The artisanal silk industry of West Bengal: A study of its history, performance and current problems

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Abstract. Artisanal silk industry is a highly labour and land intensive activity ideally suited for economy like India. During medieval period, it was practiced as a dependable livelihood and Moghul Rulers were the patrons. By 16th Century, commercial production of silk was started in Bengal by Sultan Hussain Shah. From the mid of 17th century, silk trade in India started flourishing since the demand for cheaper Bengal Silk began to rise in the European market. British traders realized that only low price of silk would not be enough to retain their market, and they introduced Piedmontese technology, though it was not suitable for Bengal economy at that point of time. After cessation of monopoly trade right, EEIC started selling off its filatures, thus spelling its gradual decline. After independence, attempts were made to transplant the temperate sericulture technology in the traditional silk producing states of India. West Bengal failed to bring the desired result both in domestic and export front, primary reason being large production of nistari multivoltine, while the export intensive bivoltine silk production is grossly ignored. During 2007-2012, the production of raw silk rose from 1660MT to 1924 MT, but the employment generation showed an enormous decline from 3.03 to 2.71 lakhs. The primary analysis in the Malda district explains that number of man-days generated from different phases of silk worm rearing activity influences the total income generation of the artisans. On the other hand, cost of machineries and loans taken by household farms have positive effects on income generation of the sericulture farms. The primary analysis also reveals that area of mulberry cultivation, educational background of family head and total man-days creation have an inverse impact on the level of average employment generation in rural sericulture, while rise in household size and numbers of male and female hired labour have positive impact on the level of employment generation in a sericulture family farm. Employment of women generates a superior impact on the nutritional and educational level of the children and this study shows that higher percentage of female members in the household, wage accruals to the hired female workers and family empowerment of female members raise the gender pre-dominance of the sericulture farms.

Keywords. Artisanal silk industry, Income, Employment, Gender labour force.

JEL. J16, N00, O13, P46, R31.

Highlights
* The study focuses on the transformations of the artisanal silk industry in West Bengal. It is based on secondary and primary sources and contextualizes its case study in a broader inter-state analysis and economic policies since the post-Independence period. It traces the historical pattern and also analyses the first four decades of planning and their impact on the silk artisanal industry in different states. It identifies price fluctuations, lack of infrastructure, the inadequate transfer and adaptation of technology and the failure to compete with imports.
* The study reveals that while in the national perspective the area under mulberry cultivation and price of cocoon reeling have a significant impact on income, the micro

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level study exposess that man days of employment generated in different phases of sericulture is a more logical way of explaining the income levels of the industry. It makes an important point that employment generation and not technology or the increase in area under mulberry cultivation is the basic need if artisanal income from silk cultivation is to be augmented.

* The analysis concludes that policy restructuring is essential if the potential of the domestic market is to be tapped by the artisanal silk industry.

**Summary**

Artisanal silk industry is a highly labour and land intensive activity ideally suited for the vastly populated, agro-based economy like India. While farmers in the rural areas practice sericulture activities, silk weaving and production of silk goods are concentrated in the urban towns and cities. Thus it interlinks both agrarian and cottage based industrial economy and hence has a widespread impact on employment and income generation. Moreover, there is a substantial involvement of women in this industry, thus challenging the prevalent gender-bias in employment and income generation.

Silk was discovered earliest in China and from there it spread to different parts of the world, including India. During medieval period, silk production was practiced in India as a dependable livelihood. Silk production was also greatly patronized under Moghul Rule in India. During the 16th Century, commercial production of silk was started in Bengal. by the last ruling Sultan Hussain Shah and since then Bengal silk started prospering. Eventually, Kassimbazar and Murshidabad in Bengal became a major hub of silk trading in India. From the mid of 17th century, silk trade in India started flourishing as the demand for cheaper Bengal Silk began to rise in the European market. The British traders soon realised that only the low price of silk will not be enough to retain their market, and so they introduced new filature technology, which was not suitable for the economy at that point of time. After the erosion of rights to monopoly trade, the EEIC started selling off its filatures, thus spelling its gradual decline. The socioeconomic condition of the silk artisans deteriorated further as silk became one of the major hindrances in the progress of Industrial Revolution leading to the corresponding promotion of Manchester silk.

After independence, attempts were made to transplant the temperate sericulture technology in the silk producing states like Karnataka and West Bengal but it failed to bring the desired result for the latter. The basic edifice of the silk-industry in India had been built on the strength of its strong domestic demand. This domestic supply crunch has led the country to rely more on imported silk and the increasing dependence on imported bivoltine silk, which is of premium quality while being offered at a cheaper rate, causing ruin of indigenous poverty stricken silk artisans. To counter this effect, the bivoltine production has been started in India, but its success was restricted only to specific regions. West Bengal fails to add any substantive value to the export basket, the primary reason behind this being that, nistari multivoltine is largely produced in West Bengal while the popular bivoltine silk is produced at a negligible percentage.

However, the productivity level of sericulture is not low compared to that of the major silk producing states in the country. A state level comparison confirms that land based productivity is not hindering the growth of mulberry sericulture in West Bengal while progress of the artisanal silk industry reveals several loopholes. Small holdings and poor economic condition of the artisans have been identified as the major impediments. The rural moneylenders utilize this to their advantage and extract a major part of the pay-off intruding into the supply chain of the industry. In the absence of institutional control and well-linked credit system coupled with financial illiteracy, the development of these rural artisans seems still a far cry. Grave issues concerning the silk artisans include volatile price of silk cocoon and silk yarn, lack of region specific mulberry variety as well as inadequate coordination between technology yielding laboratory and cultivation field,
competitive import price threat from China and infrastructural bottleneck across the states. Sericulture in West Bengal failed to develop beyond the districts of Malda, Murshidabad and Birbhum. Malda produces 75% of the state’s production and hence occupying a pivotal role in production of mulberry raw silk in West Bengal.

Income and employment generations are the major potentials of this sector as they include the wealth transferring capability from high end urban customers to poor artisans. During 2007-12, although state production of raw silk rose from 1660 MT to 1924MT, the employment generation shows a enormous decline from 3.03 lakh to 2.71 lakh. Against a national perspective, income generation, area of mulberry cultivation and price of reeling cocoons have been deduced as significant explanatory variables for income growth while the primary analysis in the Malda exposes that number of man-days generated from different phases of silk-worm rearing activity actually influence the total income generation of the artisans. On the other hand, cost of machineries and implements and loans taken by household farms have positive effects on income generation of the sericulture farms. This in a way establishes that rich and wealthy farmers who are expected to bear higher production cost have greater income generating capacity from this artisanal silk industry. The rural sericulture oriented villages are inhabited by small farmers with modest capital base and thus have limitations in income generation. This also justifies the declining number of sericulture farmers in West Bengal over the last decade or so.

On the other hand, from the employment perspective, West Bengal occupies highest number of ‘families involved per village ratio’ compared to other silk producing states. But in the last decade, the growth in sericulture has declined in terms of involvement of villages and families in West Bengal. Interestingly, the primary survey analysis on Malda reveals that area of mulberry cultivation, educational background of family head and total man-days creation have an inverse impact on the level of average employment generation in rural West Bengal. On the other hand, rise in household size and numbers of male and female hired labour have positive impact on the average level of employment generation in a sericulture family farm.

The thesis attempted to explore the hidden issues behind the ostensible ‘predominance of female workers’ in this artisanal sector of West Bengal. Employment of women generates a superior impact on the nutritional and educational level of the children. In case of West Bengal, the primary analysis shows that higher percentage of female members in the household, wage accruals to the hired female workers and family empowerment of female household members can raise the gender dominance of the sericulture farms resulting in higher levels of female engagement in sericulture. However, with an increase in household size, an additional pressure is placed on the women to undertake domestic unpaid work and household maintenance, while a greater number of male workers is initiated to join the sericulture farms, possibly due to higher returns, thus displacing the female workers.

In order to overcome such bottlenecks, the Directorate of Sericulture adopts certain targets annually which leave marginal impact in its stages of implementation. Increase in area of mulberry cultivation is shrinking in West Bengal, which can be considered as one of the major factors for the slow growth of sericulture in this part. Improved mulberry variety is to be planted with greater care for manures and fertilizers. Innovations and technologies need to be directed to the generation of more output in cost effective ways. Quality yarn needs to be produced by the domestic farms so that aggressive trade policies of foreign firms can be tackled. Irrigated lands have higher productivities and therefore greater emphasis should be given on expansion of the irrigation network. Enhancement in number of cocoon markets and power looms can be initiated with a little effort from the government. Credit facilities to sericulture artisans need to be made at discounted rates so that poor farmers can easily adapt themselves to the rising costs. Gender discrimination against women workers in wage payment has to be
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legally banned and rightfully implemented, which requires good governance in remote areas. Only then will the status and existence of this merely recognized, unremunerated women worker be promoted which in turn will ensure a healthy progress in the artisanal silk industry in West Bengal.

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