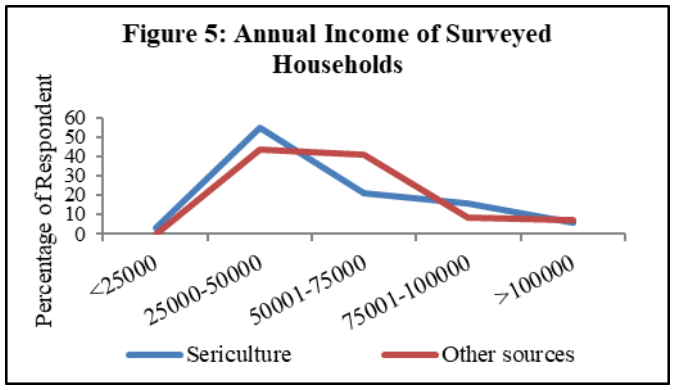


Figure 3: Annual Employment Pattern from Sericulture at Rasulpur Village

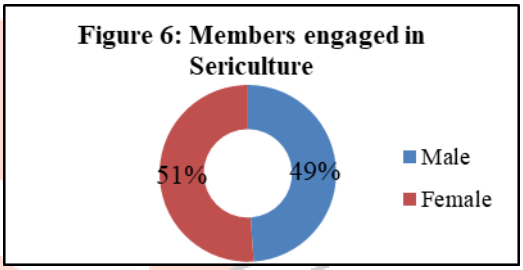


Income generation: Sericulture has an important role in household income generation. It has a low gestation period and is practised multiple times in a year. In the study area, 3% of household practise 2 crops, 50% practise 3 crops, 41% practise 4 crops and 6% practise more than 4 crops annually (Figure 4). Here, in the study area, sericulture is practised as a secondary source of income. Primary sources of income of the respondents are agriculture (80%), small business (11%) and agricultural labour (9%). Here, most of the families (55%) fall into the 25000-50000 rupees income groups. There is a decline in the number of households with increasing income group. Only 6% of families have annual income more than 100000 rupees (Figure 5).

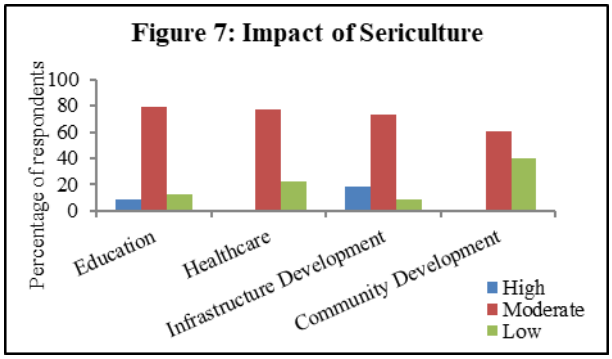


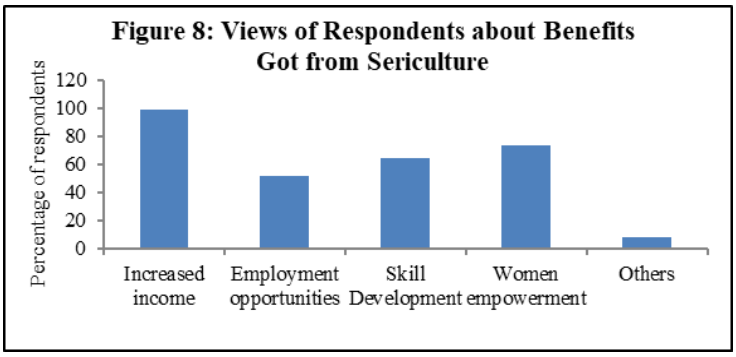


Women empowerment: As sericulture is practised as a secondary source of income in Rasulpur village, male family members are mainly engaged in the primary source of income, and sericulture activities are mostly done by female members. The whole process, like silkworm feeding, chawki rearing, cleaning, silk reeling is done at home except mulberry plant cultivation and maintained by female members of the family. Figure 6 shows the engagement of male and female population in sericulture in the study area, which indicates that 51% of female and 49% of male members are engaged in these activities. Women members maintain both household responsibilities and their work. It makes them self-dependent and improves the socio-economic status in this sector.



Community development: Sericulture has an overall positive impact on community development and ensures economic sustainability for rural and marginal farmers in this area. According to the respondents, sericulture has a high impact on infrastructure development (18%) and education (8%). A moderate impact was reported on education (79%), healthcare (77%), infrastructure development (73%) and community development (61%). At the same time, a low impact was also observed on community development (39%), healthcare (23%), education (13%) and infrastructure development (8%). It shows that sericulture is widely beneficial for rural development (Figure 7).

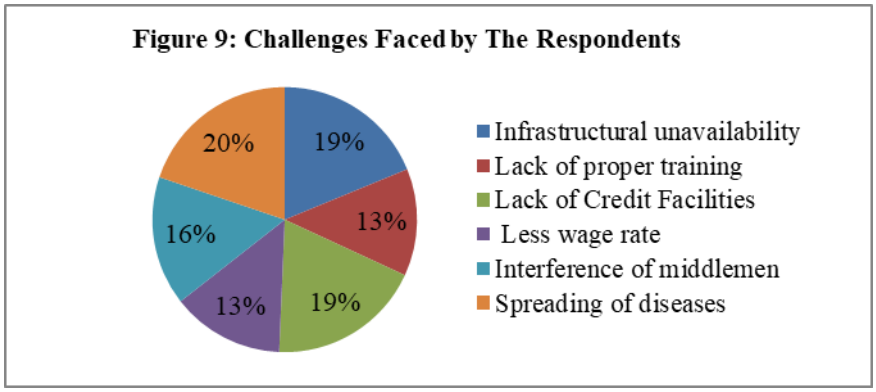




Here, the survey results regarding benefits got from sericulture in Rasulpur village have also been depicted in Figure 8. According to the respondents, sericulture has the highest benefit on income generation (99%), women empowerment (73%), skill development (65%), employment opportunities (52%) and others (8%).

Challenges:

The study identified few major challenges in sericulture in this area. Spreading of diseases (20%), infrastructural unavailability (19%), lack of credit facilities (19%), interference of middlemen (16%), lack of proper training (13%) and less wage rate (13%) are some major problems faced by the respondents in their working environment (Figure 9).



Recommendations:

To address these problems, few recommendations are given-

- Sericulturists should maintain proper hygiene in their work, which can prevent diseases and infections.
- Modern infrastructures should be given by the government for higher production of cocoon.
- Government and non-government organisations should provide credit facilities with minimum interest to the sericulturists.
- Interference of middlemen must be removed to ensure farmers get a fair price for their products.
- Sericulturists should give proper training for modern and scientific sericulture rearing techniques.
- Awareness programmes should be conducted to inform the sericulturists about the prevalent credit facilities and schemes for their financial assistance.

Conclusion:

Like agriculture, sericulture plays an important role in creating employment opportunities and additional income generation. It increases women participation in economic activities and improves the socio-economic conditions and supports rural development. Although there are few barriers, proper maintenance, awareness, training and support from government and non-government organizations can make sericulture practice more sustainable and reliable in this area.

References:

- Bhat, T.A. (2014). An Analysis of Public Private Partnership in Sericulture in Jammu and Kashmir State in India. Journal of Economics and Sustainable Development, 5 (11), 121-126.
- Bukhari, R., Kour, H. and Aziz, A. (2019). Women and the Indian Sericulture Industry. International Journal of Current Microbiology and Applied Sciences, 8 (05), 857-871. doi: https://doi.org/10.20546/ijcmas.2019.805.101
- Central Silk Board (2022). Functioning of Central Silk Board and Note on Sericulture. Ministry of Textile, Government of India. Available from: https://csb.gov.in/index.php/downloads/note-on-sericulture
- Chowdappa, C. (2003). Sericulture And Socio-Economic Development in Karnataka A Study of Kolar District. Department of Rural Development, Bangalore University. Available from: http://hdl.handle.net/10603/89494
- Directorate of Census Operations, West Bengal. (2011). District census handbook: Murshidabad district—Village and town wise primary census abstract,2011. Office of the Registrar General & Census Commissioner, India.

- Hoque, A. (2020). Sericulture And Socio-Economic Development in Malda District, West Bengal. Aligarh Muslim University. Available from: http://hdl.handle.net/10603/369735
- Hoque, A. & Hasmi, R. K. (2023). Growth and Development of Sericulture Production and Mulberry Plants cultivation in West Bengal: An Overview. International Journal of Humanities Social Science and Management (IJHSSM), 3 (3), 2023, 389-398.
- Kasi, E. (2013). Role of Women in Sericulture and Community Development: A Study from a South Indian Village. SAGE Journal, 3 (3), 1-11. DOI: https://doi.org/10.1177/2158244013502984
- Mookherjee, S. (1982). Sericulture in West Bengal: A geographical analysis. University of Calcutta. Available from: http://hdl.handle.net/10603/155226
- Office of the Deputy Director of Textiles (Sericulture), Berhampore, Murshidabad, West Bengal, 2018.
- Patel, N., Sethi, T. & Athira S. (2023). Leveraging Agroecological Approaches for Clean and Green Villages. NITI Aayog. Available in: https://www.niti.gov.in/leveraging-agroecological-approaches-for-clean-green-villages
- Savithri, G., Sujathamma, P. & Neeraja, P. (2013). Indian Sericulture Industry for Sustainable Rural Economy. International Journal of Economics, Commerce and Research (IJECR), 3 (2), 73-77.