This is in reference to continued engagement with Department of Labor on the matter of de-listing of Indian products from the TVPRA list.

- 2. AMS, an independent research, consulting and training company, has conducted a study on India's silk industry. A copy of the study report is attached for your perusal.
- The salient points brought forth by the study are as follows:
  - The study outlines the regulatory framework put in place by the Government of India to eliminate incidences of child labor.
  - The study also highlights a number of child welfare schemes introduced by the Government like Sarva Shiksha Abhiyan (universal elementary education), Integrated Child Protection Scheme, and Mid-Day Meal Scheme.
  - The study details the technological upgradation, including the adoption of automation by India's silk industry, with over 90% of raw silk in India being converted to yarn on power looms.
  - It details the Silk Samagra Scheme, focusing on Research & Development, Training, Transfer of Technology and IT initiatives; setting up of seed organizations; coordination & market development; quality certification system; export brand
    promotion & technology upgradation

4. As part of our continued engagement, the Embassy would like to organize an interaction between US Department of Labor and ISEPC (Indian Silk Export Promotion Council) to discuss de-listing the Indian Silk Thread and Silk Fabric from TVPRA list based on enforcement measures in place to remove any instances of child labour in the industry.

5. Grateful if you could indicate a convenient date and time to schedule an interaction with remaining export promotion councils in India so that they could brief about the activities being undertaken by them.

regards Chitrangna

#### Chitrangna Singh

First Secretary (Commerce) Embassy of India Washington DC

# Secondary Review

# Myth of Child Labour in Indian Silk Industry

### Submitted to:

Submitted by:





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# *Chapter 1* The Indian Silk Industry



# **The Indian Silk Industry**

The Indian textile industry has inherent linkages with agriculture, culture and traditions of the country, making for its versatile spread of products that are appropriate for both domestic and the export markets.

The *industry is the second largest manufacturer and exporter in the world*, after China. The Indian textile industry is of immense importance to the economy. The textile industry contributes to **7 percent of industry output in value terms and 2 percent of India's GDP**. In 2018-19, the **share of textile and apparel** (T&A) including handicrafts in **India's total exports was estimated at 12 percent** whereas **India's share in global trade of textiles and apparels was estimated at of 5 percent**. The major destination for India's textiles and apparel exports include the European Union and the United States with 43 percent share in total textile and apparel exports. The entire sector **employs 4.5 crore people directly** and an additional **6 crore people indirectly** through its allied sectors. The sector is well aligned with various government initiatives and schemes including Make in India, Skill India and Women Empowerment. An overview of the economic gains from the sector is presented in Table 1<sup>1</sup>:

Table 1: Earnings from Textiles & Apparel (T&A) sector and share in overall exports         (Male as is AMMUSE)									
(values in MN USD)									
Export	2016-17	2017-18	2018-19	CAGR	2018-2019	2019-	%		
Categories				(%)	(Apr-Nov)	20(Apr-	Change		
						Nov)			
Indian Textile &	35472	35723	36558	1.5	23483	21518	-8.4		
Apparel									
Handicrafts	3639	3573	3804	2.2	2419	2460	1.7		
Total T&A	39110	39296	40362	1.6	25902	23977	-7.4		
including									
handicrafts									
India's overall	275852	303376	329536	9.3	217092	211691	-2		
exports									

Data Source: DGCI&S<sup>1</sup>

The pillars of Indian textile industry include raw materials such as **cotton**, **jute**, **silk and wool**. In the sections ahead, we discuss about the Indian silk industry and the myth of child labour in the sector.

### 1.1. Silk in India

Silk often known as the "**Queen of Textiles**", is an insect fiber, with luster, drape and strength. Being home to an ancient civilization, India has contributed many things to the world, silk being one ofthem. India is not only the **second largest producer of Silk** in the world, but is also the **largest** 

<sup>&</sup>lt;sup>1</sup>Ministry of Textiles, Government of India. (2019). *Annual Report 2019-2020*. New Delhi. Retrieved from http://texmin.nic.in/sites/default/files/AR\_MoT\_2019-20\_English.pdf

**consumer of silk**. India is the only country in the entire world to **produce all five commercial varieties of silk**, namely Mulberry, TropicalTasar, Oak Tasar, Muga and Eri.<sup>1</sup>

The silk industry in the country emerged as credible employment generator only after 1945, which also coincided with India's independence. This primarily happened as a result of the establishment of the "Central Silk Board" by an Act of Parliament in 1948 based on the report submitted by the "Silk Panel". This was followed by a series of policy initiatives and the establishment of facilities at both Central and

#### Key features of Indian Silk Industry

- Low gestation, high returns
- Ideal opportunity for economically weaker sections
- Eco-friendly activity
- Women friendly occupation

State levels. Currently, the industry is estimated to **employ 9.20 million rural people who is expected to increase to 10 million by 2021**. The sector is ideal for creating employment and alleviating poverty and therefore, aligns with Sustainable Development Goals.<sup>2</sup>

The sector supports a large number of people, thereby exhibiting a high employment potential. Apart from this, many of those involved include small, marginal farmers and landless laborers. The sector also offers net returns higher than tropical crops. Moreover, the farm sector activities of the silk industry are eco-friendly. Mulberry leaves which are the main source of food for the silkworm provide green cover. The waste from silkworm can be recycled and used as inputs in gardens and intercropping can be easily carried out with mulberry plantations. Furthermore, the sector involves a wide range of activities including mulberry garden management, leaf harvesting and silkworm rearing and is effectively taken up by a high proportion of women.<sup>3</sup>Women are preferred in sericulture because of their industrious nature and sericulture is an effective way to augment the family income. It is common to find women working in the mulberry fields, leaf plucking and removal of weeds. Women are also experts in chawki rearing and feeding silkworms. Women also play a crucial role in post cocoon technology.<sup>4</sup>

The sector primarily includes two sets of activities, **on farm activities and off farm** activities. The **on** *farm activities are also known as sericulture*. The off farm activities include yarn, fabric or garment manufacturing.

#### 1.1.1. Sericulture

**Sericulture**, is the production of raw silk by means of rearing silkworm (*Bombyx mori*). The process starts with the laying of silkworm eggs. It is estimated that a female silkworm lays approximately 300-400 eggs. Female moths usually die after laying eggs. The silkworm eggs are placed in an

<sup>&</sup>lt;sup>2</sup>Central Silk Board. (2018). *Annual Report 2018-19*. Bengaluru: Central Silk Board. Retrieved from http://csb.gov.in/wp-content/uploads/2020/03/csb-aar-18-19-english-low-res.pdf

<sup>&</sup>lt;sup>3</sup>Silk-sericulture. Retrieved 23 November 2020, from http://csb.gov.in/silk-sericulture/sericulture/

<sup>&</sup>lt;sup>4</sup> Kasi, E. (2013). Role of Women in Sericulture and Community Development: A Study from a South Indian Village. doi: https://doi.org/10.1177/2158244013502984

incubator until they hatch into larvae. The hatched larvae are then fed chopped mulberry leaves. The silkworm spins its cocoon by producing a long, continuous fiber or filament. Liquid secretions from large glands within the insect harden upon exposure to air and form twin filaments composed of fiborin (a protein). A second set of glands secrete sericin, a gum like substance that binds the filaments together. Sincea moth emerging from the cocoon filament would break the cocoon filament, the larva is killed in the cocoon by steam or using hot air.<sup>5</sup>



Figure 1: Lifecycle of a silk worm

From the farms, the cocoons are taken to the **filatures** (industries) where the silk is unwounded and the strands are collected. In some factories, there may be a provision of breeding cocoons scientifically. At the factory, the process starts with **sorting the cocoons** on the basis of their colour and texture as these have a bearing on the final product. The sorted cocoons are then put through a **series of hot and cold immersions** 



to permit the unwinding of the filament as continuous threads. Since the filament of the cocoon is too fine for commercial use, 3-10 strands are usually reeled together to produce the desired diameter of raw silk. The silk filament is then reeled into skeins, which are then packed into small bundles weighing 2-4.5kgs. These are then put into bales weighing about 60 kg. In this form, silk is transported for further use.

<sup>&</sup>lt;sup>5</sup>Sericulture. Retrieved 18 November 2020, from https://www.britannica.com/topic/sericulture)

Cocoons raised on the farms are delivered to the filatures. (factories)

These cocoons are sorted on the basis of their colour and texture. The Sericin is softened for unwinding the filament through a series of hot & cold imerssions. As the filaments are too thin for use, 3-10 strands are reeled togther, to produce the desired diameter of raw silk.

Silk filaments are reeled into skeins which are then packed into bundles. These bundles are shipped to mills in the form of bales

#### Figure 2: Farm to filature process

#### 1.1.2. Varieties of silk

As mentioned above, in addition to being the second largest producer of silk in the world, **India** is the only country in the world to produce all 5 types of silk. These are mulberry silk, tasar silk (tropical tasar and temperate tasar), eri and muga silk. The most commonly found variety of silk in India is mulberry silk and the southern state of Karnataka leads in mulberry silk production. The remaining other silks are often grouped together and termed as Vanya silks as they are grown in natural conditions on trees. Some features of these types are briefly described in Table 2:

Table 2: Types of silk							
Types of	Mulberry	Vanya (non-mulberry)					
silk		Tasar (tropical tasar and temperate tasar)	Eri	Muga			
Reared from (name of silkworm)	Bombyx mori L.	Antheraea mylitta.	Philosamiaricini	Antheraeaassamen sis			
Silkworm feed on	Leaves of Mulberry plant	Plants such as Asan and Arjun	Castor leaves	Som and Soalu leaves			
Rearing conditions	Completely domesticated and reared indoors	Natural conditions on the trees					
Other features		Main stay for many tribal communities in India	<ul> <li>Eri cocoons are non-reelable and therefore spun into yarn.</li> <li>Natural copperishcolour</li> </ul>	Golden yellow coloured silk prerogative of India			

#### 1.1.3. State wise production of silk In India

Karnataka is the largest silk producing state and leads in mulberry silk production<sup>6</sup>. Majority of the cocoons are produced in the southern districts of Bengaluru Urban, Bengaluru, Rural, Ramanagara, Mandya, Mysuru, Chamrajnagar, Chickballapur & Kolar. The state is followed by Andhra Pradesh, Assam, West Bengal and Tamil Nadu in silk production.

Andhra Pradesh is the second largest mulberry silk producing state in the country and is well known for International Grade Quality Bivoltine Silk. Silk rearing and weaving form an integral part of the state economy and the state is home to several weaving clusters such as Dharmavaram, Patur, Peddapuram, Mangalagiri, Rayadurg and Poddutur etc.

Likewise, in the state of **Assam**, the art of silkworm rearing and weaving have been closely associated with their tradition and culture especially among the womenfolk.



The climate of the state is conducive for commercial **production of different silk types including, muga, eri, mulberry and oak tasar**. Trends in silk production from 2017 to December 2019 in the top 5 states are presented in Figure 3. State wise figures are detailed in Annexure 1.



Source: Annual Report 2019-20207

<sup>&</sup>lt;sup>6</sup>Ministry of Textiles, Gol& Central Silk Board.(2019). *Seri States of India-A profile*. Bengaluru: Central Silk Board. Retrieved from http://csb.gov.in/wp-content/uploads/2019/02/Seri-States-Profiles-2019.pdf

<sup>&</sup>lt;sup>7</sup>Indian Silk Export Promotion Council. (2020). *Annual Report 2019-20*. New Delhi: Indian Silk Export Promotion Council. Retrieved from http://www.theindiansilkexportpromotioncouncil.com/menu/download/download-20201015043548.pdf

Among the non-mulberry silk producing states, Jharkhand is the largest producer of tasar silk. Sericulture is practiced by majority of the tribals in Singhbhum East, Singhbhum West, Saraikela-Kharsawan, Deoghar, Dumka, Godda, Hazaribagh, Dhanbad and Giridih areas of the state.

Tasar silk is also grown in the states of Bihar, Madhya Pradesh, Uttar Pradesh, Odisha etc. and is the mainstay for several tribal communities in the country. Eri silk is grown in the states of Assam, Meghayala, Manipur, Nagaland, Arunachal Pradesh, Uttar Pradesh, Bihar and West Bengal etc. Lastly, Muga silk which is the golden coloured silk and prerogative of India is grown in Assam and the north eastern states.

#### 1.1.4. Workforce in the silk value chain

According to estimates, as many as **9.2 million** people are a part of the entire silk value chain in India (for further state-wise breakup of the refer workforce, to Annexure 2). This figure includes farmers, reelers, twisters, weavers, middlemen, traders and exporters. According to the 4<sup>th</sup> All India Handloom Census of 2019-20, there are as many as 26,73,891handloom weavers in the country.<sup>8</sup>It is estimated that 20percent of the total weavers are engaged in silk weaving. It is also not uncommon to find weaving households keeping the art of weaving alive, by passing on the skill from one generation to another. Silk weaving clusters in India are spread throughout the country. Some of the prominent weaving clusters are Varanasi, Bhagalpur, Kanchipuram, Murshidabad, Sualkuchi, Pochampalli and Molakalmuru.

#### State-wise prominent silk weaving clusters

- Andhra Pradesh: Dharmavaram , Venkatagiri, Koyyalagudem
- Assam: Sualkuchi
- Bihar: Bhagalpur, Kishanganj, Gaya, Darbhanga, Nalanda, Madhubani, Siwan, Patna
- **Chattisgarh:** Champa, Chanderi, Raigarh, Bilaspur, Sirsiwa
- Gujarat: Surat, Cambay
- Jammu & Kashmir: Srinagar
- Karnataka: Bangalore, Anekal, Ilkal, Molakalmuru, Melkote, Kollegal
- Maharashtra: Paithan, Yeola
- Tamil Nadu: Kanchipuram, Arni, Salem, Kumbhakonam, Tanjavur
- Telangana: Pochampalli ,Narainpet
- Uttar Pradesh: Varanasi, Feeder Town
- West Bengal: Bishnupur, Murshidabad, Birbhum

<sup>&</sup>lt;sup>8</sup>Press Information Bureau Government of India. (2019). *Handloom Weavers*.Retrieved from

https://pib.gov.in/PressReleasePage.aspx?PRID=1596372#:~:text=As%20per%20the%204th,workers%20is%20at%20Annexure%2DI.

# Chapter 2 Child Labour in India and Existing Regulatory Framework



# Child Labour in India and Existing Regulatory Framework

Over the years, one challenge plaguing the Indian silk sector has been the purported issue of child labour. Child labour is a complex phenomenon which is mostly an aftermath of abject poverty. India has been no exception to this widespread issue. However, overall percentage of children engaged in child labour fell from 5 to 3.9 percent between 2001 and 2011 rounds of the Census. In this chapter, we highlight the steps taken by the Government of India to limit and eradicate all forms of child and forced labour in the country.

### 2.1. Child labour in India and the regulatory framework

Data from Census 2001 and 2011 reveal a **decline in the overall magnitude of child labour;** with the decline being more visible in rural areas. The number of child workers in urban areas has increased, indicating the growing demand for child workers in menial jobs in urban areas. In addition to the census data, this trend can be observed both in terms of magnitude and workforce participation rates. Evidence drawn from the National Sample Survey data suggest that India's child workforce during **2004-05 was estimated at little over 90.7 lakh as against 2.155 cr. in 1983.** During this period, child employment declined by 1.248 cr. A bigger fall in child workforce was observed among boys than girls. A consistent fall in both boys and girls workforce during 1983 to 2004-05 has been reported which decreased from 1.206 cr. to 47.6 lakh, and 94.9 lakh to 43.1 lakh, respectively. The gender divide which worked adversely against the boys and lead to a higher proportion of young boys being engaged in work has also dissipated in recent years.<sup>9&10</sup>

One must acknowledge that this decline is largely a result of policies that India has followed. The government, over the years, through various policies and programs has been proactive in addressing the problem of child labour through constitutional, statutory and developmental measures that are required for elimination of child labour.

<sup>&</sup>lt;sup>9</sup>VV Giri National Labour Institute & UNICEF. (2020). *State of Child Workers in India- Mapping Trends* (pp. 4-8). VV Giri National Labour Institute & UNICEF. Retrieved from http://VV Giri National Labour Institute & UNICEF

<sup>&</sup>lt;sup>10</sup>Limaye, S., &Pande, M. (2013). A study of Child labour in India – Magnitude and challenges. *ASM's International E-Journal Of Ongoing Research In Management & IT*. doi: 10.13140/RG.2.1.1328.9202

In 1979, the Government of India formed the first committee called **Gurupadswamy Committee** to study the issue of child labour and to suggest measures to tackle it. As directed, the

#### **REGULATORY FRAMEWORK**

- Setting Up of the Gurupadaswamy Committee
- Child Labour (Prohibition & Regulation) Act, 1986
- Child Labour (Prohibition & Regulation) Amendment Act, 2016

committee examined the problem at hand and made suitable suggestions. It highlighted **poverty** as the underlying cause of child labour and stated that as long as poverty continued, it would be difficult to totally eliminate child labour. Hence, any attempt to abolish it through legal recourse would not be practical. The Committee felt that given the circumstances, the only alternative was to ban child labour in hazardous areas and to regulate working conditions in other areas.<sup>11</sup>

Based on the recommendations of Gurupadaswamy Committee, the *Child Labour (Prohibition & Regulation) Act was enacted in 1986.* As per the Act, employment of children was prohibited in certain specified hazardous occupations and processes and it regulated working conditions in others. The list of hazardous occupations and processes is progressively being expanded on the recommendation of Child Labour Technical Advisory Committee constituted under the Act. Subsequently, with the enactment of the Child Labour (Prohibition & Regulation) Amendment Act 2016, definition of child labour has been expanded, prohibiting employment of Children below 14 years in all forms of work and also prohibition of employment of adolescents(14-18 Years) in the scheduled hazardous occupations and processes.<sup>11</sup>

In continuation with the above approach, a **National Policy on Child Labour** was framed in 1987, which wanted to adopt a step by step approach with a focus on rehabilitation of children and adolescents.

The draft plan of action outlined in the Policy for tackling this problem is as follows<sup>10</sup>:

 Legislative Action Plan for strict enforcement of The Child & Adolescent Labour (Prohibition & Regulation) Act, 1986.Project based action plan in areas of high concentration of Child & Adolescent Labour-National Child Labour Project (NCLP) Schemes. Focuses on general developmental programmes for the benefit of the families of children

Labour Commissions and Committees have looked extensively into the evils of child labour and made appropriate recommendations. India's judiciary, right up to the Supreme Court, has demonstrated compassionate responses against the practice of child labour. As per **Article 24** of the Constitution, no child below the age of 14 years can be employed in any factory, mine or any hazardous employment unit. Likewise, **Article 39** requires the States to direct its policy to

<sup>&</sup>lt;sup>11</sup>About Child Labour. Retrieved 20 November 2020, from https://labour.gov.in/childlabour/about-child-labour

ensuring that the tender age of children is not abused and that they are not forced by economic necessity to enter avocations which may be unsuitable for their age or strength.<sup>10</sup>

In addition to these, various other schemes have been introduced from time to time to extend direct and indirect benefits to children. Some of these are:

#### CHILD WELFARE SCHEMES

- Sarva Siksha Abhiyan (SSA)
- Integrated Child Development Scheme (ICDS)
- Mid-Day Meal Scheme (MDMS)
- Integrated-Child Protection Scheme(ICPS)

1. Sarva Shiksha Abhiyan (SSA) – The Sarva Sikhsha Abhiyaan, is a program aimed at universalizing elementary education making free and compulsory education available to all children between 6 to 14 years. Its overall goals include universal access and retention, bridging of gender and social category gaps in education and enhancement of learning levels of children. SSA has achieved commendable success in raising the Gross Enrolment Ratios especially at primary and upper primary levels. GER at different levels is presented in Table 3.

Table 3: Gross Enrolment Ratio at different levels 2015-16						
Level	Male	Female	Total			
Primary (I-V)	97.9	100.7	99.2			
Upper Primary (VI-VIII)	88.7	97.6	92.8			
Elementary (I-VIII)	94.5	99.6	96.9			
Secondary (IX-X)	79.2	81.0	80			
Senior Secondary (XI-XII)	56.0	56.4	56.2			

Source: Education Statistics at a Glance, 2018<sup>12</sup>

**2. Integrated Child Development Services (ICDS) Scheme** – The ICDS is one of the world's largest development programmes directed towards childhood care and development. It makes necessary provisions for supplementing nutrition, immunization, health check-up & referral services, pre-school non-formal education and nutrition & health education for pregnant women, lactating mothers and children between 0-6 years.

**3. Mid-Day Meal Scheme (MDMS)** – The MDMS was launched as a Centrally Sponsored Scheme in 1995, with a view to enhance enrollment, retention and attendance and simultaneously improve nutritional levels among children.<sup>7,13</sup>According to the latest figures **11.59 crore children** are **enrolled** in the scheme. In the top 5 silk producing states MDMS coverage is more than 87 percent. The all India figure stands at 78 percent.

<sup>&</sup>lt;sup>12</sup>Ministry of Human Resource Development Department of School Education and Literacy Statistics Division. (2018). *Education Statistics at a Glance* (p. 11). New Delhi: Ministry of Human Resource Development Department of School Education and Literacy Statistics Division. Retrieved from https://www.education.gov.in/sites/upload\_files/mhrd/files/statistics-new/ESAG-2018.pdf <sup>13</sup>Shodhganga : a reservoir of Indian these @ INFLIBNET. (2020). Retrieved 29 October 2020, from https://shodhganga.inflibnet.as.in/bitteracm/01602/024/02/00.introduction.pdf

Table 4: MDMS Coverage across Top 5 Silk producing states							
State	Percentage of children enrolled & covered at primary and upper primary level as part of MSMS						
	2012-13	2013-14					
Karnataka	90	92					
Andhra Pradesh	81	89					
Assam	91	91					
West Bengal 91		94					
Tamil Nadu8787							

Source: Performance audit of MDMS 2009-10 to 2013-14)<sup>14</sup>

**4. Integrated Child Protection Scheme (ICPS)**—The ICPS brings together existing child protection schemes of the Ministry under one comprehensive umbrella, and integrates additional interventions for protecting children and preventing harm. It is aimed at building a protective environment for children in difficult circumstances, as well as other vulnerable children, through Government-Civil Society Partnership.

In addition to the above schemes, a number of other initiatives aimed at Child Protection & Welfare have been launched in the last decade-

- 1. Rashtriya Bal Kosh (National Children's Fund)
- 2. Rajiv Gandhi Scheme for Empowerment of Adolescent Girls (RGSEAG) Sabla
- 3. Kishori Shakti Yojana

**Childline India Foundation (CIF)** has been set up as a nodal organization by the GOI. In 1996, CHILDLINE India Foundation (CIF) launched CHILDLINE, the country's first toll-free tele-helpline for street children in distress. As of November 5<sup>th</sup> 2020, 90 million calls have been handled (since inception) covering 595 districts across the country.

In the case of child labour, State Governments are the implementing authorities and have been directed to conduct regular inspections and raids to detect cases of violations. Since poverty is the root cause of this problem, and enforcement alone cannot help solve it, the government has been laying a lot of emphasis on the rehabilitation of these children and on improving the economic conditions of their families.<sup>11</sup>

Alongside the central and state governments, various Non-Government Organizations (NGOs) too have helped in checking the issue. As mentioned above, one of the key steps in this direction is spreading awareness. These child welfare and human rights organizations interact with families, community leaders as well as children's collectives. They try to sensitize parents and families

<sup>&</sup>lt;sup>14</sup>Ministry of Human Resource Development (MHRD). (2015). *Performance Audit of Mid Day Meal Scheme (2009-10 to 2013-14)* (pp. 107-111). Retrieved from

http://mdm.nic.in/mdm\_website/Files/OrderCirculars/2017/DO\_Letters/Audit\_Para/performance%20audit%20ofMDMS\_2009-10-2013-14.pdf

about the importance of children's rights, sending children to school and ill effects of employing their children in fields and factories. Some of them also play a vital role in demanding implementation of welfare schemes such as right to education and food security. NGOs have also helped in rescuing children from factories and enrolling them in schools and educational institutions. They help in arranging counselling sessions for child labourers, rehabilitating them as well as sending them to schools.<sup>15</sup>

In addition to the above government policies specific to child labour, the silk industry too has introduced technological up-gradations, mechanization in sericulture, and use of power looms as well as surveillance measures to help in keeping a check on illegally employing children. The detailed developments and workings are discussed in the next chapter.

<sup>&</sup>lt;sup>15</sup>Initiatives Against Child Labour in India. Retrieved 23 November 2020, from https://www.savethechildren.in/child-protection/initiativesagainst-child-labour-in-india/

# Chapter 3 Technological Up-gradations & Other Initiatives in the Silk Sector



# Technological Up-gradations & Other Initiatives in the Silk Sector

Being the second largest producer of silk in the world, the Indian silk sector is highly dynamic and rapidly evolving. Some key advancement in the sector is discussed below.

The Central Silk Board (CSB) was constituted in April, 1949, and is a statutory body under Ministry of Textiles, Government of India. CSB was established primarily for the development of sericulture and silk industry and is the apex agency which governs and oversees the growth and development of Indian silk industry. The vision of CSB is to "See India emerge as the Global Silk Leader" and over the years has aligned to this vision statement by planning its strategies for three distinct sectors viz., (a) Silkworm Seed Production; (b) Farm Sector/Pre-cocoon Sector and (c) Industry or Post-cocoon Sector.<sup>2</sup>

Within the farm sector of the value chain, **mechanization in sericulture** is being encouraged. Mechanization includes the use of mulberry cutting preparation machine, cultivator and weeder, mulberry pruner cum harvester, chawki leaf chopper, cocoon harvester, cocoon de-flosser and cocoon cutting machine. A shift in using these machines will be highly effective and efficient than manual work. It may also help silk farmers increase the area under cultivation with ease.<sup>16</sup>

Activities of theCSB are carried out by the 192 units located across the country through the Central Sector Scheme (CSS), "Integrated Scheme for Development of Silk Industry (ISDSI)". The Cabinet Committee on Economic Affairs (CCEA) has approved continuation of the above ongoing Central Sector Scheme, XII Plan for three years from 2017-18 to 2019- 20 under the new name "Silk

#### KEY COMPONENTS OF THE SILK SAMAGRA SCHEME

- Research & Development, Training, Transfer Of Technology & It Initiatives
- Seed Organization
- Coordination & Market Development
- Quality Certification System, Export Brand Promotion & Technology Upgradation

#### Samagra".

The expected outcomes of the scheme include enhanced silk production including both mulberry and vanya silks as well as increase in employment generation.

<sup>&</sup>lt;sup>16</sup>Mechanization in Sericulture.(2018) Ministry of Textiles & Central Silk Board. Retrieved from http://csb.gov.in/wp-content/uploads/2018/04/mechanization-in-sericulture.pdf

**1.** Research & Development, Training, transfer of Technology and IT Initiatives: Under this component of the scheme, Sericultural Research Stations are trying to fine tune existing technology for local needs and frontline demonstration. They are also conducting research using improved feed, silkworm breeds, and standardization of silkworm seed production technology, developing post-cocoon technology, product development and diversification. Furthermore, their endeavors also include designing IT applications for technology transfer, exchanging information, distribution through SILKS portal (Sericulture Information Linked Knowledge System), farmers, reelers data base and dissemination of prices through SMS.

**2. Seed Organizations:** Through seed organizations, the CSB plans to develop a seed multiplication network, encourage private sector participation for increased seed production, and provide technological support to state seed production units and registered seed producers. Lastly, it aims at full implementation of the silkworm seed act to inculcate quality parameters in silk production.

**3.** Coordination and Market Development: Regional Offices of the CSB liaison with the states and the Departments of Sericulture and CSB's nested units in their jurisdiction. They coordinate with these agencies in implementing various sericulture development programmes of central government in respective states.

Within market development, quality checks have been built in processes to ensure quality of silk products. For instance R&D, training, transfer of technology and I.T. initiatives comprise the Export Promotion Scheme. Within this scheme the CSB is providing various services with respect to silk exports through its Regional Offices and Certification Centres, which include:

- 1. Voluntary quality inspection of silk goods meant for exports against payment of service charges, as prescribed by the Board.
- 2. Issue of various Tariff Certificates including GSP, Handloom Certificates, Certificate of Origin and Handicraft Certificates on inspection of silk goods and on self-declaration by the exporters as well.
- 3. Inspection and certification of silk waste meant for exports.
- 4. Inspection of natural silk carpets under 'voluntary basis scheme' as an export promotion measure
- 5. Textile testing services for checking silk quality, identification of constituent yarns and its percentages, physical/chemical properties and other parameters through laboratories attached to Certification Centres.
- 6. Technical assistance in identifying constituent yarns and ascertain percentage of silk content in products, as and when approached by different organizations

**4.** Quality Certification Systems, Export, Brand Promotion & Technology Upgradation: The last component of the scheme aims at designing Quality Certification Systems. The CSB is popularizing the "Silk Mark Scheme" through the Silk Mark Organization of India (SMOI) an assurance label that aims to protect the interests of the consumers from traders selling spurious silk products.

The board's network Certification Centers carry out pre-shipment inspection that aims to assure quality and purity of silk products exported from India. These officers are helping various stakeholders in the value chain to fulfill their promise of delivering quality silk to their consumers. During 2018-19, the SMOI **1195 surveillance/inspections** were undertaken by SMOI.

In addition to the Central Silk Board, another important entity in the silk sector is **The Indian Silk Export Promotion Council (ISEPC).** The ISEPC was established under Companies Act in the year 1982-83 and is a non-profit organization, with an object to promote, support, protect, maintain and increase the export of Silk & other allied Silk products. It is an apex body of Exporters / Entrepreneurs of Silk and other allied Silk products who deals in Silk Garments; Silk Made-ups; Silk Accessories; Silk Scarves; Silk Sarees, GI Sarees (Brocade Banarasi Sarees); Silk Carpets; Silk Cushion Covers; Silk Home Furnishing; Silk Blended products; not for profit under the Companies Act of India, duly sponsored by the Government of India, in the Ministry of Textiles for export from country and projecting India's image abroad as a reliable supplier of high quality of silk and other allied silk goods & services and ensured various measures keeping in view of observance of international standards and specification. The Council has created necessary infrastructure as well as marketing and information facilities, which are availed both by the members' exporters and importers.

The ISEPC as an Apex Body has as many as 7096 exporters since 1983 are registered with the Silk Council and the Council has a regular membership of approximately 2310 regular silk exporters. It works in tandem with Government of India and State Governments and is actively engaged in policy formulation in the silk sector. The Council also plays an integral role in exploring markets and identifying silk products with export potential, organizing and participating in silk fairs and exhibitions in India and abroad, resolving trade disputes and organizing workshops / seminars / conclave / hands on skill development of wearers turned exporters, on trade and policy issues.



## **Myth of Child Labour in Silk Sector**

One of the major concerns that looms the silk industry and its export products is the alleged involvement of children in various processes in the value chain. The rapid technological developments in the sector over the years have reduced drudgery within the silk value chain. This can be witnessed from farm sector technological up-gradations itself. Mechanization of sericulture for instance has not only reduced labour, but further reduced the need for employing family members, especially children in farm activities.

Secondly, the importance of the **decentralized powerloom sector** is a renowned feature of the Indian textile Industry. It provides employment to 44.18 lakh persons as per M/s Nielsen baseline Powerloom survey conducted during the year 2013 and contributes 60 percent of total cloth production in the country. More than 60 percent of fabric meant for export is

#### KEY DEVELOPMENTS IN INDIAN SILK INDUSTRY

- Mechanization in sericulture
- Dominance of power looms
- Quality Certification
- Inspections & verifications by SMOI

also sourced from Powerloom sector. The readymade garments and home textile sectors too are heavily dependent on the power loom sector to meet their fabric requirement. There are approximately 25 lakh powerloom in the country.<sup>1</sup>Based on discussions with key experts, it was revealed that within the silk sector, 90percent of raw silk is converted into yarn on powerloom itself. The production of silk yarn or fabrics on powerloom has no scope of child labour as it is done in established mills or factories. The incidence of child labour in silk sector is therefore minimized to negligible.

As mentioned earlier, it must be noted that silk and silk products form a small fragment of the Indian textile basket which consists of other items such as cotton, jute and wool. During 2019-20,

India's cotton productivity was 486.33 kg/ha and in terms of raw material consumption basket of the Indian textile industry, **the proportion of cotton is approximately 60 percent**.<sup>1</sup> Likewise, **jute production** too in India was estimated at **one million metric tons** during the fiscal year in 2019.<sup>17</sup>Compared to these dominating entities, the production of **silk was estimated at 26,253 MT** in 2019-20. On similar lines, difference in the quantum of production is further



reflected in the share of silk exports. Silk exports add up only to a small proportion of total textile

<sup>&</sup>lt;sup>17</sup>Production volume of jute goods in India from financial year 2009 to 2019. (2020). Retrieved 23 November 2020, from https://www.statista.com/statistics/1032559/india-production-volume-jute-

goods/#:~:text=Production%20volume%20of%20jute%20goods%20India%20FY%202009%2D2019&text=India%20was%20the%20largest% 20producer,the%20cost%20advantageous%20polypropylene%20packaging.

and garment exports (comprising fiber raw silk & silk waste 1.34 percent. natural silk yarns 0.41 percent, readymade garments 0.83 percent and silk carpets 1.56 percent ) when compared to cotton, jute and other fabrics. These figures again show the minute scale of silk in the textile sector.

Moreover, the silk export basket too is dominated by Ready Made Garments (RMGs) adding upto almost 43 percent, whereas handloom products constitute only 23 percent as represented in Figure 4. This again underlines



the high contribution of power loom in the sector, thus, reflecting minimal chances of involvement of children.

Table 5 presents the state wise change in child labour between Census 2001 and 2011. At an all India level, it can be noted that child labour adds upto less than 1 percent of the country's total working population. Among the eminent silk producing states, the same trend can be observed. If the total percentage of child labour in any state is estimated to be as low as 1 percent, the total number of children in the textile and garment sector and further in the silk industry (if any) will be much lower, almost equivalent to zero. This data too highlights how the myth of child labour in the silk industry has been overstated. Various initiatives and schemes that are in place against child labour, as discussed in the previous sections, have indeed decreased its incidence across the country over the decades to almost negligible proportion. Hence such an allegation against India and particularly its silk industry is indeed far from the ground reality.

Table 5: Percentage of child labours (5-14 years) as percentage of total workers								
State	No. of working children in the age group of 5- 14 years		Change inPercentagechildchange inlabourchild labour		Number of working people	Percentage of child labour(5-14 years) among		
	2001	2011	2001 & 2011	from 2001 & 2011		workers, Census 2011		
Karnataka	822615	249432	573183	69.68	27872597	0.89		
Andhra Pradesh	1363339	404851	958488	70.30	39422906	1.03		
Assam	351416	99512	251904	71.68	11969690	0.83		
West Bengal	857087	234275	622812	72.67	34756355	0.67		
Tamil Nadu	418801	151437	267364	63.84	32884681	0.46		
India	12666377	4353247	8313130	65.63	481888868	0.90		

Source: Census of India 2001 & 201118

The above mentioned figures coupled with scant literature pointing towards the engagement of child labour in household units further raise doubts about the allegations of child labour in the silk

<sup>18</sup>Census of India. (2011) Retrieved from https://censusindia.gov.in/2011-common/censusdata2011.html

industry. In several households, children are being taught the art of weavingwhile enrolled in school and completing their education. These studies also highlight how parents too, value formal education of their children and aspire for a better future by breaking the vicious cycle of poverty.<sup>19</sup>A formal education background coupled with the skill of weaving can help many of these children become garment/silk entrepreneurs. The Ministry of Textiles has also signed MOUs with Indira Gandhi National Open University (IGNOU)and National Institute of Open Schooling (NIOS) to secure educational facilities for weavers as well as their families. The NIOS offers learning specialized subjects such as design, marketing, business development etc. through distance education for handloom workers. The Ministry of Textiles has also committed itself to reimbursement of 75percent of fees towards admission to NIOS & IGNOU for SC,ST, BPL and women learners belonging to weavers' families.<sup>8</sup>

All government and non-government players in the silk value chain believe that children belong in schools, not workplaces. They are of the opinion that child labour deprives children of their childhood and their right to education. The above developments indicate how allegations of involving child labour do not take into consideration the progress made in this sector. In addition to this, due to the delicate nature of the fabric, specific skills and techniques are needed in silk reeling and weaving, which can only be carried out by highly skilled artisans. The Technology Upgradation Scheme (TUF) introduced by the Ministry of Textiles, GoI enables the use of domestic weaving technology to produce high quality fabrics using benchmark technologies in dyeing, weaving and finishing. With the introduction of power looms, the prospect of engaging children is also limited.

Therefore, the above findings, initiatives, technology upgradation as well as various other child welfare policies indicate how there isvery little/no scope for the employment of any kind of bonded/child labour across silk value chain in the country. The stakeholders in the industry are not only dedicated in delivering the best quality of products to their customers but are equally committed to following ethical trade practices.

<sup>&</sup>lt;sup>19</sup>Save the Children. (2020). *The Hidden Workforce: A study on Child Labour in the Garment Industry in Delhi*. Delhi: Save the Children.

# ANNEXURES

### ANNEXURE- 1

### List of State-wise Production of Silk is Presented Below:-

6		-	046.47		2017 10		2010 10	201	.9-20(P)
S. No	State	2	016-17		2017-18		2018-19	(Till	Dec-19)
1	Kawastaka	Target	Achmnt.	Target	Achmnt.	Target	Achmnt	Target	Achmnt.
1	Karnataka	11000	9571	11120	9322	10750	11592	12000	8276
2	Pradesh	5505	5970	6090	6778	7805	7481	7946	5735
3	Telangana	150	119	160	163	200	224	295	147
4	Tamil Nadu	2000	1914	2000	1984	2190	2072	2300	1548
5	Kerala	10	11	12	15	14	16	20	8
6	Maharashtra	285	259	328	373	415	519	630	228
7	Uttar Pradesh	280	269	300	292	340	289	365	165
8	Madhya Pradesh	275	111	230	103	160	100	165	17
9	Chhattisgarh	290	361	405	532	670	349	562	321
10	West Bengal	2706	2565	2590	2577	2775	2394	2900	1587
11	Bihar	84	77	85	63	95	55	86	3
12	Jharkhand	2622	2631	2744	2220	2658	2375	2604	1511
13	Odisha	130	125	140	116	148	131	155	47
14	Jammu & Kashmir	170	145	180	132	190	118	170	16
15	Himachal Pradesh	40	32	40	32	43	34	50	25
16	Uttarakhand	35	34	44	35	45	36	42	23
17	Haryana	1	1	2	0.7	2	0.7	2	0.4
18	Punjab	1	3	6	3	5	3	5	3
19	Assam (including Bodoland)	4103	3811	4705	4861	4980	5026	5395	4494
20	Ar.Pradesh	48	45	58	54	65	59	75	55
21	Manipur	530	529	560	388	435	464	600	401
22	Meghalaya	900	927	1070	1076	1110	1187	1220	972
23	Mizoram	70	76	100	83.6	105	92	130	88
24	Nagaland	690	678	770	615	633	620	682	558
25	Sikkim	10	9	17	0.001	3	0.4	1	1
26	Tripura	65	75	85	87	125	230	130	24
Tota	d.	32000	30348	33840	31906	35960	35468	38530	26253

(in MT)

(P): Provisional

### Annexure-2

Name of the Cluster	Estimated Production MT	Estimated Work force involved
Karnataka	9322	2470330
Andhra Pradesh	6778	1796170
Assam	4861	1288165
West Bengal	2577	682905
Jharkhand	2220	588300
Tamil Nadu	1984	525760
Meghalaya	1076	285140
Nagaland	615	162975
Chhattisgarh	532	140980
Manipur	388	102820
Maharashtra	373	98845
Uttar Pradesh	292	77380
Telangana	163	43195
J & K including Ladakh	132	34980
Odisha	116	30740
Madhya Pradesh	103	27295
Tripura	87	23055
Mizoram	84	22260
Bihar	63	16695
Arunachal Pradesh	54	14310
Uttarakhand	35	9275
Himanchal Pradesh	32	8480
Kerala	15	3975
Punjab	3	795
Haryana	1	265
Rest of India	6624	744910
Total	38530	9200000

### **Clusters with Estimated Production and Workforce Involved**

### Annexure-3

### Export Statistics of Silk Categories which comes under ITC HS Code Chapter 50, 57, 61,62 and 63

Silk Ex	ports - Value i	n US Million Dollars
Commodity	2018-19	2020-21
		(April-Sept 2020)
Category 50 Silk	84.48	34.29
Category 57 Silk Carpet	17.80	9.20
Category 61 Silk Article of Apparel & Clothing's (KTD)	3.50	2.09
Category 62 Silk Article of Apparel & Clothing's (Non KTD)	312.77	77.95
Category 63 Silk Other Made-ups	2.56	2.48
Total	421.11	126.01



### Annexure-4

### THE INDIAN SILK EXPORT PROMOTION COUNCIL

# Silk Map of India showing locations of all silk entre all over India with the specific silk varieties like Mulberry, Muga, Tussar and Eri

