



A review on sericulture productivity in Nanded district of Maharashtra

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Abstract

India is primarily an agricultural country, with the majority of its population living in rural areas. Rural residents' primary line of work is agriculture. The monsoon season is essential to most agricultural land. There is uncertainty about agricultural production because most years have an extended dry period that ends with two rainy seasons. The fundamental issue with agriculture these days is its economic viability. Farmers will continue farming in the future if they earn a steady and predictable income from it. It is necessary to consider other options that provide farmers with a particular amount of revenue. Farmers have many of chances in the numerous agro-allied sectors. Farmers have started producing dairy, poultry, Fish culture, goats, and sheep in order to continue making money. Sericulture is another profitable industry with a lot of promise. In this context, a number of farmers in the Maharashtra began cultivating sericulture, which results in the production of cocoons. Global conditions today plainly show that the Indian silk industry has a plethora of prospects. One of the industries with the highest labor intensity is sericulture, which combines industrial and agricultural processes. Given this context, the current study focuses on the growth of sericulture farming and its profitability in different Nanded district villages. This study makes use of both primary and secondary data. Data pertaining to 2022–2023 was gathered in October of 2023. The core data was gathered by surveying 24 sericulture farmers in the villages of Nanded district. Written reports from the Nanded district sericulture office have been used to gather secondary data. Approximately eighty percent of sericulture producers are benefiting, according to the sample survey.

Keywords: Sericulture, productivity, farmers, Nanded districts

Introduction

Rural people's primary occupation is agriculture. The majority of agricultural land depends on the monsoon season. There is uncertainty regarding agricultural yield because of the prolonged dry period that occurs within two rainy seasons in most years. The price of agricultural commodities decreases whenever there is an abundance of output. It is necessary to consider different sources that provide farmers with a particular amount of money. In order to sustain their livelihood, farmers have ventured into dairy, poultry, goat, and sheep husbandry, as well as the cultivation of fruits, vegetables, and flowers. This backdrop led to the establishment of sericulture farming, the production of cocoons, by a number of farmers in the Nanded district.

Sericulture, often known as silkworm farming, is a globally significant agricultural sector whose influence on commerce and culture has made it an essential part of human history. Silk is the final commodity produced by the sericulture farming. The fibrous protein used by silkworms to spin their cocoons is known as silk. In essence, sericulture is a rural, agro-based economy that combines farming and manufacturing. The industry's on-and off-farm activities are taken into consideration, making it the center of attention. Mulberry plant cultivation is referred to as Moriculture. In mulberry sericulture, mulberries are cultivated for their leaves, silkworms are raised from the leaves to make cocoons, the cocoons are retracted to produce silk thread, and the yarn is woven into fabrics. Sericulture involves a variety of little tasks, such as harvesting leaves from plants, feeding silkworm larvae, handling larvae, and so on. Because silkworm larvae are

tiny and extremely delicate, these tasks require cautious handling. Women are capable of performing these jobs well. Therefore, in the end, this also gives women a lot of opportunities.

These days, it's widely accepted that agriculture is failing. Given this context, it is imperative to ascertain whether sericulture farming contributes to farmers' increased revenue. Agricultural productivity is unpredictable in drought-prone areas such as Nanded district in Maharashtra. It is crucial to research whether cultivating sericulture is profitable and provides farmers with a steady income.

Material and methods

The current study relies on both primary and secondary sources of information. A survey has been conducted in the villages of eight talukas in the Nanded district to determine the profitability of sericulture production. The 24 farmers who practice sericulture across eight talukas provided the initial survey data. Data pertaining to 2022–2023 was gathered in October of 2023. The Maharashtra government's Nanded District Sericulture Office provided secondary data. The development of sericulture cultivation in the Nanded district has been explained using secondary data.

Result and discussion

The Nanded district is the second most populous and rapidly developing district in Marathwada. Applied agricultural activity and farming are the primary sources of revenue. Nowadays, sericulture has helped farmers become more financially stable. Additionally, the government offers farmers numerous opportunities for supplemental income.

For the farmers' financial stability, it has been a huge success. According to the study, sericulture has grown in significance in the study areas recently and has the potential to be the main source of employment and revenue in the region. It is the least demanding of resources and doesn't call for a college degree or a lot of busywork. They can actually accomplish this task and generate large returns with relatively little cost, simple technology, and labor. The results of this study showed how important sericulture is to the empowerment of farmers in the Nanded area, as well as to the growth of their families and the Indian economy.

Table No. 1 shows the overall production of cocoons produced by farmers in the Nanded district of Maharashtra, along with the amount of mulberry plantation land divided by taluka and the amount of cocoons sold in rupees. In 2022–2023, sericulture farmers in the research region were

able to produce 451.54 kg of cocoon on average, utilizing an average of 1.5 acres of land. This production ranged from 152.8 kg to 4,995 kg.

Sericulture also offers the benefit of being a family-friendly industry, meaning that everyone may participate in the manufacturing process and generate cash and jobs. One other benefit of sericulture is that it's a year-round activity that is not dependent on the seasons. The fact that sericulture is more likely to produce a crop and generate revenue than other conventional crops like cotton, soybeans, etc. is one of the factors contributing to its popularity in the Nanded district. Regular crops yield an average yearly income of between 28,000 and 32,000 rupees, but sericulture yields an average annual income of between 95,000 and 1,90,000 rupees per acre. For certain farmers in the research region, sericulture generates even higher incomes.

Table No 1: Taluka wise Status of Cocoon Production in Nanded District (Year 2022-2023)

Sr. No.	Taluka	No. of Farmers	Land holding in hector	Area used for Mulberry Plantation (Acre)	Cocoon Production in Kg	Amount From Cocoon in Rs.
1	Ardhapur	03	5.31	5.33	1,043.6	5,73,980
2	Bhokar	01	1.35	1.00	223.4	1,22,870
3	Hadgaon	09	9.30	13.40	4,995	27,47,250
4	Kandhar	01	2.99	2.20	1,199	6,59,450
5	Loha	02	2.79	2.00	651.3	3,58,215
6	Mudkhed	05	10.95	8.60	2,232	12,27,600
7	Mukhed	02	4.70	4.40	340	1,87,000
8	Naigaon	01	1.89	2.20	152.8	84,040
	Total	24	39.28	39.13	10,837.1	59,60,405

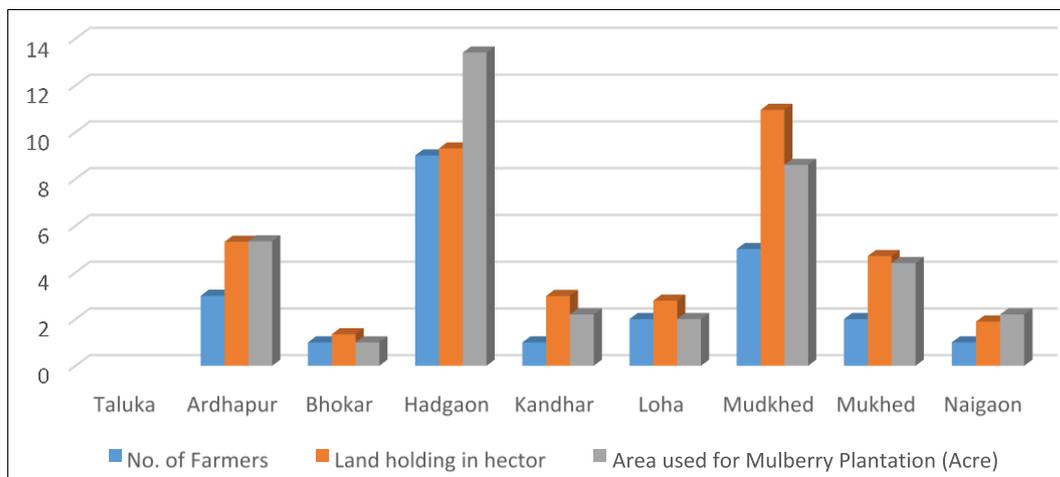


Fig 1: Taluka wise Farmers Land Holding & Area used for Plantation

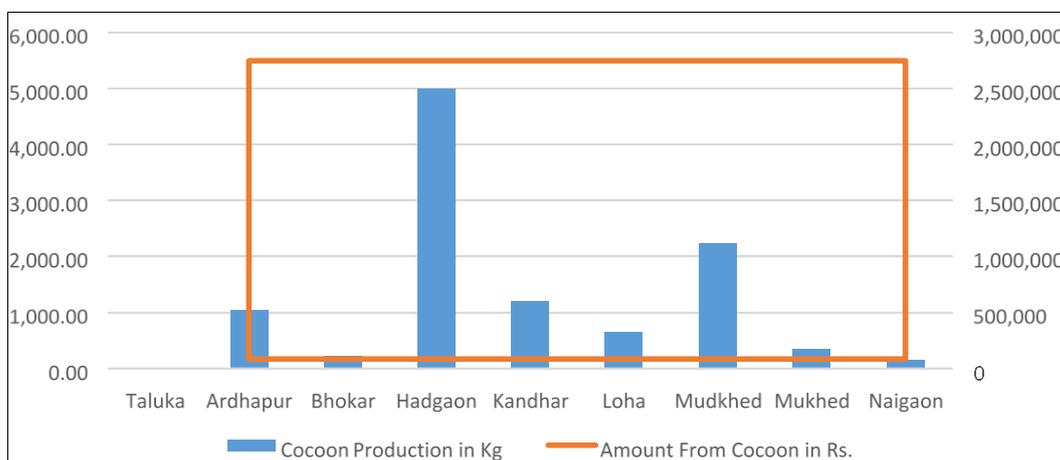


Fig 2: Taluka wise Cocoon Production & Amount from Cocoon

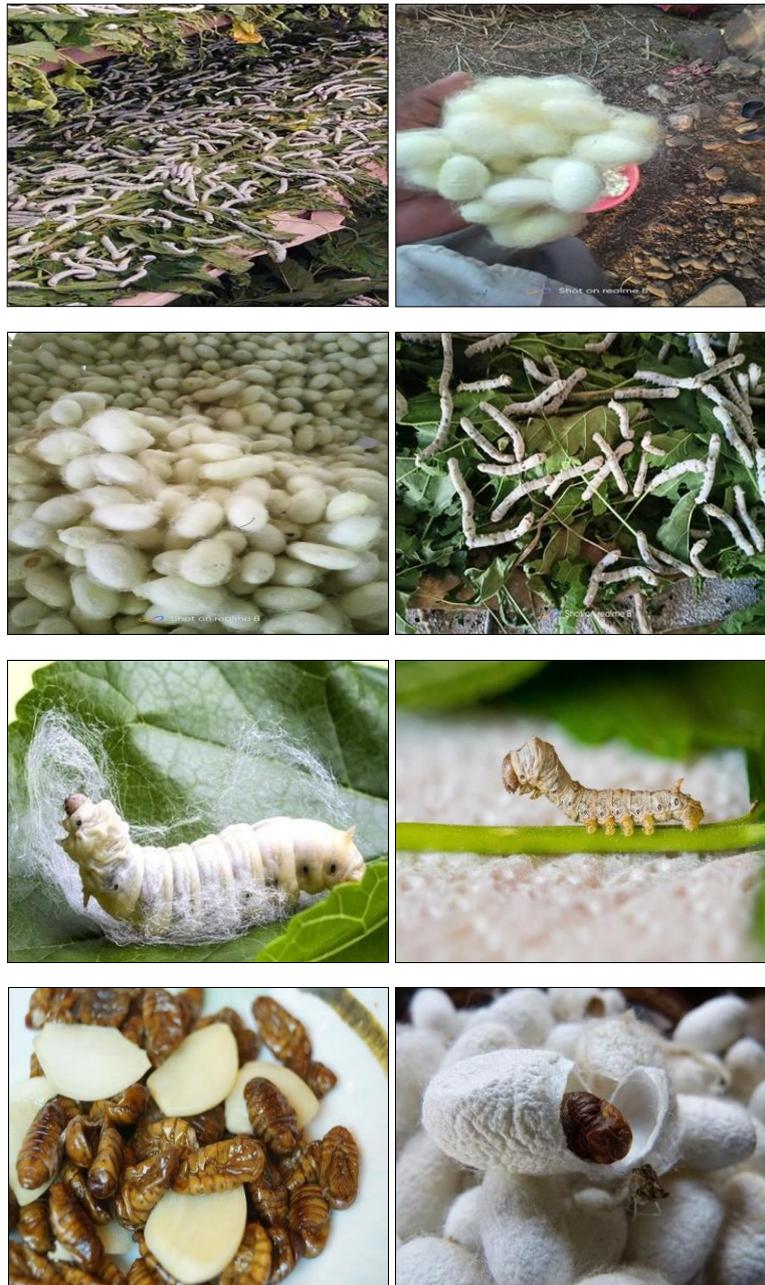


Fig 3: Various Stages of Silk Worm

Conclusion

The Nanded district's farmers are finding extremely profitable and meaningful employment in sericulture. The sericulture sector has the potential to empower farmers, and it is imperative to advance sericulture throughout the Nanded district. This will undoubtedly contribute to the advancement of farmers' socioeconomic standing in society.

Acknowledgement

The authors express their gratitude to Nanded District Sericulture Office, the farmers, and other sources for their direct or indirect assistance with this work.

Conflict of interest: Author declare that they have no conflict of interest.

References

1. Choudhari SD, CB Latpate, AV Mhetre. Analysis of Sericulture production in Parbhani district. The Pharma Innovation Journal,2021:10(1):207-208.

2. Hiware CJ. Farmer’s empowerment through sericulture industry from Aurangabad District, Maharashtra State, India. Entomology and Applied Science Letters,2016:3(2):22-28.

3. Kalyankar PM. Development of Sericulture Farming in Marathwada Region and Economic Viability of Sericulture Farming. International Journal of Tropical Agriculture,2019:37(3):341-351.

4. <https://mahasilk.maharashtra.gov.in>