

Silk Samagra and Atma Nirbhar Bharat: A Study on Import Substitution of Silk Industry

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ABSTRACT

The contagious coronavirus disrupted the pre-established economic system. As it was a communicable disease the transportation of goods and services were stopped. This led to a break in the logistic network which brought hardship to the economy. To overcome this situation the Prime Minister of India announced an economic package of Rs 20 lakh crore for Atma Nirvhar Bharat which means "Self-Reliant". The mission aimed to produce the products indigenously and play a major role in the global economy by exporting the surplus products. The mission is parallel to the principle of Sarvodaya of Gandhian economy which emphasized on local goods using local resources and creating employment opportunities for the local people. Further, the rise of unfavorable views for China created a scope for India to replace the China as world's manufacturing center. Looking at its scope the FMCG sector and the textile sector emerged as the poster boy. As the textile industry comprises a layer of activities and is a labour-intensive industry so the paper focused on it. "SILK SAMAGRA" was one of the schemes for the development of the silk industry to strengthen the sericulture activities of India. The period of the scheme was 2017-2018 to 2019-2020. As the period of the scheme is over the paper attempted to find out whether the scheme was advantageous to the silk sector or not.

KEYWORDS: Atma Nirvhar Bharat, Silk Samagra, Silk Industry, labour-intensive, Sericulture, Sarvodaya, employment opportunities

1.1 INTRODUCTION

The outbreak of coronavirus shattered the dream of India becoming the third-largest economy by 2031-2032. The pandemic acted as a catalyst to the chronic unemployment disease of the Indian economy. As India is a highly populated country with a huge labour force majority of the labour force depends upon the informal sector for their living. The informal economy plays a major role in employment creation, production, and income generation in the economy. As per the International Labour Organisation (ILO) report, 81% of Indians make their living by working in the informal sector. The informal sector provides the opportunity for many poor people to secure their basic survival needs. There was a presumption that with the right mix of economic policies and resources informal economy would be transformed into a dynamic modern economy. However, paradoxically the informal sector and informal employment continued. In the financial year 2018, the State Bank of India estimated that the informal sector is 52% of the total economy a similar conclusion was made by S V Ramana Murthy in his paper "Measuring Informal Economy in India." Unfortunately, the sudden crisis brought hardship to the lives of informal workers as they do not have access to secure work, benefits, welfare protection, or representation. This increased the rate of open unemployment which turned into an indicator of economic distress. To get better off, the Government of India on 13th May 2020 announced Atma Nirvhar Bharat which means "Self-Reliant." Atma Nirvhar means producing goods indigenously and playing important role in the global economy by exporting the products. The mission aimed to cut down the import dependence by focusing on substitutions. The mission concentrated on local products using local resources by the local labour workforce. The mission is parallel to the principle of Sarvodaya and Swadeshi of Gandhian economic principles. The principle of Sarvodaya is a pragmatic approach for attaining economic self-sufficiency through the regeneration of village and cottage industries that ensures a critical minimum level of income for every family.

Although agriculture is the most reliable source of livelihood still the country's economy can be improved and become "Self-Reliant" by manufacturing activities. Particularly in the field of textiles, metal, and precious stone works. India's textile industry is one of the oldest industries in the Indian economy. The industry has a historical significance. It plays a major role in boosting the economy, expanding global integration, and making the Indian craft and talent reach the world. Indian textile is recognised as a self-reliant industry from the production of raw materials to the delivery of finished products, with the substantial value addition at each stage of the process. Textiles are made up mainly from four sources i.e., animal (wool, silk), plant (cotton, jute, flax), minerals (asbestos, glass fibers), and synthetic (nylon, polyester, acrylic, and rayon). Here, the paper considered only the silk industry to find out how the Silk Samagra scheme helped in silk production, technological advancement and created employment opportunities.

1.2 LITERATURE REVIEW

The literature review is based on three areas i.e., Informal sector, Atma Nirvhar Bharat, and Silk industry. At first informal sector was studied. It was observed that the informal sector never drew the attention of the economist it was sociologists and anthropologists who studied the informal sector. Anthropologist Keith Hart during the period 1970 to 1973 first coined the term informal sector. Later on, International Labour Organisation (ILO) looked over the informal sector. The term was narrated as a part of the urban force which works outside the preview of the formal labour market. He considered the informal sector as self-employed individuals. ILO further described the main aim of the informal sector is to provide subsistence to families. DeSoto (1989) focused

on the legal status of the informal sector. Most of the researchers characterised the informal sector as the sector whose activities are small, out of Govt regulations, ease to enter and exit, labour-intensive, uninterrupted income with a professional status of self-employed or family business. (Swaminathan 1991, ILO, Sethuraman 1976, and DePaula 2007) The studies on the informal sector carried out in developed countries and in developing countries converged on some common points like tax evasion, unregulated system, survival, the price of goods and services is lower than the formal level of activity. The literature carried out in developed countries argues more on positive effects whereas the literature based on underdeveloped countries argues more on the negative side of the informal sector.

The Indian economy that faced the hard-hit of covid-19 is now in recovering mode as said by David Malpass President of World Bank. He also highlighted the challenge of accommodating people into the formal economic sector. India can stand on its own feet in the major sectors. Sectors are labour-intensive and depend upon agricultural products. The objective set in making the Nation Atma Nirvhar Bharat is so monumental that it needs a strategy of 360 degrees to accomplish them (Subherwal,2020). Further, he added the objective can be achieved with the help of social entrepreneurs which will help in creating job opportunities at the village level.

Indian textile represents India's cultural heritage. It is identified with the colourful vibrant silk sarees. The textile industry is the largest and important part of India's economy in terms of employment and foreign exchange (Panigrahi,2020). He mentioned that there is a need to upgrade the technology. (Khatoon and Iffat,2020) highlighted the decrease of handloom workers from 4.59 lakh in 2009-2010 to 3.88 lakh in 2019-2020 as per the 4th All India Handloom census.

Taking this as the base the research methodology of this paper is developed.

1.3 RESEARCH METHODOLOGY

1.3.1 Data Collection: The data are secondary in nature. The secondary data are collected through the website of Central Silk Board and Lok Sabha website.

1.3.2 Data Size: The study is related to the "Silk Samagra" scheme approved by the Government of India for the development of the silk industry to sustain and strengthen the sericulture activities in the country.

1.3.3 Period of the study: The period of the study relates to five years i.e., 2016-2017 to 2020-2021.

1.4 OBJECTIVES OF THE STUDY:

1. To examine the relation between silk production and import
2. To investigate technological advancement in accordance with Atma Nirvhar Bharat.
3. To learn whether the scheme helped in employment generation or not.

1.5 SILK INDUSTRY OF INDIA

India is the second-largest silk producer next to China and contributes 18% to world production. The sericulture industry is an agro-based industry providing employment opportunities to rural-based on-farm and off-farm activities. Indian silk is exported to major markets like the USA and European countries and small markets of Asia. Silk has been a fascinated fabric because of its natural sheen, vibrant colours, and resilience in nature. Silk production is regarded as an important tool for the economic development of a country as it is a labour-intensive and high-income generating industry. India is the second-largest silk producer next to China and also the largest consumer of silk. The silk fabric is broadly segregated into mulberry silk and Vanya silk. Mulberry silk is the highest quality of silk. The unique characteristic of mulberry silk is 100% natural and odourless. It contains a natural protein called Sericin which is suitable for sensitive skin also. Mulberry silk comes from the silkworm which solely feeds on mulberry plants. The non-mulberry silk is called Vanya silk. Vanya silk includes tasar, eri and muga. India is the only country producing all three types of Vanya silk. Muga silk is known as golden silk of Assam is the exclusive product of India. This yellow golden colour silk was obtained from the semi-domesticated multivoltine silkworm. These silkworms feed on the aromatic leaves of som and soalu plants and are reared on trees similar to that of tasar. The muga silk is used in products like saree, mekhalas, and chaddars, etc. Tasar is coarse silk with copperish in colour used for furnishing and interiors. Eri silk which is also known as Endi or Errandi is multivoltine silk spun from open-ended cocoons. Eri silk is the product of the domesticated silkworm. Eri culture is a household activity. The silk is used for the preparation of chaddars.

Silk Samagra is an integrated scheme for the development of the silk industry during the year 2017 to 2020 intending to increase production by improving the quality and productivity and to empower poor families through various activities of sericulture in the country. The scheme comprises four (4) major Components viz. (i) Research & Development, Training, Transfer of Technology and I.T. Initiatives, (ii) Seed Organizations, (iii) Coordination and Market Development and (iv) Quality Certification Systems (QCS) / Export Brand Promotion and Technology Up-gradation. As the period of the scheme is over the paper tried to find out the status of the silk production before the scheme and after the scheme.

Table-1 Raw silk Production during Pre and Post Silk Samagra period

Year	Raw silk production in India (MT)					
	Mulberry	Vanya				Total raw silk
		Tasar	Eri	Muga	Total	
Pre-Silk Samagra period						
2016-17	21273	3268	5637	170	9075	30348
Post- Silk Samagra period						

2017-18	22066	2988	6661	192	9840	31906
2018-19	25345	2981	6910	233	10123	35468
2019-20	25239	3136	7204	241	10581	35820

Source: CSB Annual Report

In the above table the year 2016-2017 is taken as the base year of silk production. It can be observed that the total silk production during the post silk samagra period has increased from 30348MT to 35820MT. The mulberry production has increased from 21273 MT in the year 2016-2017 to 25239 MT in the year 2019-2020. Similarly, the production of Vanya silk in the variant of eri and muga has increased except in the production of tasar. The decrease in tasar silk production may be of its short fiber which makes it less durable and the production of tasar silk depends upon the climatic condition and pest. Still, it has its demand because it is used in cosmetic products. As the production of silk has gone up further, we tried to find out the status of import of silk. The status of the silk import has been shown in table-2.

Table-2 Import of Silk

Year	Qty (MT)	Amount (Cr)	%Increase or decrease over the year (Qty)	Unit price per kg imported
2016-2017	3795	1092	100	2878
2017-2018	3712	1218	-2.2	3281
2018-2019	2785	1041	-25	3739
2019-2020	3315	1149	19	3467
2020-2021	1804	570	-45.5	3162

Source: Author's Calculation

In the table-2 year, 2016-2017 is taken as the base, and accordingly the percentage of increase or decrease of import of silk is calculated. It is observed that the import of silk during 2017-2018 and 2018-2019 was decreased but during the year 2019-2020 the import of silk has increased which shows the demand for silk and there is a scope for further silk production to meet domestic demand. As a result, silk production was increased and the import of silk was decreased to -45.5% which is a positive sign for sericulture. It can also infer that the silk samagra scheme has been fruitful in the production of silk to meet domestic demand.

India needs to produce a bulk quantity of high-quality silk to meet the requirement of the power loom and mill sector. Among all the silk that is produced in India bivoltine silk is par at the import quality. The quality of bivoltine silk is considered to be superior quality because it can sustain the colours after dye and the strength of the silk thread can bear the pressure of Automated Reeling Machine (ARM). Production of bivoltine silk is less because it is sensitive to hot climatic conditions and poor leaf quality. As the climatic condition of India in most of the states is hot and warm so production of bivoltine silk is difficult. So, the paper tried to establish the relation between bivoltine silk production and import.

H0: The relation between bivoltine silk and import are positively related.

H1: The relation between bivoltine silk and import are negatively related.

Table-3

Descriptive Statistics

	MEAN	STD.DEVIATION	N
IMPORT	3082.2	818.696	5
EMPLOY	86.4	3.647	5
BIV_PRODUCTION	6383.76997	778.247	5
MULSILK_PRODUCTION	23563.7317	1842.399	5

Source: Author's Own Calculation

Table-4

Correlation Between Import and Silk Production

	IMPORT	EMPLOY	BIV_PRODUCTION	MULSILK_PRO
IMPORT	1			
EMPLOY	-0.282	1		
BIV_PROD	-0.652	0.804	1	
MULSILK_PROD	-0.52	0.783	.972	1

Source: Author's Own Calculation

From the above table, it can be inferred that though silk production has increased still the relation between import and silk production has a moderately negative relation. The bivoltine silk is about 2A grade silk which is at par with the quality of silk imported from China. If the production of bivoltine increases domestically then obviously the import of silk will decrease. In the correlation table, the r-value is -0.652 and p-value 0.01%. That means the production of import quality silk will reduce the dependence on import of silk. So H1 is accepted.

1.6 TECHNOLOGICAL DEVELOPMENT

The queen of fabric is one of the major components of the textile industry. The success of the industry depends on the innovation and use of modern technology in silk reeling, silk spinning, testing, weaving, wet processing, and fabrication. Sericulture includes two steps first cultivation of silk and second reeling of silk. Reeling of silk means separating the thread from the cocoon to get the silk fiber. Reeling of silk is done by machines at an appropriate climate and humidity. Presently, the country is producing more than 7000 MT of import substitute Bivoltine silk is the result of continued R&D efforts made in the last two decades with a focused approach for the production of international grade Bivoltine silk. About 20 years back, the Bivoltine silk production in the country was negligible and now the country is on the threshold of becoming Atma-Nirvhar in production of import substitute of Bivoltine silk. So far Central Silk Board (CSB) has been assisting with the import of Automatic Reeling Machines (ARMs) from China for the production of 4A grade silk. To support and boost India's vision for AtmaNirvhar Bharat and Vocal for Local Abhiyan, CSB has decided to stop importing ARMs from China to promote the manufacturing of indigenous automatic reeling machines developed by CSB. In this regard, necessary steps have been taken to scale-up the automatic reeling activity and indigenous manufacturing of automatic reeling machines for enhancement of international quality 4A grade Bivoltine silk production to become Atma-Nirvhar. The textile minister in 2020 answering a question in Lok Sabha informed that the government has extended its support to the artisans by upgrading their traditional tool-kit to a new tool-kit with the help of the expert technical agency. Further, the minister also added that under design development and diversification the traditional designs are being diversified and new designs are being developed with the help of the National Institute of Fashion Technology (NIFT)/ National Institute of Design (NID). Despite improvements in technology still India imports modern equipment for digital printing machines, weaving machines, and spinning machines which implies that there is a scope for research and development which will further help the farmers and weavers to adopt technology at a low cost.

1.7 EMPLOYMENT GENERATION

Economic growth and improved standard of living is the ultimate objective of the country. This can be achieved by creating employment opportunities. Employment opportunities can give financial freedom, decrease poverty, and ultimately increase the gross domestic product. Looking at the long run benefit sericulture stands as a twilight. Sericulture is a cash crop as it provides both on-farm and off-farm activities. It provides a source of income to the people even having small landholding and it employ to entire family members through chawki rearing, cocoon production, silk reeling, spinning, etc. Looking at its scope silk samagra also had an objective to increase the employment rate. Employment generation during silk samagra period is shown in table-3

Table-5 Employment Generation During Silk Samagra Period

Year	Employment Generation (Lakh)	% Increase or decrease over the years
2016-2017	82.50	100
2017-2018	85.10	3.15
2018-2019	86.04	1.10
2019-2020	91.78	6.67
2020-2021	87.30	-4.88

Source: Authors own calculations

In the above table, 2016-17 year is taken as the base year and 2017-2018 onwards up to 2020-2021 is the post samagra period. It is observed that employment in sericulture has increased during the silk samagra period. The percentage of increase in employment in 2017-2018 is 3.15%. In 2018-2019 though there is an increase in employment generation in comparison to the pre-samagra period i.e., 2016-2017 but the percentage is low to the previous year i.e., 2017-2018. Again, there is a swift increase in employment with a percentage of 6.67%. In the year 2020-2021, the employment rate has decreased as 2020-2021 was not a normal year. The impact of the covid -19 pandemic has badly hit the silk industry. But still, we can conclude that there is an increase in employment which indicates the successful implementation of the scheme. Further, to respond a question in Lok Sabha the textile minister informed that the Union Government in budget 2021-2022 has launched the scheme of setting up seven mega textile parks which will attract investment and boost employment opportunities. The textile sector is a highly unorganised sector so the data of employment is not maintained. The above scheme promotes technology up-gradation, creation of infrastructure, skill development and creates a conducive environment for textile manufacturing in the country which helps in boosting employments.

CONCLUSION

The contribution of the textile industry is indispensable for the country. The industry has always extended its helping hand whenever the country needed it the most. Be it during the pre-independence period or 2019-2021 it has stood behind the country and given all kind of support to the country to cope up with the rabbit hole. During the pandemic, the textile sector teamed up with the pharmaceutical companies for the preparation of PPE kits and helped in fighting the deadliest virus of the century. The textile industry of our country has a wide scope in the technical textile field and domestic market. As it is the only industry that involves both organised and unorganised workforce the Government of India has started reshaping the industry by promoting e-market and

e-commerce and implementing various schemes. The successful implementation of the silk samagra scheme by the Central Silk Board has made India to meet the domestic need for silk during the pandemic. The scheme helped India in decreasing the import of silk from 3795 MT to 521 MT during the year 2019-2020. The scheme further has helped in production of bivoltine silk. Thus, we can conclude that the “Silk Samagra” scheme pitched in at right time to meet the domestic need during the global supply chain crisis because of pandemic.

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