

# Re-emergence of Seri industry in Sri Lanka: A Sustainable solution for poverty alleviation and economic stability

## Introduction

The silk is the natural fiber from the insect (salivary gland excretion of the silkworm) and is called as “Queen of Textiles” due to its royalty, popularity, and demand. The silk industry is an eco-friendly, highly labour intensive, natural resources consuming low investment-oriented industry. Therefore, promoting such industry is timely needed to hunt foreign reserves needed for the country to hop up with the economic crisis and the sovereignty of the country. Sri Lanka has a long history of the sericulture industry since the 17<sup>th</sup> century, and between 1980-92 around >400ac extended 16 government farms were run profitably in Pallekale, Vaddakkachchi, Iranaimadu, Korana, Galaka, and Battigama. Thereafter, Seri industry of Sri Lanka started to collapse slowly due to the introduction of synthetic silk at cheaper prices and religious believe. Now, Sri Lanka imports raw materials to produce value-added textiles from other countries. Sri Lanka’s textile & garment exports are all set to cross \$5.07 billion in 2021. Therefore, the textile industry plays a major role in foreign earnings to Sri Lanka. Among the text tiles, silk is the world’s 96<sup>th</sup> most traded product. Sri Lanka imported \$ 20.4 M worthy silk in the year 2020 but Sri Lanka’s silk exports were only US\$11,462,000 in 2021. Year by year Sri Lanka’s raw silk import is increasing due to the demand of local consumption and the handloom sector to produce value-added products. Considering the current economic crisis, Sri Lanka should promote local Silk production and expansion of silk industry for various reasons;

1. To prevent the wastage of foreign reserves
2. To open more employment opportunities
3. To secure economic sustainability through the continuous export earnings
4. To secure the export-oriented rural based handloom textile Industry

Strengths to re-introduce the Seri industry in Sri Lanka



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## Climate suitability

Seri industry needs mean annual rainfall of 600mm to 2500mm, pH range of 6.2 to 6.8, well-drained loamy to clay soil, 65 to 80 percent relative humidity, mean temperature of 24 and 28 °C, and a sunshine duration of 5 to 12 hours per day. Therefore, many places in Wet Zone, Dry Zone, and Intermediate Zones in Sri Lanka meet the required conditions, and most suitable to establish the Seri industry and expand as per the economic requirement of the country.

## Land availability and use

As per the world data atlas, total agricultural land area in Sri Lanka is 28,086 sq. km (45.4%). Arable land as a share of the land area of Sri Lanka went up by 3.94 % from 21.3 % in 2017 to 22.2 % in 2018. Nearly 16.2 % of the agricultural land area is occupied by permanent crops and rest of the 6% land can be used for other agricultural purposes. Therefore, the land will not be an issue to re-introduce and expand the Seri-industry in Sri Lanka (Figure 1). Inter-cropping of mulberry plants, which is used feed the silkworm, with coconut is another option to efficiently utilize the land. In a one-acre adult coconut plantation, 3500-5000 mulberry plants can be grown. Under-coconut mulberry cultivation could generate an additional income of Rs. 25,000 to 30,000, 2 to 2.5 MT of fuel wood per acre per annum, and open additional employment opportunities of 1.5 to 2 workers per acre.

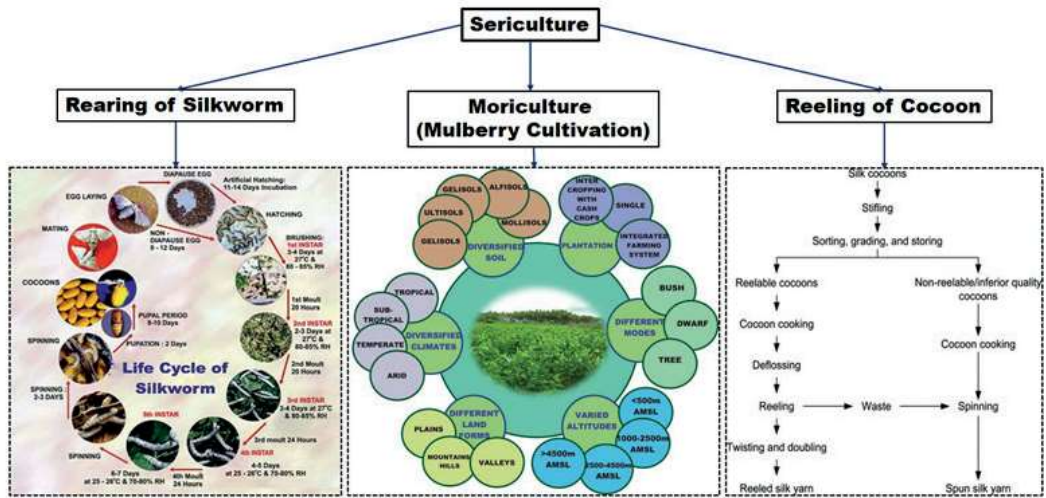


Figure 1: Sericulture in nutshell

**Labor force**

In 2020, the total number of estimated employed persons in Sri Lanka is about 8.0 million and of which, 29.0 percent are engaged in the Agriculture sector. Still, the economically inactive population of the country is about 8.4 million. The unemployment rate of the youth is 23.80% among the overall unemployment of 4.84% in 2020/2021. The unemployment rate of the county is expected to increase due to the current economic crisis. Therefore, reintroduction and expansion of Seri industry at the village level will open a window for substantial employment opportunities particularly, women headed families and unskilled persons from the economically weaker societies. For example, in India, China, and Thailand, nearly 7.9 million, one million, and 20,000 workers are employed in the silk sector, respectively.

**Market demand**

Among the text tiles, silk is the world's 96<sup>th</sup> most traded product. Sri Lanka's textile & garment exports hunting substantial foreign income annually in billions US dollars. In 2020, Sri Lanka's clothing exports fetched \$3.939 billion, a fall of 24.3 percent over \$5.205 billion in 2019 and again hit \$5 billion in 2021. Sri Lanka imported \$ 20.4 million worthy silk in the year 2020, but Sri Lanka's silk exports were only \$11.462 million in 2021. The past five year's data projects that the Sri Lanka's raw silk import is always higher than the export due to the demand for local consumption and the handloom sector to produce value-added products (Figure 2).

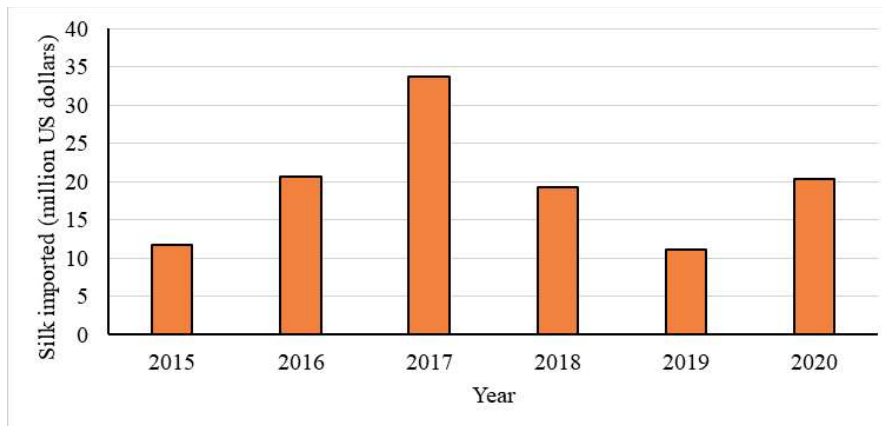


Figure 2: Import trend of Silk in Sri Lanka between 2015-2020

The usage of natural silk dresses and silk-based products is high in Sri Lanka. If silk is locally produced, there is no doubt that it will find a good market opportunity in Sri Lanka as well as in world market. The current scenario is quite fitted to take up the industry forward and capture the market.



## Weakness, Opportunities and Threat

- Exiting mulberry germplasms are traditional varieties (Jaffna local variety and kanva 2 Indian varieties). Now high yielding and agro-ecological-specific varieties of the mulberry plant are available in many countries. Fast Breeding of suitable high-yielding varieties using molecular approaches for the various agro-ecological region in Sri Lanka is feasible and very much important.
- Multiplication of silkworm breeds especially suited to local breeding and rearing conditions is also very much important. In the 1980s, mulberry silkworm breeding stock comprised of 46 pure lines introduced from Japan, Korea, and India and maintained by the silkworm breeding centre at Nillambe under the Silk and Allied Products Development Authority. The cross breeding of traditional breeds with potential hybrids will be helpful to get high silk yield. Technical and technology support to silk industry sector people who are engaged in the processing are very important to enhance their skills to ensure the quality silk is being produced in desired quantity to run the industry profitably.
- Due to the political dilemma and unavailability of a strong economic policy framework, corruptions in management, and bureaucratic complexity of government, investors are not much interested to invest in silk industry. Moreover, forecasted risks of the transaction and fluctuating exchange, insufficient import-based raw materials, a sharp decline in the tourism sector, further increased the risk very much, and slow down or shutdown of traditional silk production centers due to the inability of getting foreign orders.
- Lack of sufficient research, extension training and insufficient quantity of qualified personnel in sericulture are limited in Sri Lanka, but there are opportunities available to get high tech training from neighboring countries like china and India through scholarships programmes. The extension system should work actively to train the technical personnel with medium and low – level skills in the country. Educate the silk industry people related to quality standards of silk, marketing strategies, value-added product production methods, and strategies to get a high profit and attract the local and foreign markets to sell at higher prices. The market prices regulation for raw silk and monetary and regularly mechanism need to be implemented by the government intervention. The major limiting factor to expanding the silk production is the importation of silk-based products from other

countries at remarkably low prices as well as high quality. Therefore, Government has to implement import restrictions or high tariff regulations to control the importation of silk-based products.

- Market competition: Around the world, there are a lot of vast extensively silk-producing countries running the silk industry for a long time. Therefore, definitely, Sri Lanka needs to compete with the other countries to market its own silk. There are excellent opportunities available to Sri Lanka are 1. There is a huge demand for Sri Lankan brands of text tiles in foreign markets; 2. More than 40 lacks of Sri Lankans are living around the foreign countries, therefore, if we create awareness to purchase our product, that could be substantial enough to sell our brand; 3. GSP+ tax exemption will be an opportunity to market our silk in a competitive basis.

In conclusion, there is a huge demand for the products of silk in local and foreign markets. Past history of sericulture in Sri Lanka promises that climatic factors and human capital are favorable for successfully run the Seri industry. Re-emerging Sericulture by implementing successful strategies used in past, and establishing short/medium/long term policy frameworks to hop-up from the predicted weakness and threats will be ideal to secure economic sustainability through the continuous export earnings.

## References

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