



Influence of Covid-19 Peak Period on Sericulture Farmers, Reelers, Weavers and Traders.

SHARYU VASANT GHONMODE

S.S.E.S.Amt's Science College, Congress Nagar, Nagpur, (M.S.)

Abstract

India is an ancient country to establish sericulture industry and it manufactures and even exports the tasar cloth (Kosa) to various countries since several centuries prior to the B.C. During the second century B.C., the silk was exported from India to European countries. It has been studied that the production of tasar silk was much more than that of mulberry silk during the Mughal period.¹ India is unique in producing all four commercial silk varieties viz. Mulberry, Tasar, Eri and Muga. Sericulture is well-established agro-cottage industry and suited to rural-based farmers with a good cost-benefit ratio. It provides employment to six million rural populations. Covid-19 was caused by the novel corona virus and was first identified in Wuhan, China. This disease is transmitted through direct contact with the respiratory droplets of infected person, especially when the person coughs and sneezes. Covid-19 has led to a huge loss of human life, food system, millions of agricultural workers had gone through working poverty, mal nutrition and poor health. The Covid -19 crisis has created a dire impact on the complete world. The Lockdown declared by Government had an awful impact on the financial growth and development of every individual. The sericulture sector has also vouched such condition. The sericulture farmers, reelers, weavers and traders have to face various issues like marketing of cocoons, silk, its products, non availability of vehicles for transportation, non availability of the workers from sericulture sector, problems regarding hard currency flow. During pre Covid-19 period the average selling price of cocoon was 400 Rs/Kg while the price during Covid-19 period was Rs. 200/Kg. This paper helps to study the impact on Covid-19 peak period on the livelihood of sericulture farmers, reelers, weavers and traders. Different activities involved in sericulture were affected by pandemic. Due to difficulty in import and export of silk and other related materials, Government has to be self reliant for the production.



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CONTACT Sharyu Vasant Ghonmode ✉ sharyu.ghonmode@gmail.com 📍 S.S.E.S.Amt's Science College, Congress Nagar, Nagpur, (M.S.)



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Introduction

In India, sericulture is the well-established agro-based cottage industry. It has been reported that out of 5,76,000 villages, the sericulture practice has spread over 50,000 villages in India.² It is the only agricultural crop was provided output within a month.³ It provides employment to nearly six million rural populations provided employment to over 9.1 million people in India during financial year 2019. Sericulture is an export oriented sector of the Indian economy with an annual export earnings of about 937.54 crores (mulberry silk goods Rs. 462.50 crore and tasar silk goods Rs. 412.30 crores) as recorded in 1994-95. About 72,879 tons of silk is produced in the world, while 10,905 tons are shared by India and ranks second position in mulberry as well as tasar silk. Foreign exchange earnings of tasar silk goods from USA is ranked first followed by Germany, England, France, UAE, Italy, Japan etc. (c.f. Export review Indian Silk, 1996). Sericulture provides socio-economic development by providing the employment to man and women rural workers.^{4,5}

Covid-19 (Corona Virus Disease 2019) caused by SARS-CoV-2 (Severe Acute Respiratory Syndrome Corona Virus-2) was first found in Wuhan province of China. It has caused an awful impact

on every human beings life. As the impact was seen globally and also it has affected the economic activities, India has imposed the restrictions on import and export of goods, also the movement and travel of people from place to another place. The nation was under strict lockdown. This all restrictions were imposed to save getting affected from this disease as this being the highly contagious disease. But on the other hand the lockdown has caused severe repercussions including sericulture sector. This has affected the people and farmers right from food plant cultivation for silkworms up to the reeling the cocoons and weaving of the silk thread.

Current Prominence of Indian Sericulture Sector

After China, India is the second largest country producing silk. The complete world is aware about the importance of silk as our culture, because rituals and tradition is not complete without the silk. India produced approximately 35,820 Metric Tons (MT) of raw silk which comprises about 32, 82% of the total global silk production⁶. From the four varieties of silk produced in 2018-19, Mulberry accounted for 71.45% (25,345 MT), Tasar 8.4% (2,981 MT), Eri 19.48% (6,910 MT) and Muga 0.66% (233 MT) of the total raw silk production of 35,468 MT⁷ (Table 1).

Table -1-Source: (<https://csb.gov.in>) Functioning of Central Silk Board & Performance of Indian Silk Industry, as on 1st July 2021). The data received from DOSs & compiled at CSB (Central office); P: provisional

Particulars	2015-16 Achieve ment.	2016-17 Achiev ement	2017-18 Achiev ement	2018-19		2019-20 (P)	
				Target	Achiev ement	Target	Achiev ement (Till Dec-19)
Mulberry Plantation (Lakh ha.)	2.09	2.17	2.24	2.46	2.35	2.57	2.44
Raw Silk Production in MT:							
Mulberry (Bivoltine)	4613	5266	5874	7200	6987	8500	4740
Mulberry (Cross breed)	15865	16007	16192	18100	18358	18865	13340

Sub Total (Mulberry)	20478	21273	22066	25300	25345	27365	18080
Vanya							
Tasar	2819	3268	2988	3650	2981	3515	1909
Eri	5060	5637	6661	6750	6910	7370	6035
Muga	166	170	192	260	233	280	227
Sub Total (Vanya)	8045	9075	9840	10660	10124	11165	8171
Grand Total	28523	30348	31906	35960	35468	38530	26251

Raw Silk production during 2018-19 in the country was 35,468 MT, which showed an increase of 11.2% over the production achieved during the previous year and around 98.6% of the annual production target. The mulberry silk production was 14.9% more during 2018-19 over the previous year. The bivoltine raw silk achieved a record production of 6,987 MT during 2018-19 showing 18.9% growth over earlier year. In the same way, Vanya silk, which includes Tasar, Eri and Muga silks, has achieved 2.9% growth during 2018-19 over 2017-18. The area under mulberry during 2018-19 was up by 4.9%.

The production of raw silk in Maharashtra State during last 3 Years (2016-17 to 2018-19) and 2019-20 (till Dec-19) are given in following table 8 (Table 2, Fig.1):

Table 2: (<https://csb.gov.in>)Functioning of Central Silk Board & Performance of Indian Silk Industry, as on 1st January 2020). (In MT) (P): Provisional

S.No.	Maharashtra
2016-17 Target	285
2016-17 Achievements.	259
2017-18 Target	328
2017-18 Achievements.	373
2018-19 Target	415
2018-19 Achievements.	519
2019-20 (P) Target	630
2019-20(P) Achievements. (Till Dec-19)	228

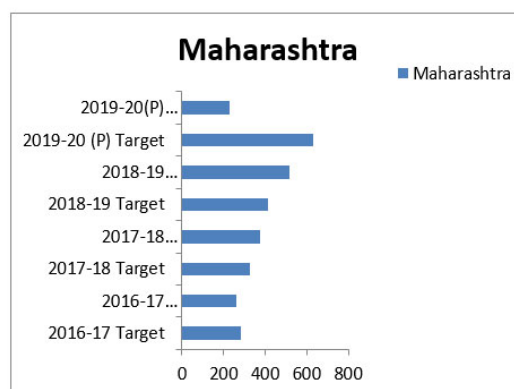


Figure 1

Import of Raw Silk

Silk is important in India and there is high demand for it, but as the production is low, India has to import raw silk from other countries like China because it produces good quality silk.

Table 3: Source: DGCIS, Kolkata, (<https://csb.gov.in>)Functioning of Central Silk Board & Performance of Indian Silk Industry, as on 1st January 2020).

Year	Quantity (MT)	Value (Rs. in Crores)
2016-17	3795	1092.26
2017-18	3712	1218.14
2018-19	2785	1041.41
2019-20(up to Dec-19)	2545	872.47

The quantity and value of raw silk imported during last 3 Years (2016-17 to 2018-19) and current financial year 2019-20 (till Dec-2019) are given below (Table-3, Fig.2)

Export of Raw Silk

Apart from importing silk, India also exports several silk goods which is more than 15% of the total raw silk production.⁴

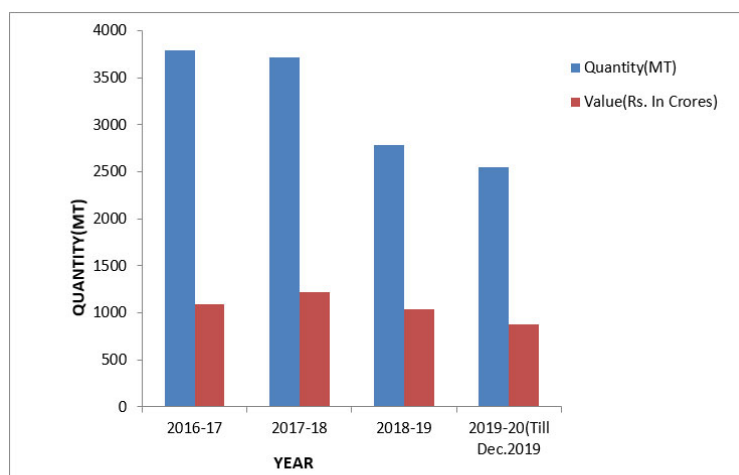


Figure 2

Table 4: (Rs. in Crores) Source: (<https://csb.gov.in>) Functioning of Central Silk Board & Performance of Indian Silk Industry, as on 1st January 2020), Compiled from the Statistics of DGCIS, Kolkata; P: Provisional

Items	2016-17	2017-18	2018-19	2019-20 (P) (up to Dec-19)
Natural Silk Yarn	15.33	15.67	24.71	6.47
Silk Fabrics	1051.65	864.81	1022.43	303.1
Readymade Garments	864.33	650.48	742.27	633.9
Silk Carpet	63.78	17.34	113.09	119.49
Silk Waste	98.33	101.19	129.38	74.48
Total	2093.42	1649.48	2031.88	1137.44

Influence of Covid-19 Peak period on sericulture farmers, rearers, reelers, weavers & traders of India.

Table 5: Monthly average Prices of Cocoon in 2020.

S.No.	Items	Unit	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct(P)
1	Biovoltine Reeling Cocoon (Ramana garam)	Rs./Kg	481	534	439	300	267	274	213	284	282	292
	Cross Breed Reeling Cocoon (Ramanagaram)	Rs./Kg	417	452	371	264	217	214	171	237	231	246

Sources: www.csb.gov.in; P: Provisional data

Table 6: Monthly average Prices of Silk in 2020.

S.No.	Items	Unit	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct(P)
1	Raw Silk(Charaka)	Rs./Kg	3105	3144	3208	2556	2171	1985	1816	2369	2175	2186
2	Raw Silk(Filature)	Rs./Kg	3296	3432	3461	2785	2667	2478	2316	2396	2384	2375
3	Dupion Silk	Rs./Kg	2137	2182	2164	NT	1744	1731	1770	1576	1672	1618

Sources:www.csb.gov.in; P:Provisional data; NT:No Transaction

The export earnings during 2016-17 was Rs.2093.42 Crores, Export values of Silk goods during 2017-18 was Rs.1649.48 Crores and Rs. 2031.88 Crores for year 2018-19 while 2019-20 (till Dec.-2019) was Rs.1137.44 Crores¹⁰ (Table 4).

Effect on Silkworm Rearers

The poorer section of the society was much affected by global pandemic. Sericulture being the agro based cottage industry involves various processes like rearing, reeling weaving, printing etc. The expenditure in sericultural activities remained the same during pre-Covid-19 and Covid-19 (Lockdown period),¹¹ however, only the change was seen in terms of price per Kg of a cocoon. The average selling price of cocoon was 400 Rs/Kg while the price during Covid-19 period was Rs. 200/Kg. Due to lockdown many farmers could not even move out of their houses for collection of the leaves, as a result various silk producing states in India suffered. Some of the farmers couldn't even buy the disinfectants for their crops; also they were not able to buy the Chawkis for rearing of silkworms. The Central Sericulture Board and the States were unable to provide the help to farmers regarding the production of crop due to lockdown.^{12,13} Due to lockdown import and export of sericulture related material was also stopped as a result in the beginning farmers got high rates for selling the cocoon but later on as the movement of individual that were restricted due to lockdown, the cocoon price fall drastically by 70% leaving the farmers in vex^{14,15} (Table-5) Apart from this, farmers had to face transportation problems, because of this reason many have shifted to some other work by temporarily stopping the sericulture.

According to SFWA(Sericulture Farmers' Welfare Association) Ramanagaram, the cross-bred cocoons showed a drop in price i.e, 130-150 Rs/Kg and Superior high quality bivoltine cocoons showed

a drop in price i.e, 170-220 Rs./Kg. Also before lockdown approximately 850-900 reelers visited cocoon market but after outbreak only few cocoon reelers visited market.

Effect on Silk Reelers

Another important activity from sericulture is reeling process which requires huge amount of cocoons by which reeling can be done. Reeling activity was also lowered as the import and export of cocoons were stopped due to lockdown.¹⁶ The reeling machines which require the maintainance was also stopped due to the restrictions imposed by government. Even after the reeling of the silk which was obtained had problem in selling the silk as there were no borrowers due to lack of money with the burrowers. The silk yarn prices were also dropped to a greater extent¹⁷ (Table-6).Mohammed Shafi Ahmed, a silk reeler told that they use to sell the silk yarn at 3500-4000/Kg but during Covid-19 the price fall to 1900-2400/Kg.

Effect on Silk Weavers and Traders

Apart from rearing, reeling, and crop cultivation most of the sericulture farmers are also engaged in weaving and trading business. But due to lockdown most of the weavers and traders were hard hit by pandemic.¹⁸ India is known for celebrating most of the important festivals like Diwali, various religious Pujas, marriages etc. where people wear silk apparels mostly. But due to lockdown there were restrictions on various gatherings and marriages thus the demand for silk was reduced to a greater extent and traders had to struggle a lot. The import and export were totally stopped as a result the orders given that were cancelled for which the sericulture industry had to bear a huge monetary loss. Sualkuchi Village which is well- known as a biggest weaving villages and Bhagalpur silk industry where over 18,000 and 10,000 weavers respectively got affected badly due to uncertainties of Covid-19.

Conclusion

The overall impact of Covid-19 was very troublesome for the sericulture farmers and the sericulture industry. In sericulture every process starting from crop cultivation upto export are interlinked to each other. If first process is hampered means other process is ultimately going to hamper. This is what had happened during lockdown. The study says that weaving, trade and export was worst hit by pandemic than rearing and reeling. As the weavers used to heap up the finished product with them, there was shortage of the orders in market. The lockdown which was imposed resulted in the monetary loss as a result they were not in a position to buy silk yarn. This ultimately resulted in less production of silk yarn and so there was no demand for the cocoon. This all had affected farmers in every aspect. The Central Silk Board has carried out the studies on farmers, exporters and traders in Karnataka, Maharashtra,

A.P., Telangana which showed that post cocoon sector was much affected as compared to pre-cocoon sector. Still the government can help these farmers to overcome and strengthen the sericulture industry by their assistance.

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Conflict of Interest

There is no conflict of interest.

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