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सिल्क मार्क-उत्पादक और उपभोक्ता का पथप्रदर्शक



रेशम वास्तव में एक समकालीन, उत्तम दर्जे का, शानदार, सुरुचिपूर्ण और मनोमुग्धकारी कपड़े के रूप में विकसित हुआ है जिसने औपचारिक शाही/राजसी परिधानों से जुड़े सभी आंतरिक गुणों और मूल्यों को

बरकरार रखा है। भारत एकमात्र देश है जहाँ रेशम की सभी चार ज्ञात किस्मों और सभी उत्कृष्ट रेशम प्रकारों और विविधीकरणों का उत्पादन होता है। प्राकृतिक शहतूत रेशम, भूरे रंग का उष्णकटिबंधीय तसर रेशम, उत्कृष्ट एरी रेशम और शांत सजीला मूंगा रेशम और मुद्रण और डिजाइन विशेषताओं के माध्यम से इनकी मूल्य श्रृंखला अंतरराष्ट्रीय व्यापार क्षितिज को चमकाती है।

रेशम अपने ग्लैमर, चमक, दमक और पवित्रता की रक्षा के लिए कई लड़ाइयाँ लड़ रहा है। हालांकि इसने रेशम को उच्च मूल्य के कपड़े के रूप में प्राप्त अद्वितीय स्थिति को बनाए रखने में काफी हद तक मदद की है, किन्तु रेशम के बारे में लोगों का ज्ञान अभी भी सीमित है। इन वर्षों में, भारत अपनी सिद्ध उत्पादन क्षमता और उत्पादकता के साथ एक वैश्विक रेशम-व्यवसाय और निवेश केंद्र में बदल गया है। वैश्वीकरण और ब्रांड 'सिल्क मार्क' के एक सक्रिय विपणन अभियान के साथ, एक संभावित रेशम उत्पादन आधार के रूप में राष्ट्र की एक महत्वपूर्ण छवि पेश हुई है। 'सिल्क मार्क' दुनिया में भारत के बारे में बनी धारणा को बदल रहा है। 'मेक इन इंडिया' उत्पादन और उत्पादकता के माध्यम से सिल्क मार्क बाजार-संबंधी सुधारों के वादों के कारण अन्यों से अलग नज़र आता है। रेशम के क्षेत्र में भारत कुछ समय से भरोसे का नाम रहा है। इस विश्वास पर खरा उतरने और इसे पूरा करने का समय आ गया है और सिल्क मार्क भारत को इस दिशा में आगे ले जा रहा है। देश में उत्पादन गति को प्रोत्साहित करने और सतत बनाए रखने के लिए सिल्क मार्क

ब्रांड की छवि बहुत महत्वपूर्ण है। यह अनिवार्य है कि सिल्क मार्क आज भारतीय सिल्क की एक जीवंत, ठोस और सक्रिय ब्रांड छवि बने। इसलिए भारत को सिल्क मार्क को बढ़ावा देने के लिए एक अभियान की आवश्यकता है, जो दुनिया के लिए भारत की कल्पना को बुने और समावेशी विकास का वृहद निष्पादन करे। सिल्क मार्क ब्रांड अभियानों में देश की रेशम व्यापार संस्कृति, भावना और जोश को प्रदर्शित करने की क्षमता है। रेशम उत्पादन और व्यापार पारिस्थितिकी तंत्र के क्षेत्र में भारत एक प्रदर्शनकारी शक्ति है। अब समय आ गया है कि इस आंदोलन को सिल्क मार्क ब्रांड की सुरक्षा कवच के साथ जोड़ा जाए जो रेशम उत्पादकों और रेशम व्यवसाय की दुनिया को बताता है कि भारत वास्तव में क्या है।

सिल्क मार्क ऑर्गनाइजेशन ऑफ इंडिया (एस.एम.ओ.आई.) अपने सेट-अप सिस्टम, मानकों और प्रक्रियाओं के माध्यम से बेईमान निर्माताओं और व्यापारियों द्वारा नकली रेशम के व्यापार के खिलाफ उपभोक्ताओं की प्रभावी सुरक्षा से जुड़ा है। सिल्क मार्क में एक अनूठी लेबलिंग पद्धति है जिसमें अधिकतम सुरक्षा के लिए छिपी हुई विशेषताओं वाले ई-बीम होलोग्राम हैं जिससे छेड़छाड़ नहीं हो सकती। इन लेबलों को क्रमांकित और कोडित किया जाता है ताकि प्रत्येक लेबल को उसके अधिकृत उपयोगकर्ताओं के लिए पहचाना जा सके। आज की आवश्यकता है, आर्थिक विचारों की निरंतरता दिखाने के लिए एक दृढ़ नीति व्यवस्था, एक नौकरशाही जो खुद को एक सूत्रधार और अच्छे व्यवसाय और उत्पादन अभ्यास के प्रवर्तक के रूप में प्रदर्शित करें। इन सबके साथ, हमें सिल्क मार्क ब्रांड अभियान की आवश्यकता है जो पूरी कहानी को मूल रूप से बताए। और इस प्रकार, विश्वास बनाए रखने के लिए सिल्क मार्क अपनी यात्रा पर आगे बढ़ते रहे।

के. एस. गोपाल
प्रधान संपादक

Silk Mark-A Guide for Producer and Consumer



Silk has truly evolved as a contemporary, classy, luxurious, elegant, and sensuous fabric that has retained all the intrinsic properties and values associated with the ceremonial

costumes of the erstwhile royalty. India is the only country to produce all the four known varieties and for all its classic silk types and diversifications. The natural Mulberry silk, the rusty tropical Tasar silk, the performer par excellence Eri silk, and the cool chic Muga silk and their value chain through all its printing and design specialties sparkle the international business horizon.

Silk has been fighting many battles to safeguard the sanctity of its aura of glamour, sheen, shine, serenity and purity. While this has helped in preserving the unique position enjoyed by silk as a high-value fabric to a great extent, people's knowledge about silk as such remains rather limited. Over the years, India has turned into a global Seri-business and investment center with its proven production capacity and productivity. With globalization and an active marketing campaign of brand 'Silk Mark', a crucial image has been projected of the nation as a potential silk production base. The 'Silk Mark' is changing the perception of India in the world. Silk Mark stands out from the rest in a host of market-facing reforms-in-promise through 'Make in India' production and productivity. Incidentally, India is the second largest silk producer in the world. India has been a promise in Silk, for a while. It is time to fulfill and redeem this promise and Silk Mark is taking India forward in this direction.

The Silk Mark brand image is very vital to encourage and keep the production tempo in the country alive. It is imperative that Silk Mark is a vibrant, solid, and active brand image of Indian Silk today. Thus, India needs a campaign for the promotion of Silk Mark that weaves the imagery of India for the world and performing giant for inclusive growth. Silk Mark brand campaigns have the ability to showcase the silk business culture, sentiment, and vigor of the country. India is an exhibiting force in the space of silk production and business ecosystem. It is time to accompany this movement on the ground with an air cover of Silk Mark brand imagery that tells the world of producers and silk business what India is really about.

Silk Mark Organisation of India (SMOI) is associated with effective protection of the consumers against trading of spurious silk by unscrupulous manufacturers and traders through its set-up systems, standards and processes. The Silk Mark has an innovative labelling method consisting of a specially designed paper sticker affixed with a tamper-proof distinctly numbered high-security e-beam hologram having concealed features for maximum security. These labels are numbered and coded in such a way that every label can be identified for its authorized users. A firm policy regime is required to show the consistency of economic thought; a bureaucracy that showcases itself as a facilitator and an enabler of good business and production practice is the need of the day. As all this falls into place, we need the Silk Mark brand campaign that tells the entire story seamlessly. And thus, the Silk Mark is required to roll on to its journey to keep the trust.

K. S. Gopal
Editor-in-Chief



INDIA INTERNATIONAL SILK FAIR 2022

Inclusion. Interaction. Innovation.

Silk Mark Organisation of India (SMOI), New Delhi, in association with P3D Cell, CSB, Bengaluru; CTR & TI, Ranchi and CMR & TI, Ladoigarh participated in the India International Silk Fair 2022 (IISF-2022) held at Riviera House, Gurugram. The Fair was organised by M/s Indian Silk Export Promotion Council, New Delhi, from 28th to 30th July 2022, to showcase all Indian varieties of Mulberry and Non Mulberry Silks under one roof, along with a Live Demonstration elucidating the processes from soil to silk; from cultivation of food plants to the actual weaving of fabrics. This Demo imparted a wider knowledge platform to retailers and traders of silk products, from India as well as abroad, who were at the Fair to sell, purchase or otherwise ink mutually beneficial business agreements.

As in years gone by, this mega event saw participation by almost all exporters from different corners of the country. On the occasion, SMOI, New Delhi, was proud to have participated in such a prestigious event, with the full support and guidance of the CEO, SMOI, Central Silk Board, Bengaluru.

The grand Fair was graciously inaugurated on 27th July 2022 by Smt. Darshana Vikram Jardosh, Hon'ble Minister of State for Textiles and Railways, Government of India, New Delhi. Shri. Upendra Prasad Singh, IAS, Secretary (Textiles), Government of India, graced the occasion as Guest of Honour.

The Silk Pavilion

The Theme Pavilion of SMOI was beautifully presented and managed by Silk Mark Organisation of India, New Delhi Chapter, in association with P3D Cell, CSB, Bengaluru; CMR & TI, Ladoigarh and CTR & TI, Ranchi. Live demonstrations on Tasar, Eri and Muga Silk Worm rearing were the focal points of attraction, while a superb audio-visual programme on sericulture stole the hearts of visitors.





Publicity

This international Fair aims to facilitate a plethora of opportunities for rearers, silk producers, manufacturers, exporters, traders, etc., and to proffer a very useful platform for the exchange of ideas/views/innovations, technologies, products, as well as develop valuable relationships among all the stakeholders of the industry. SMOI had made all arrangements to provide wide publicity on all types of silk produced in India, and the critically important Silk Mark Label, by distributing pamphlets, displaying posters, and giving out info-leaflets on Silk Mark, the Symbol of Pure Silk. The publicity materials were distributed to all participants/guests/ media persons, exporters, importers and consumers present on the occasion. The collated and comprehensive information at the Theme Pavilion on the Status of Silks in India, a brief note on all Types of Silks, the Prime Role of SMOI in the development of the Silk industry in the country, and above all the importance of the Silk Mark Label were appreciated and acclaimed for their design and content. The Charts/Banners/Posters displayed in the Pavilion also added more information on the Indian Silk Industry, especially in the Vanya Sector, for the enlightenment of the visitors.



Achievements

1. Participation in the event has added new dimensions in the minds of Traders/ Buyers, both from India and abroad: On the role of Central Silk Board in the development of the Silk Industry in the country and the importance of SILK MARK, the only assurance of Pure Silk.
2. The silk dealers/traders/exporters are now aware about Mulberry/Vanya Silk, and solid relationships were also formed with them during discussions with us as well as with Authorised Users of the Silk Mark.
3. Visitors: Apart from India, about 150 foreigners from 27 countries visited the SMOI Pavilion: From Uzbekistan, Ghana, USA, Spain, Turkey, Iran, South Africa, Singapore, Romania, Greece, Togo, Germany, Canada, Peru, Bulgaria, Brazil, Australia, Armenia, Vietnam, Russia, Bhutan, Bangladesh, Senegal, HongKong...
4. Authorised Users who participated in the Fair had secured business from the local traders/exporters, and around Rs.12 crores of business was generated in terms of confirmed orders/queries/samples taken, etc.
5. Three New Silk Mark Authorised Users were also registered during the Fair.

Report: Shri Dasharathi Behera
Assistant Secretary (Tech.), RO, CSB, SMOI, New Delhi





Ms. Arushi Chowdhury Khanna : TWILLING THE HIMROO

A NEARLY-EXTINCT CRAFT COMES BACK TO LIFE !



Ms. Arushi Chowdhury Khanna

The pride of Maharashtra is the Himroo which during its heyday was woven along with the Mashru and Paithani at - yes - the royal weaving hub of Aurangabad. Aurangabad has had a place in history as a handloom textile hub with many beautiful weaves for the royalty being woven here. Till the 1990s, handloom weavers and weaves were patronized; thereafter several of these crafts have been relegated to the languishing craft division. I first heard of the Himroo Revival Project while searching for jalabandhas or jala tiers. I wanted to know if the bandhas at Aurangabad were like those at Banaras. I had spoken to a colleague of Arushi, who told me about their revival work in Himroo. From then on till now, there has been much progress. Struggling to convince the only surviving weaver to start production; training



Ms. Chitra Balasubramaniam

(Freelance features writer, among other things, she writes on Textiles for the love of it.)

more persons to weave; getting hold of samples to revive; trying to sell them so that the whole process will not be just a flash in the pan...Himroo production is finally happening. Along with it, the pure silk Himroo which was once made for royalty is being done on a project funded by INTACH. The Himroo shawls recreated are fabulous. A tiny workshop is running and there are hopes that the extinct weave may start singing again. Arushi Chowdhury Khanna, with her exuberance and energy, speaks on her journey with the Himroo.

Q1. How and when did LoomKatha begin?

After nearly 8 years of working in the craft sector with organisations like WomenWeave, Adiv Pure Nature and AIACA, I set up LoomKatha in 2017 to work with nearly-extinct weaving crafts of India. As a bootstrapped organisation, I initially



worked with more commercially viable crafts like Maheshwari and Phulia weaving. I worked on the textile developments and my friend and colleague, designer Sidhika Lillaney, would turn these textiles into beautiful garments which we marketed online and at exhibitions. As we built credibility and volumes, I was able to start on the true mission of revival and we began the Himroo Revival Project in 2019.

Q2. How did you chance upon Himroo and why were you drawn to it? Please tell us more about your journey- meeting Suraiya Appa, research and more...

Having grown up in Mumbai and having a great sense of love and loyalty to the city and the state, it always bothered me that Maharashtrian handlooms are not as well-known as weaves from other states. So when I set up LoomKatha to work with languishing textile crafts, I was very keen to start with a weave that was from Maharashtra. And in all my readings, Himroo kept appearing but I was unable to find an actual Himroo shawl available anywhere. Simultaneously, I ended up relocating to Aurangabad for personal reasons and therefore, it seemed the perfect choice of weave to work on.

However, while there are many hoardings all over the city of Aurnagabad advertising Himroo showrooms and workshops, when I visited these I found that the products being sold as Himroo were in fact mainly viscose bedsheets and bedcovers that were made in the Aurangabad

mills. They had motifs like paisley and marigold that were similar to Himroo so, in a sense, they had copied the Himroo aesthetic but watered it down to suit mass production. There were a few handloom Himroo shawls available but they were woven on very coarse material and, surprisingly, had motifs like parrot and peacock which are actually associated with Paithani!

Finally, after many visits to government offices and the local khadi centre, I was able to find one weaving family that still had old swatches of Himroo that used to be woven on their looms right upto the 1990s. From these, I was able to begin piecing together what the original textile looked like. I also had a team of interns from the Young India Fellowship (Ashoka Univ) who visited the Weavers' Service Centre in Delhi and the Salar Jung Museum in Hyderabad. They also visited Suraiya Appa's centre in Hyderabad and were able to obtain some firsthand information from all these sources. After putting together all the bits of information from these various sources, I was able to understand the original structure of the Himroo weave. I was also able to locate one weaver who was now working as an auto driver and he agreed to come back to weaving and train a small group of women in the craft. This is how the Project started.

Q3. How difficult was it to start with the first pieces?

It took us over 6 months to weave our first piece. The truth is that the Himroo handlooms had been shut for nearly a decade. There were a handful of looms running at tourist shops that





claimed to be weaving Himroo but as I mentioned earlier, they were actually weaving a very watered down version of Himroo using viscose and staple (polyester) fibres. We were eventually able to locate 3 original Himroo looms in a shed but they were in defunct condition. They first had to be repaired and the loom parts like reed and shaft ordered from Banaras. Then the jacquard punch cards had to be re-made as the old ones we found were very damaged. After this the "jaala" had to be tied. All the old technicians who did this work had passed away. We found someone from Banaras who was working at the powerloom mills in Aurangabad who knew how to tie the "jaala", so he came in his spare time to do this. Then, the first warp that he set up turned out to be a cheap synthetic silk warp (locally known as "chamak" yarn) so then we had to begin the entire process again. Eventually after 6 months of struggle we were able to weave our first actual Himroo piece with cotton and silk yarns.

Q4. Why is Himroo so tedious?

Himroo was the fabric of royalty. The designs are complex and the fabric itself is very dense. Added to that, it is a 4-shaft twill weave and the shuttles are handthrown. So the weaver is basically weaving a base twill fabric with cotton and adding an additional layer of ornamentation through the silk yarn. For complex designs, as many as 5 different coloured shuttles are used to create the design. A Himroo shawl takes between 10 and 20 days to be woven.

Q5. What kind of pieces have you woven? Tell us more about this project with INTACH.

When the INTACH team headed by Ms. Bindu Manchanda visited our centre in Aurangabad, we had a wonderful group discussion with all the weavers. One of the senior-most weavers is Vasant Khoje, a septuagenarian, who still begins weaving at 7 o'clock every morning. As he was

talking to us about how he had learnt weaving in the 1960s when he was just 11 years old, he happened to mention that at that time, some of the most skilled weavers were able to weave pure silk Himroo in which the base twill was silk and the design was also silk. This type of Himroo has probably not been woven for over 30 or 40 years in Aurangabad. This was of immense interest to the INTACH team and so they supported a research programme in which we experimented with different varieties of silk yarns and changed the loom settings to accommodate for a silk warp (which is far more delicate and difficult to manage than a cotton warp). By the end of the project (March 2022), Vasant Mama was able to weave beautiful pure silk Himroo dupattas, and he continues to do for us since then.

Q6. How are you planning to take Himroo forward?

I aim to continuously refine the Himroo product so that we can recreate more and more complex designs and patterns. At the same time, we want to continuously innovate and ensure that Himroo textiles can reach a larger customer group. For example, we worked with Bangalore-based designer Arati Monappa to weave natural dyed yarns (that she sent us) in the Himroo technique. The result was a beautiful product that had never been done before. Similarly, our very first customer for Himroo was actually a US-based brand called the Ibu Movement. They loved the Himroo designs but needed the colours to be



changed to suit the American market. We were able to do this and create beautiful jackets for them from the Himroo textiles. We look forward to more such innovative collaborations.

Q7. Are you working on any other weaves?

Yes, my organisation Loom Katha is working with weavers in Bengal on linen and jamdani weaves. We did a small project with the Craft Council of Andhra Pradesh on the Challapalli cotton weave of the state. While researching Himroo, we also found that Mashru used to be woven alongside Himroo in Aurangabad for the Deccan nobility. As you may be aware, today most of the Mashru that is woven uses rayon and cotton instead of actual silk and cotton. So we made a small collection of Mashru scarves using silk and cotton. Going forward, we want to develop this fabric further. However, finding weavers in Aurangabad is a challenge so we may take this up in some other weaving cluster.

Q8. Tell us more about your project in Egypt and its weaving and intricacy.

In Egypt I am mainly working with a wonderful NGO called Threads of Hope, that trains refugee women in languishing textile crafts of Egypt. Here, I am training a group of artisans to work with the traditional natural dyes of Egypt that have been used since the time of the Pharaohs. Unfortunately, today no one remains in Egypt who has the expertise to use these dyes on fine fabrics like cotton and linen. So I am working on this project-we have started using dyes like madder root and safflower. Fragments of madder-dyed leather and cloth which date back thousands of years have for example been found in the erstwhile Egyptian kingdom of Thebes.

Q9. Anything else you wish to add about your journey with Himroo, other weaves, silk, dyes, textiles...

The journey with Himroo has been a long and



difficult one. There is really no infrastructural support available for individuals like us who wish to work with nearly-extinct craft forms. However, I am fortunate to have found many individual mentors and guiding lights who believed in the work I was trying to do and came forward and supported us. One of the most difficult times was during Covid-19. When the sudden lockdown happened, not only were the looms shut down but we also lost a major research project as the concerned corporate moved the funds to healthcare. At this time we launched a campaign called #kaamnotdaan on Instagram and asked people to pre-book orders with us just so that we could provide some stipend to our small group of weavers during this time. To my amazement, people supported us enthusiastically and we could not only pay out the stipends but also set up a few new looms near the weaver homes so that they could resume weaving without having to travel far. When the lockdown became indefinitely extended, we took almost a year to deliver all the orders, but everyone was happy to wait and not a single order was cancelled!





REDISCOVERING THE SILK ROUTE

TRACKING THE IMPRINTS OF CULTURAL EVOLUTION ALONGSIDE

The Silk Route is reminiscent of an era of great cultural evolution (revolution) stretching well over a millennium and a half, commencing from 200 BC to 1400 AD. This era has also witnessed the confluence of various civilizations from east to west, an integration of multi-ethnic cultures thriving alongside the Silk Road and a cradle of intellectual and educational enlightenment that flourished across the lanes and bylanes of the Silk Route. Silk fabrics are mirrors of all civilizations in which they have played a part. Silk, the mystical fibre, has a fascinating history; legends woven together. Silk was known and produced in India from pre-Vedic times. India was on the fabled silk route which stretched 6000 miles across the heartland of Asia from China to the Mediterranean. Indian caravans laden with luxury goods like spices and indigo traded for silk from China. The legendary Silk Route, as historians put it, has had a tremendous impact in influencing the political, social and cultural renaissance across the globe, making an indelible mark on the evolution of world history. It is therefore refreshing and rejuvenating to rediscover the Silk Route with an antiquarian zeal, and accentuate the chronicles associated with



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this tiny silk fibre which had great influence in shaping world history.

The ancient Silk Route is not a myth, but a historical reality that greatly influenced the cultural, social and political history of both eastern and western civilizations. In his travel memoirs "Wonders of the World", Marco Polo writes about Chinese silks... "No day in the year passes that there do not enter a thousand cart loads of silks from which are made quantities of cloth of silks and gold..." Fascinated by this description, Columbus set sail for India with the idea of reaching the land of silk and spices by sailing westwards around the world, and reached America.

The Evolution

Beginning in about 100 BC, a network of overland trade routes developed to carry goods between Asia and Europe. The earliest and most



heavily-used route came to be known as the Silk Road, for the precious Chinese silk that was traded abundantly on it. The route waxed and waned over the centuries with changing political and environmental conditions. After the discovery of a sea route from Europe to Asia in the late 15th century, the land outlets were gradually abandoned in favour of ocean-borne trade.

Silks and spices, those rare treasures, frequently traveled together by land routes through Persia from Central Asian passages, or by ship through the Persian Gulf to the ports at the mouths of the Tigris and Euphrates, from there to be transported by camel caravan to the souks of Syria, the prime Mediterranean point for the disposal of Eastern luxuries. The northerly land routes carried Chinese silks, while Eastern vessels brought India's wild silks as well.

Although silk had traveled to western countries earlier, the Silk Route is generally referred to as having been opened in the 2nd century BC during the time of the Romans and the reign of the Han Emperor Wu, whose Ambassador traveled as far west as Persia and Mesopotamia, bearing gifts including silks. A Han Emissary reached Baghdad in AD 97, and important finds of Han silks have been made along the silk route; for instance Sir Marc Aurel Stein discovered 45 monochrome and polychrome figured silks at Lou-Lan in the Tarim Basin, and the Soviet

archaeologist P. K. Kozlov excavated some 20 patterned silks in nomadic burial mounds at Noin-Ula in Northern Mongolia. Spectacular finds from richly-furnished tombs have established that the inclusion of precious silk garments as well as shrouds, with both woven and embroidered patterns, formed part of the burial rituals. The famous Tomb of Lady Dia at Mawangdui (western Han, 170 BC) contained more than one hundred types of silks and silk garments, which displayed a variety of intricate weaves and various printing techniques. The early silks are usually fine gauzes, either plain or patterned on the warp face with small geometric repeating motifs, some self-coloured and some polychrome.

East or West, Silk is the Best

Despite the great distance between Asia and Europe, the two regions had contact prior to 1AD. Traders, pilgrims and warriors all traveled along the Silk Road from Rome and Syria in the west to as far as China in the east. Culture spread through interaction among merchants, travelers and conquerors. The most profound influences of all were those brought by conquering civilizations. To understand the history of cultural diffusion, one must know the major empires of the Silk Road and the effects that they had on the exchange and spread of culture. Trade on the Silk Road flourished during three major time periods: (1) the 2nd century BC through to the 2nd century AD (2) the 7th to 10th centuries AD and (3) the 12th to 14th centuries AD. These were periods that saw the unification of great empires of the East and West. Major historical events are listed in the table below.

The Perilous Stretch

The Silk Road was actually a perilous network of routes. It was hazardous to monks and pilgrims carrying Buddhist teachings between India and China, and even more hazardous to traders who intended to exchange gold, wool, horses, jade



and glass for silk. The Road started in what is now Xi'an in Shaanxi province, traversed a barren crust of earth through treacherous mountains and desert across Central Asia to Antioch and Tyre; the last lap, to Europe and Egypt was by water and other Mediterranean ports.

By 126 BC, the Silk Route passing through Thashkant, Baghdad, Damascus and Istanbul carried fabulous silks from India and China to Europe. The ancient caravan track originated at Sian, followed the Great Wall of China to the northwest, bypassed the Tokla Makan Desert, rose over to the Pamir mountains, crossed Afghanistan and went on to the Levant; from there silks and spices were shipped across the Mediterranean. Once closed during the sixth century, the highway was opened again by the Venetian traveler Marco Polo who journeyed via this route in the 13th century to reach Asian lands.

Few made the entire trip; caravan loads were passed from trader to trader at each oasis and stronghold, prices going up with each exchange. Neither civilization, West or East, knew much about the other beyond the edge of the route. Yet, the patterns of silks were flavoured by all the different cultures along the route.

Rediscovering the Silk Route: An international team headed by an Indian Army officer has ventured into rediscovering the Silk Route recently. American space shuttle 'Endeavour' fitted with the world's most powerful space radar, capable of piercing clouds, plants, sand and ice blasted off on 30th September 1994 from Cape Canaveral. Among other missions, the spacecraft was to search for buried treasures along China's Silk Road, once traveled by Marco Polo.

Revival of the Silk Route: The proposal to reopen the old Silk Route is expected to limit the economic impact of Afghanistan and Pakistan on the new Central Asian Republics. The revival of Silk Route with the help of funds from the European Union and the Asian Development Bank will seek to provide modern transportation facilities along the route that has been named the "Europe-Caucasus-Central Asia Transport Corridor" [TRACECA].

New trade links are being worked out now through the old route that stretches from Uzbekistan, north of Afghanistan, through Central Asia into Turkey and thereon to the Mediterranean. The proposals on the new route were agreed to at a conference in Baku - capital of

Azerbaijan. The conference was attended by 700 delegates from more than 30 countries of Europe and Asia. The new route will have 'historic strategic significance' for South Asia. A new route along the old route will seek to provide direct and modern transportation along the east-west corridor.

SILK ROUTE CHRONICLES IN CHRONOLOGY

ERA	HISTORICAL EVENTS IN CHRONOLOGY
5000-500 BC	
3000	Silk first produced in China
3000	Sumerians develop first writing system
753	Rome founded
600	Zoroaster born in Persia
560	Buddha born in Nepal
551-479	Confucius born in China
400 BC	
	Empire of Alexander the Great expands into Asia. Greek culture seeps into Central Asia
300 BC	China completes the Great Wall as defense against the northern nomadic invasion
	Han dynasty overthrows Qin and develops its vast empire
	Buddhism begins to spread north.
	Paper first made in China
200 BC	
	Stirrup appears in India and Central Asia
	Greek city-states come under Roman rule
	The Xiongnu, later called Huns rise to power in Central Asia and invade Chinese western border regions
	Han power reaches Tarim region. The Silk road under China's control and the route to the west now open
100 BC	
	Parthian King Mithridates sends ambassadors to both Sulla and Wu-ti to provide an important link between Rome and China
	Parthians vanquish Romans at Carrhae. One of the most disastrous defeats in Roman history
	Rome conquers Gaul
	Egypt under Roman rule. Gives Rome access to Red Sea and Spice Route trade
	Rome officially becomes an empire
1 AD	
	Silk first seen in Rome
	Buddhism begins to spread from India to Central Asia
	Roman Syria develops the technique of blowing glass. The industry expands
	Kushan Empire of Central Asia. Sogdians trading on Silk Route
	Death of Jesus Christ. Spread of Christianity begins
	China sends the first Ambassador to Rome from Pan Ch'ao's command, but he fails to reach Rome
	Graeco-Egyptian geographer, Claudius Ptolemy writes his Geography; attempts to map the Silk Road
100 AD	
	Rome sends the first Roman envoy over sea to China
	Roman Empire at its largest. A major market for Eastern goods
	Buddhism reaches China
	For the next few centuries, Buddhism flourishes, becoming the most popular religion in Central Asia, replacing Zoroastrianism
	The four great empires of the day - the Roman, Parthian, Kushan and Chinese - bring stability to the Silk Road

200 AD	<p>Silk is woven to cloth across Asia, but using Chinese thread</p> <p>Han dynasty ends. China splits into fragments</p> <p>Sassnians rise to power from Parthians. Strong cultural influence along the trade routes</p> <p>Barbarian attacks on the Roman Empire</p>
300 AD	<p>Secret of sericulture begins to spread west along the Silk Road</p> <p>Xiongnu invade China again. China further dissolves into fragments</p> <p>Constantinople becomes Rome's capital</p> <p>Christianity becomes the official Roman religion</p> <p>Dun Huang caves start to appear and become the world's largest Buddha caves</p> <p>Huns attack Europe</p> <p>Roman empire splits into two</p> <p>Fa-hsien, one of the first Chinese Silk Road travelers by foot and a Buddhist monk, sets out for India</p>
400 AD	<p>A Chinese princess smuggles some silkworm eggs out of China. Silkworm farms appear in Central Asia</p> <p>New techniques in glass production introduced to China by the Sogdians</p> <p>Western Roman Empire collapses</p>
500 AD	<p>Silkworm farms appear in Europe</p> <p>Buddhism reaches Japan</p> <p>Sui dynasty reunites China</p>
600 AD	<p>Roman Empire becomes Byzantine Empire</p> <p>For the first two centuries Silk Road reaches its golden age. China very open to foreign cultural influences. Buddhism flourishes</p> <p>The Islamic religion founded</p> <p>Death of Muhammad. Muslim Arab expansion begins</p> <p>Muslims control Mesopotamia and Iran, along with the Silk and Spice Routes</p>
700 AD	<p>Arabs conquer Spain in Europe, which introduces much Eastern technology and science to Europe</p> <p>Block printing developed in China</p> <p>Tang dynasty begins to decline and with it, the Silk Road</p>
800 AD	<p>First porcelain made in China</p> <p>Gunpowder invented in China and spread to the west by the 13th century</p> <p>All foreign religions banned in China</p> <p>Compass begins to be used by Chinese</p> <p>Diamond Sutra dated 11 May 868, the world's oldest known printed book, made in Dunhuang</p> <p>Venice established as a city-state</p>
900 AD	<p>Tang Dynasty ends. China fragmented</p> <p>England unified for the first time</p> <p>Playing cards invented in China and spread to Europe towards the end of 14th century</p> <p>Sung dynasty reunites China</p> <p>Porcelain developed in China and exported to western Asia</p>
1000 AD	<p>First Crusade. Exchange of technology between Europe and Middle East</p>
1200 AD	<p>Death of Genghis Khan</p> <p>Mongolians invade Russia, Poland and Hungary</p>

	<p>Seventh and last Crusade</p> <p>Mongols control central and western Asia</p> <p>Silk Road trade prospers again under the "Pax Mongolica"</p> <p>Paper money introduced to Central Asia and Iran by Mongols</p> <p>Marco Polo leaves for the East</p>
1300 AD	<p>Third Silk Road route appears in the north</p> <p>Ibn Battuta, the first-known Arab, travels on a 75,000-mile journey to China via the Silk Road</p> <p>Paper made across Europe</p> <p>Spinning Wheel in Europe</p>
1400 AD	<p>Renaissance period in Europe</p> <p>Chinese explore the Spice Routes as far as Africa</p> <p>Gutenberg printing press in use</p> <p>China closes the door to foreigners</p> <p>Lyon becomes the new center of the silk trade</p> <p>Columbus reaches America</p> <p>Vasco da Gama discovers the sea route from Europe to the East via the cape of Good Hope to Calicut in India</p>
1500 AD	<p>Islam becomes the religion of the entire Taklamakan region</p>
1600 AD	<p>Prince Babur, descendant of Genghis Khan and Tamerlane, extends his empire from the Ferghana Valley to India. Founder of Mogul dynasty</p>
1700 AD	<p>Number of severe earthquakes in Central Asia damage some of the great monuments</p> <p>Porcelain produced in Europe</p>
1800 AD	<p>German scholar, Baron Ferdinand von Richthofen uses the term "Silk Road" (Seidenstrasse) for the first time</p> <p>Hedin explores the Kun Lun and Takla Makan deserts, unearthing buried cities along the old Silk Road</p> <p>The Great Game - Tsarist Russia and British India expand in Central Asia</p>
1900 AD	<p>Chinese revolution; end of Chinese dynasties</p> <p>Europeans begin to travel the Silk Road</p> <p>Tibet under China's control</p>
1947	<p>India gets freedom from British rule</p>
1948	<p>Central Silk Board formed by an Act of Parliament</p>
1951	<p>Indian silk export took shape (in free India) by exporting finished silk fabrics to Europe worth Rs. 17.07 lakhs</p>
1952	<p>For the first time, India exports tasar silk fabrics (TGN) to Germany</p>
1982	<p>Central Silk Board shifts its headquarters from Mumbai to Bangalore</p>
1983	<p>Indian Silk Export Promotion Council formed in Mumbai</p>
1989	<p>National Sericulture Project (NSP) with aid from World Bank with an outlay of Rs. 550 crores implemented in India</p>
2000 AD	
2004	<p>Silk Mark scheme launched in India for the first time in the silk world</p>
2008	<p>Silk Mark Magazine was released for the benefit of the silk fraternity, carrying the Wit & Wisdom of the silk world</p>
2017	<p>Central Sector Scheme "Silk Samagra", an Integrated Scheme, launched for the development of sericulture in the country</p>
2022	<p>Central Sector Scheme "Silk Samagra 2" launched for making India Atmanirbhar in Silk production and also in Silk machinery manufacturing and transforming Indian Sericulture Industry from Livelihood to Entrepreneur Level</p>





SILK MARK EXPO 2022, BENGALURU

A Glittering Gamut of Splendorous Silks!

Silk Mark Organisation of India, Bengaluru organised the Silk Mark Expo 2022 for 5 days - the annual, national-level exhibition-cum-sale of Silk Mark-labeled products - from 04th to 08th August, 2022 at Rangoli Metro Art Centre, M. G. Road, Bengaluru.

The Expo was graciously inaugurated by Shri. Rajit Ranjan Okhandiar, IFS, CEO & Member Secretary, Central Silk Board, Bengaluru, in the august presence of Smt. Kalpana Kataria, IRS, Executive Director, Bangalore Metro Rail Corporation Limited, at 3:30 p.m. on 04th August 2022. The much-awaited Expo had 23 Stalls for Authorised Users (AUs) of Silk Mark from across the country. Nine states participated, and all appreciated the

professionalism displayed in organising the Expo.

8th National Handloom Day, observed on 7th August'2022 to commemorate the launch of the Swadeshi Movement in 1905. This was very appropriate, and appreciated and celebrated by all. The day is marked to honour the handloom-weaving community and to highlight the contribution of the handloom sector to the socio-economic development of the country. Hon'ble Prime Minister Shri Narendra Modi initiated the day in the year 2015. This was to boost the idea of self-help and self-reliance on Indian goods to boycott foreign products.

The Silk Mark Theme Pavilion displayed





Cocoons, Yarns and Fabrics of Mulberry, Tasar, Eri and Muga Silk. On-the-spot testing of silk products for the satisfaction of consumers was also arranged at the venue. Officers of SMOI and Central Silk Board (CSB) demonstrated the identification and testing of pure silk, and explained about the importance of Silk Mark to the general public, who were pleased with the important information shared. Silk identification games were organised and the winners were given gifts.

The Expo had it all: Tasar silk sarees with fancy designs having embroidery with contrast colour, Kalamkari handmade designs, digital printed sarees, Kantha work, Tasar shirts, Tasar and Matka jackets, Eri silk socks, Mulberry silk shirts, dhotis, quilts, hand bags and other made-ups of silk, all of which attracted buyers in flocks. The Government Societies displayed their latest collections of designer sarees and garments, and the same were snapped up by local retailers.

The Expo was very well covered by the Print and TV media. Advertisements were released in Newspapers (English & Kannada); on screens in Metro Trains and in luxury apartments; on standees at Metro stations; in



social media such as Facebook and Instagram; through Rich Media in the electronic media, and as pamphlets. State and Central Government officials, along with the general public, visited the exhibition in large numbers.

Report: Shri D. N. Sandeep
Assistant Director (Insp.), SMOI, Bengaluru





WORLD TRADE ORGANIZATION

World Trade Organization must get back to trade

Shattering the status quo at the WTO : How a focus on core trade issues will create a more valuable and decisive organisation

At World Trade Organization (WTO) negotiations at Geneva, the key issues have included a reduction in fishery subsidies, patent waivers for making a vaccine for the pandemic, food security, e-commerce, etc. Now why does it sound if we are reading the correct list of issues?

World trade has two core components. Goods and Services. Both with an annual value of \$28.5 trillion. The surprising past is: The current WTO outcome does not include new rules on Goods, Services or other trade-related subjects.

The decision on no import duty on digital products for two more years finds mention in every WTO ministerial outcome since 1999.

Members could not agree on a single multilateral agreement liberalizing trade in Goods or Services in the past 27 years. The weak deal signed in 2013 is related to trade facilitation only.

Why does the WTO not deliver on core trade issues anymore?

To understand, we compared the economic priorities of the major trading powers led by the US with the decisions taken at the WTO in the past. The results surprised us. WTO has always acted as a tool for implementing the economic priorities of developed countries. Is liberalizing core subjects not their focus anymore? Here are the details.

The General Agreement on Tariffs and Trade (GATT), established in April 1947 with 23 members, was the beginning of the multilateral



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(Took VRS from Government. Writes on technology and trade issues)

trade system. The US, EU and Japan cut their tariffs on industrial goods without seeking reciprocal cuts from other countries. They did not lose much as they produced and traded most goods among themselves.

Milton Friedman, in the 1970s, provided the economic logic for the next few decades. He argued that businesses should have no further responsibility than accumulating profit. The quest for profits led to big firms shifting production to low-cost countries like China. This required the free flow of products across countries. GATT negotiations translated this priority with a single-minded focus. From 1947 to 1994, talks at the GATT led to a fall in average import tariffs from over 100% to 4% for developed and 10% for developing countries.

The tariff cuts benefited the trade of rich and poor countries alike. But the major gainer was China. Reports of China producing fakes, giving large subsidies, or stealing trade secrets did not bother the west. It thought China, with its low-end products, was only eating into the export share of developing countries.

Going beyond the core issues

Offshoring and tariff cuts increased profits

of western corporates. GATT could be more beneficial if it deals with more subjects. No matter if these are not linked to trade.

A new body, the WTO soon replaced the GATT in 1995. It added intellectual property rights, services, agriculture, and an effective dispute settlement system.

The pharma lobby wanted patent protection in every country. The World Intellectual Property Organization, the concerned body, was of little use as it had no power to punish the patent-violating nations. WTO's dispute settlement process ensured time bound punishment for violation of intellectual property. Intellectual property became the first non-trade subject included in WTO.

WTO's agriculture rules drafted by large agriculture trading firms legalized most subsidies provided by the developed countries. Today, if support given by a developing country like India exceeds more than 10 percent of the production value of, say, rice, the government violates the WTO rules. In contrast, even a 100% subsidy by developed countries may fall within the rule. Developed countries are unwilling to change such discriminatory laws.

The push is to include many more non-trade subjects like environment, labor standards, fossil fuel subsidies, plastic pollution, and transparency in government procurement into the WTO fold.

That would mean a poor country exporting cotton shirts must first meet high environmental standards at home. This will only raise costs and cut exports from poor countries.

A group of experts led by eminent economist Jagdish Bhagwati warned about this in 1999. He said that the non-trade subjects do not really belong to the WTO. Even though environment and labor protection are worthy goals for countries to pursue locally, specialized

multilateral and regional institutions exist where developing countries can (and are) contribute as active participants. Resultantly, these "trade and... discussions (at the WTO) are at best, unnecessary, and at worst, an attempt to legitimize trade protectionism.

Trump era

The US economic priorities changed radically in January 2017 when Trump became President. The new thinking was that the WTO had failed to protect workers, farmers and businesses.

The Trump administration imposed steep tariffs in January 2018 on China alleging intellectual property violations. Next, in December 2019, it blocked the appointment of new nominees to WTO's appellate body, alleging it did not serve American interests. Trump's actions paralyzed WTO's role as a judge and enforcer of global trade rules.

Way Out

Out of 164 members, at least 140 are developing or least developed countries accounting for 45% of world trade. The WTO needs a new plan that reflects the aspiration of all members and not just a few.

The new WTO should handle only trade-related subjects. It should retain its core principles like decision-making by consensus and restore the dispute settlement process.

Non-trade subjects are already being dealt with outside of the WTO. They may also be dealt with through multi-country (Plurilateral) initiatives by willing members. The US-led Indo-Pacific Economic Framework for Prosperity with 13 member countries is one such example.

GATT/WTO rules have increased trade of both rich and poor countries. A new WTO agenda with focus on core values will benefit all.



Golden Muga Silk: A New Horizon



Muga culture is an agro-based small scale industry of North East India, and over 30,000 families are directly or indirectly engaged in this culture. The Muga silkworm *Antheraea assamensis* (Helfer) producing golden-yellow Muga silk is geographically isolated to a single part of the world, i.e. North East India, especially in Assam. Muga silk has already received its Geographical Indication Registry. This region (Longitude 25.5736° N, Latitude 93.2473° E) of India comprising Assam, Meghalaya, Manipur, Tripura, Mizoram, Arunachal Pradesh and Nagaland occupies an important position for its distinctive contribution to the country's faunal and floral wealth.

All the five known commercial varieties of silk, viz. Mulberry, Tropical Tasar, Oak Tasar, Eri and Muga silk are available in India. Among them Muga silk is the most costly and unique in nature for its golden-coloured yarn. The mega biodiversity resources of North East India harbour a number of sericigenous insects of the world. The region is also of strategic importance for its proximity to India's International borders with as many as four countries, namely China, Myanmar, Bhutan and Bangladesh. Among Vanya silks, Muga *Antheraea assamensis* (Helfer) is the most prominent, widely cultivated and prestigious silk of North-Eastern India, particularly in the Brahmaputra valley and adjoining hills of Assam. The Muga silkworm, which is endemic to N. E. India and its parents, still exists in the wild state in different zones of N. E. India.

Crop Cycle

The Muga silkworm is multivoltine in nature having five to six crops in a year, of which, only two crops, namely autumn (Kotia: October-



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November) and spring (Jethua: April-June) are reared for commercial cocoon production. Each commercial crop is preceded by one seed crop and each seed crop by one pre-seed crop. The pre-seed and seed crops of Muga usually fall in adverse climatic seasons of extreme summer and winter, and thus hamper productivity. In this regard certain innovative ideas like advancement and postponement of crops may give a new dimension. Rearing of seed crop in colder regions to avoid climatic hazards is another option.





Scope of Employment Generation:

Muga culture has vast potentialities to generate employment through diversified activities. Further, Muga silk is an eco-friendly textile material as the process of dyeing with many undesirable chemicals is not required here. Thus there is ample scope for development of organic Muga silk. However, traditional farmers are practicing Muga rearing mostly through organic mode. Muga fabric has the capacity to protect from harmful UV radiation. Local traders like Prabha Textile, Assam, have shown the possibility of sun umbrella construction using Muga fabric. Muga fabric is also almost nearly fireproof, as visible firing is not seen here like burning of bird feathers. Hence earlier, Assamese women used to wear Muga mekhela in kitchen.

Muga silk is the most expensive amongst all silks, and used primarily for producing mekhala chaddar, sarees etc. Product diversification in Muga silk in the form of fashion accessories such as hats, caps, scarf, wraps, stoles, ties etc., may play a major role to uplift the industry. This aspect can be exploited for market promotion and export by bringing desired diversity in the final product. Recently the silk industry entered into the medical field. IIT, Guwahati showed scope for different applications of silk in medical science too. Silk-based artificial liver tissue, repairing of damaged nerves through silk and Muga silk fibroin-based functional scaffolds are certain important highlights of the sector.

Muga culture for the people of North East India is a primary part of their lives and culture, tradition and customs, rather than a profitable profession. It needs a transformation from an ethnic traditional practice to an enterprise, from subsistence to substantial crop and from a leisure time engagement to a sericulture business. Due to recent product diversification Muga has been gradually spreading outside the state. So far several works have been done in the R&D sector using Muga silk.

Threat in Muga Culture

Fake Muga silk is a major threat in the growing stage of the Muga silk industry. Several fake Mugas like 'kachamuga' are emerging in the market in the name of Muga, at a cheaper rate. Besides, blending with tasar silk has created another problem in this sector. Buyers occasionally are cheated by sellers, and are purchasing fake or blended Muga fabrics as the genuine article. Hence, it is advised to purchase Muga fabric only with the Pure Silk Label developed by Silk Mark Organisation of India.

Power Loom in Muga

Machine-woven Muga is far superior to the hand-woven fabric in terms of uniformity in texture and colour, and the fabric is of better quality because the power loom uses stronger, better yarn, leading to a heavier fabric in terms of weight per unit area. Another great advantage of the mechanised process is that unlike in handloom where the maximum length is restricted to 12 metres due to practical problems in the weaving process, there is no such





restriction for the power loom. This translates into greater flexibility for buyers who could require longer lengths for their products.

Post-Cocoon Technologies

Central Silk Board has developed a Muga reeling machine and popularized it among reelers. The machine is suitable for reeling and twisting of tasar and Muga cocoons and helps in eliminating the drudgery involved in the traditional system. The output of the machine is around 250-300 of 55-60 denier tasar/reeling silk in 8 hours. Of late, a new improved reeling machine named "Sonalika" has been developed by Central Silk Technological Research Institute (CSTRI), Bengaluru. A Bhir reeler can produce one kilogram of Muga silk yarn in about 12 days, whereas Muga reeling using "Sonalika" reeling machine can produce 1 kg of Muga silk yarn in four days. Along with manual and power operated, solar energy operated machines are also developed. Central Muga Eri Research and Training Institute (CMERTI) developed an improved Muga reeling machine (BANI), devised for reeling weft yarn as a substitute of traditional Bhir or Bhowri. In order to facilitate easy stifling and drying of Muga cocoons in remote areas, a portable, low cost cocoon drying machine has been designed. To operate the machine, no electricity is required and local-based resources like firewood, pruning waste etc. can be used as fuel. It has the capacity to stifle and dry 8000 cocoons in 6 hours. A chemical formulation, "Muga Silkplus" for cooking and reeling of Muga cocoons has also been developed. It increases raw silk recovery from 40-45% to 50-55%. Quality of the raw silk produced using this formulation is found to be better than the present traditional system in respect of tensile strength. All these innovations were patented under the IPR Act.

So far several works have been done in the R&D sector of Muga silk. But technology development by itself is not sufficient to bring about the desired and need-based improvement. The sericulturist must be motivated to be self-sufficient and adopt modern techniques for increasing production efficiency from Muga culture, through an effective skill up grading mechanism. The Central Government of India has launched the SAMARTH Scheme for Capacity Building in Textile Sector (SCBTS). The objectives of the scheme are to provide demand-driven, placement-oriented skilling programmes to incentivise the efforts of the industry in creating jobs in the organised textile and related sectors, to promote skilling and skill up-gradation in the traditional sectors through respective sectoral divisions/organisations of the Ministry of Textiles; and to provide livelihood to all sections of the society across the country. The Scheme would target the training of 10 lakh persons over a stipulated period, with an estimated budget of 1300 crores, and it has invited the participation of Textiles Industry/Associations registered under Central or State Government/Chambers of Commerce of Central or State Governments.



Silk Mark Participation in the Exhibition 'Hausla'

organised by Jammu & Kashmir Trade Promotion Organisation

Inspiring Growth for Women Entrepreneurs



An exhibition was conducted by the Jammu & Kashmir Trade Promotion Organisation, Department of Industries & Commerce, Government of J&K, at Zabarwan Park, Boulevard, Srinagar from 18th to 24th July 2022, for their registered women entrepreneurs under the title 'Hausla'. This was to encourage and promote their start-ups and provide a market for their products. The exhibition was inaugurated by Shri. Vivek Bhardwaj, IAS, Administrative Secretary, Industries & Commerce, in the presence of Shri. Mahmood Ahmad Shah, Director, Industries & Commerce, Dr. Devansh Yadav, MD, JKTPO, and other dignitaries.

Around 26 stalls were set up by women entrepreneurs displaying different products. Out of these, 10 stalls showcased textile materials/fabrics. Two of our Authorised Users namely M/s Govt Silk Factory, Rajbagh and M/s Qamash for Women, Awantipora, also participated in the Fair. A stall was also allotted to SMOI, Srinagar, and we displayed different types of Cocoons, Silk

Yarn/Fabric Samples and Silk Mark Labels, literature and promotional material etc. All the visitors were informed about the process of Silk, its different varieties, identification of different fibers through the burning process etc. They were also told about the Silk Mark Scheme and its contribution in promotion of pure silk in the industry. They were asked to look for the Silk Mark Label while purchasing silk.



During the period of the Exhibition, literature about Silk Mark Organisation of India was distributed to all the visitors. On the last day of the event, Silk Mark literature was distributed to all the stall owners, and they were thus invited to join Silk Mark. The participants and the visitors to our stall received the knowledge of Silk Mark Organisation of India, which was highly appreciated especially by female participants. Officers of different Departments also visited the SMOI Stall, and were briefed about the aims and objectives of Silk Mark Organisation of India.

Report: Shri Saadat H. Khan
Assistant Director (Insp.), SMOI, Srinagar



SILKWORM SILK FOR BURNS



According to a 2010 paper, the estimated annual burn incidence in India is approximately 6-7 million per year. The high incidence is attributed to illiteracy, poverty and low level safety consciousness in the population. The situation becomes further grim due to the absence of organised burn care at primary and secondary health care level. But the silver lining is that 90% of burn injuries are preventable.

In 2016, a Bengaluru-based healthcare facility, Sericare, developed a wound-healing silk sheet called Fibroheal that hastens the healing of wounds and aids in scar reduction, especially in burn victims. The product was funded by the Department of Biotechnology, Government of India, and supported by the Biotechnology Industry Research Assistance Council (BIRAC).

According to Vivek Mishra, GM, Sales & Marketing of Sericare: "While silk sutures have been used since World War I, this is the first time the silk protein has been introduced as a sheet for wound cover. The silk protein is an occlusive [air- and water-tight] wound cover, which is non-toxic and non-allergenic. It actually participates in the wound-healing process, maintains the temperature for new cell synthesis, absorbs the wound exudate [discharge], and prevents external moisture from getting to the wound." According to Dr. Radhakrishna, "When we compared the two [collagen and silk] and took it through several testing processes, we saw that the structural part of both proteins [collagen and silk] was similar.



Dr. Vivekanand Shenoy,

Ph.D. (Chemistry),
Consultant

Moreover, silk is non-mammalian in origin". Collagen-based dressings are animal-based and imported.

Clinical trials were carried out at AIIMS in Delhi and proved to be successful. The company finally obtained an Indian patent on the product. It has been used in AIIMS, Delhi; and Victoria Hospital, Command Hospital and Manipal Hospital in the city. Depending on size, the product costs between Rs 90 and Rs 1,051 (2016 prices). It also helps in the reduction of pain within 24 hours of application. "The product is a bilaminate [two layers] film having both hydrophilic [liquid absorption from wounds] and hydrophobic [prevents moisture from entering the wound] properties, which are unique in the Indian market." Another ingredient added in the product is a herb called Centella Asiatica (Mandukaparni), which is one of the most widely-used health herbs in India. In dermatology Centella asiatica is used in treatment of small wounds, hypertrophic wounds as well as burns, psoriasis and scleroderma.

Schiefer et al found natural silk to be effective in the treatment of burn patients with over 10% total body surface area (TBSA) of burns.



They further stated that "During the treatment of superficial burn injuries patients are often confronted with painful dressing changes. Therefore we often treat these wounds with very expensive materials like nylon mesh combined with animal collagen that can stay on the wound and slowly peel off during re-epithelialization. Due to our good experiences with the treatment of small burn injuries with pure natural silk as cost-efficient material, we now also started treating large burn injuries for the first time with silk." In 24 of 27 cases all wounds healed without problems and without dressing change, infection or further operations. In three cases, mostly chemical burns, initial burn depth assessment was not correct and skin grafting became necessary during wound healing. All patients were satisfied with the treatment, though stated a feeling of stiffness in dressings covering joints. Altogether silk is an interesting, cost-efficient material for the treatment of superficial burns. During the treatment of larger areas a careful wound depth evaluation is very important to avoid infections and further operations during the wound healing.

Silk sericin has been directly used in regenerative medicine to maintain the proliferation of keratinocytes and fibroblasts during the wound healing process. It can induce fibroblast proliferation and collagen production without the activation of pro-inflammatory cytokines. Aramwit et al found that silk sericin is safe and beneficial for burn wound treatment when it is added to silver sulfadiazine cream. Another study found that chitosan-sericin-silver nanocomposite films accelerated the process of burn wound healing through fibroblasts differentiation, angiogenesis, and collagen reorganisation in animal models.

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Resham Embroidery with the Phulkari

After speaking of artisans and weavers, this time the focus is on a book on embroidery on Phulkari. The reason for choosing the book is that Phulkari though the pride of Punjab with history spanning both sides of the border has been relegated to the background. Once done in every home, today it has been replaced by machine made articles. There are just a handful of craftsmen who are oft seen at exhibitions. Thus this book aptly titled Phulkari from Punjab, Embroidery in Transition - Anu H Gupta, Shalina Mehta comes as a refreshing change. It has sourced artisans from all over the district and when one hears the author Anu speak it is exhilarating. Anu has literally gone all over the States of Punjab and Haryana in search of artisans and rattles off names with consummate ease. It probably helped because her PhD was on Phulkari. One thing that comes out clearly is that Phulkari is still done vibrantly all over the country. There was



Ms. Chitra Balasubramaniam

(Freelance features writer, among other things, she writes on Textiles for the love of it.)

a time when it had dwindled but now it is robust and is being done on all types of fabric - chiffon, georgette, net, cotton, silk. What is absent though and is not seen is its association with day-to-day life. The use of khes as a cotton base to embroider is not prevalent. The Daj and wari trousseau is still common. Anu's journey going to remote areas and seeing the phulkari could have been better emphasized, yet the book adds new dimensions to the work of phulkari.

The book is heavy on historical research and talks of the various motifs and designs. There has been little documentation of motifs used in phulkari. This book deals with the subject extensively. There are charming motifs which have been highlighted. One motif which caught my eye is that of a jhumkas. May be a girl in love with her ornaments embroidered them. Several phulkaris were embroidered with motifs of ornaments which may be the girl longed to wear or would wear during her wedding. There is description of various baghs, chope and thilma. There is a huge chapter on dyes using natural materials. The traditional method of dyeing has been well documented. The use of indigo, red,





black for phulkari and bagh comes out well. There is further documentation of various stitches used in phulkari. The usual mention is of the darning stitch and how the phulkari is always embroidered from the back. They have documented many of the phulkari and concentrated on the stitches used. There is also emphasis on the use of the resham or silken threads for embroidery, and how it came from Afghanistan and then later on from China, Bengal and Kashmir. Interesting references to designs include the nabhajaal and chokadajaal; there is mention of the tool dupatta and the bhoolbhulaiya (maze) design. Blocks used for printing designs have been dealt with in great detail. There is a very detailed section on the weaving of khes and the different types made and used for embroidery. Khes though a well-known craft needs intervention and very little has been done on it.

The part that I found very interesting and which one does not get to read much about is the contemporary manner in which phulkari is done. Anu tells me an interesting story on the yaad di nishani. "Phulkari is also a group activity where women sit together and embroider one phulkari. I had read heard about the yaad di nishani, but never seen it as it was never illustrated in any of the available texts. It is a unique or standout or different motif embroidered by a friend on her friend's phulkari, while her friend was embroidering her bridal wrap. It was a reminder of the bond of



friendship. In one of the villages a woman showed me the phulkaris which had been embroidered and pointed out to one of the motifs saying it was the yaad di nishani of her friend. She had a broad smile on her face while she was mentioning about her friend and her memories embroidered on her Phulkari. Moreover such activities of helping each other and creating products for others with love are a pillar of the rich Punjabi culture."

Anu further adds, "Usually this yaad di nishaani was a different motif from rest of the motifs in Phulkari, so whenever the bride or the embroiderer looks at it, she will always remember the friendship and loving memories of embroidering together. It is a charming story of personal and loved bonds. It is these charming instances which make up phulkari, a home-grown craft which captures the everyday life of the people especially women. It is also interesting to see how enterprising Gujarati traders set up a very lucrative business in old phulkaris, by exchanging old textiles for vessels. They managed to get the best pieces out and several now adorn private collections and museums all over the world. In a country where embroidery skills are dying out; where a trousseau is now market-bought and not made at home, a charming tradition has been documented. What gives hope is the revival being done and those who continue to ply the trade and are active in it.





SILK MARK NEWS SNIPPETS

SRINAGAR



Silk Mark participation in Kisan Mela at Manasbal, organised by CSR & TI, Pampore



Silk Mark participation in the exhibition organised by J. K. Forest Department on the sidelines of meet "Forests for Livelihood" at Jammu



Shri. Hemant Kumar Nanda, Director (Silk), Ministry of Textiles, at CSR & TI, Pampore



Salespersons' Training Programme at M/s. Aabshaar, Gandhinagar, Jammu

PALAKKAD



Salespersons' Training Programme at M/s. B. M. Govindacharai, Salem



Salespersons' Training Programme at M/s. Deepak Creations Pvt. Ltd., Coimbatore



Salespersons' Training Programme at M/s. Vimal Traders, Coimbatore



Salespersons' Training Programme at M/s. Shri Meenachi Sarees, Salem

CHENNAI



Awareness Programme on Silk Mark at Progressive Women Association, Ashok Nagar



Salespersons' Training Programme at M/s. Al Farida Silks, Ramanathpuram

NEW DELHI



Salespersons' Training Programme at M/s. Triveni Handlooms, Tugalkabad, New Delhi



Salespersons' Training Programme at M/s. M & M Fashion, Roorkee, Uttarakhand

MUMBAI



Salespersons' Training Programme at M/s. Shiva Sarees, Vashi, Navi Mumbai



Salespersons' Training Programme at M/s. Shivleela Silk, Nerul, Navi Mumbai

VARANASI



Salespersons' Training Programme at M/s. Nisa Exclusive, Varanasi



Salespersons' Training Programme at M/s. Taba Kashi Pvt. Ltd., Varanasi

Display of Recycled Silk Yoga Mats on the 8th International Day of Yoga at Mysore



As part of the observance of the 8th International Yoga Day, a two-day exhibition was organised on 21st and 22nd June 2022, by the Ministry of Ayush, Government of India, at Dussehra Grounds, Mysore. It was graciously inaugurated by the Hon'ble Prime Minister of India, Shri. Narendra Modi.

Central Silk Board was allotted Stall No. 7, under the Start-ups Category. CSTRI and P3D Cell, Central Silk Board, jointly arranged the Stall by displaying recycled silk yoga mats, posters, etc. These Silk Yoga Mats are developed using recycled silk material in the weft and cotton in the warp and woven on handlooms. A video on the making of the yoga mats was played on the television screen at the entrance to the Stall, which showed the processes involved in making the recycled silk yarn, and the yoga mats from them. The video also highlighted the advantages of these yogamats.

Dr. Subhas V. Naik, Director, Central Silk Technological Research Institute, CSB, empowered Senior Scientist and Principal Investigator, Dr. S. Nivedita, to brief about the yoga mats to the Hon'ble Prime Minister of India, Shri. Narendra Modi, who visited the Stall after the Inauguration. He was accompanied by the Hon'ble Chief Minister of Karnataka, Shri. Basavaraj Bommai. The visit was telecast live on various TV channels. Other dignitaries who visited the Stall included Shri. Sarbananda Sonowal, Hon'ble Union Minister of Ayush and Shri. Rajesh Kotecha, Secretary, Ayush. Dr. Subhas V. Naik, Director, CSTRI, Dr. S. Nivedita, Scientist-D and Shri. Shankar Kotrannavar, Deputy Director (Insp.), Product Development Cell (P3D), Central Silk Board, explained the various processes

and advantages of recycled silk yoga mats to the visitors.

The display included Beginner's yoga mats, Rubber-backed yoga mats, Indigo-printed and vegetable dyed/natural yoga and meditation mats, Plain, Striped, Fancy and Extra Thick yoga mats. The Navalagundyoga mat with woven design was a special attraction. All the mats were made on handlooms using recycled silk yarn in the weft and cotton yarn in the warp. Six posters and two A4 boards were displayed which covered the turning of recycled silk yarn into yoga mats, the benefits of silk and recycling as well as features of the silk yoga mats. On the table provided, silk cocoons, silk yarn, recycled silk fibres, selvedge waste and recycled silk yarn, plus a book titled "Silk Waste Management and Recycling" were displayed for those interested. One book was collected after the Prime Minister's visit for his office and another was collected by the Ministry of AYUSH.



On public demand, the exhibition was extended up to 26th June 2022, a Sunday. Shri. C. K. Ramesh, T. A., CSTRI Bengaluru, and Shri. Ramesh

Gowda, Technician, CSRTI, Mysore managed the Stall throughout. The Stall was visited by over 2500 people from Yoga, Ayurveda, Naturopathy and related fields, as well as residents and students from various schools and colleges in Mysore and surrounding regions. It is noteworthy that only 'Natural Fibre' yoga mats were used/displayed during the International Day of Yoga at Mysore.

Report : Dr. S. Nivedita, Scientist-D, CSTRI, CSB, Bengaluru, and Shri. Shankar S. Kotrannavar, Deputy Director (Insp.), CSB, Bengaluru



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