FIBRES USED IN MAKING OF A SAREE

Dr. N. N. MAHAPATRA

Business Head (Dyes) SHREE PUSHKAR CHEMICALS & FERTILISERS LTD., MUMBAI

Nature has everything that a man needs, be it food, clothes, techniques, and most importantly, ideas. Our ancestors wore clothes made out of natural fibers, of which Linen and Cotton were the most common ones. But with industrial aging, we developed new techniques to build yarns that produced longer-lasting synthetic fibers such as Nylon, microfibre, etc.

How much ever we grow, humans have the tendency to stay connected with their roots. In spite of the hovering dusk at the natural weaving techniques in the mid 20th century, we have come a full circle now where our love for naturally available fibers such as jute, linen, bamboo, banana, java cotton, etc. has resurfaced. In fact, wearing the age-old handloom sarees made out of vegetable stalks has now become a style statement.

Sarees crafted using yarns of natural fibers extracted from plants such as jute, bamboo, banana, hemp, aloe vera, etc. are called eco-friendly sarees. Each fabric made from these organic plants has a unique environmental quality that makes them nature-friendly. For instance, jute fibers are 100% processable, and there is no window of wastage when you yarn a saree out of this fabric. Similarly, other fibers have some properties that lend them the tag of being organic.

New Age Eco Sarees are Indian drapes made of natural fibers which do not tend to harm our environment. The principle of using fibers extracted from natural plants to yarn a saree that is not polluted using pesticides and insecticides has earned the process another name- Organic Sarees. Crafted using deft artisanship of the weavers, these sarees are known to have a longer life than the fabrics made of synthetic fibers using unreliable machinery. This aspect coined another name for the very same concept- sustainable sarees or fibers. With features like recyclability, no wastage of water for plant development, and availability of stalks in abundance, sarees yarned out of these fibers do not do any harm to the environment. And thus the name, eco-friendly sarees. These are some of the names used to refer to a naturally manufactured fabric which includes linen, jute, banana, bamboo, wild silk, and more.

In 2011 a saree was weaved using 25 types of natural fibers and even made it into the Limca Book of Records.

1. Cotton- When comfort comes first, cotton is the primary choice. This saree fabric is so versatile that it can be worn both on an everyday basis and of course, on special occasions. From the office to weddings to festivals, cotton sarees remain the answer!

2. Silk - Silk, one of the oldest known fibers is a protein fiber, produced by the silkworm by spinning around its cocoon. The entire process of starting from the eggs till the worms are grown up and cocoons are formed as shown in the diagram below. The silk farmers let the caterpillars that make the largest cocoons, turn into moths. The moths then laid eggs and the eggs hatched out more caterpillars making even bigger cocoons. Over the centuries, the size of



the cocoon has increased and silkworm cocoons are now much bigger than the cocoons of other caterpillars. At least half a mile of continuous thread may come from one cocoon.

The silk threads are then dipped in color liquid and used for preparing the colorful silk Saree. Chinese are the ones who started manufacturing silk sarees. Out of the numerous species of silk moths, scientists have enumerated about 70 silk moths which are of some economic value. The four commercially known varieties of natural silk are (1) Mulberry silk (2) Tasar or Oak Tasar silk (3) Muga silk and (4) Eri silk.

Although the bulk of the world silk supply comes from the silk moth Bombyx Mori which is domesticated, the other varieties of silk are known as wild silk, as they are grown in remote forest trees in natural conditions.

The silk sarees of India are among the living examples of the excellent craftsmanship of the weavers of the country. Their mastery lies in the creation of floral designs, beautiful textures, fine geometry, the durability of such work, and not the least, the vibrant colors they choose for making sarees. Many states in the country have their own variety of makes in silk as well as weaving centers with their traditional designs, weaving, and quality. The silk varieties are renowned by the place where it has been woven.

Banaras is one of the leading silk weaving centers in India. Amru silk, Jamvar, Navarangi, Jamdani, etc. are the types of Banaras Saris, in which Amru Silk brocades with a heavy pallu

JULY 2021 TEXTILE

10 COVER STORY

of flowering bushes or the flowering mango pattern are very famous.

Maharashtra is famous for its Paithani silk saris, generally with gold dots design and Kosa silk of Bhandara district.

Patola silk, known as the pride of Gujarat is noted for its bright colors and geometric designs with folk motifs.

Madhya Pradesh is famous for Chanderi, Maheshwari, and Tussar silk saris. Specialties of these saris are the contrasting colors and depiction of animal and human figures on the sarees.

Silk Bomkai Sambalpuri saris from Orissa come in single and double Ikat weaves. Murshidabad in West Bengal is the home of the famous Baluchari sari in which untwisted silk threads are used for weaving brocades. In the south, heavy silk saris from Tanjore, Kumbakonam, and Kancheepuram in Tamil Nadu are known for their broad decorative borders and contrasting colors. Kancheepuram silks have an enviable position among the best silk sarees in the country for their texture, luster, durability, and finish. Kolegal and Molkalmoru in Karnataka are known for their simple Ikat weave with parrot motif on the borders.

Sarees have been a passion for every south Indian female. With regard to the silk sarees in Tamilnadu, it got its name from the location where the sarees were weaved. Like Kancheepuram, Aarani, Thirubuvanam, etc but nowadays people look for more and more varieties. Hence the vendors started introducing new patterns in silk sarees, giving new names like Vasthirakala, Parampara, Samuthriga, Vivaha; bridal seven, etc. Most of them are traditional silk sarees with additional stonework or added colorful embroideries in the silk sarees.

Tanchoi Silk: Weaving technique which is a blend of silk from the two countries, India and China.

Garad Silk: Garad originates in West Bengal, and is distinguished by its red border and small paisley motifs. Silk fabric used to weave Garad sarees is produced by the silk yarns woven close together which imparts the fine texture. **Jamawar:** Jamawar Silk is an adulterated form of Pashmina silk that contains a blend of cotton and wool. This is usually used in weaving shawls for the winters.

Matka Silk: A rough handloom silk fabric made from the waste Mulberry Silk without removing its gum (sericin) part, largely produced in Karnataka and Kashmir.

Banarasi/Benarasi Silk: A fine variant of silk evolving from the lands of Benaras or Varanasi, known for gold and silver work of brocade and zari on the fabric.

Mulberry Silk: The purest form of silk extracted from Silkworms, usually produced in yellow, white, or greenish-yellow color.

Murshidabad Silk: Silk was produced at the 'Silk Mecca' of East India.

Bangalore Silk: Known for its simplicity and purity of Silk, Bangalore silk is produced in the silk farms of Bangalore.

Angora Silk: Known for tender texture, the Angora silk yarn is made up of the fur of meek 'Angora' rabbit.

Silk Embroidery: Intricate patterns embroidered in silk on various fabrics.

Pochampally/Pochampalli Silk: Type of silk originating from the town of Boodhan Pochampally, located in Nalgonda district of Andhra Pradesh, popularly known as the silk city of India.

Mysore Silk Crepe: Woven from handspun silk yarn and comes from the silk city of Mysore in Karnataka.

Sournachuri Silk: Originating from West Bengal, Sournachuri Silk has gold thread incorporated in the weave of silk, hence giving a rich shine to the fabric. It is also known as the 'illustrious' sister of the Baluchari Silk saree.

Raw Silk: Raw Silk is the most natural form of delicate fiber of silk with no twist and is an unprocessed form of silk that can be easily woven into different fabrics.

Kosa Silk: Comes from Chattisgarh, and is known for its soft texture and dull-brownish look, hence available in shades of gold pale, dark honey, cream,

etc. Kosa is one kind of Tussar Silk.

Tussar Silk: Also known as Wild Silk, Tussar radiates gold sheen in its fabric and is exclusively produced in India.

Muga Silk: Produced only in Assam, Muga silk yarns are totally yellow in color and is considered as strongest natural fiber

Eri Silk: Also known as Errandi and Endi in most parts of India, Eri Silk is the purest form of silk from the east, with a dull yellow, gold-like sheen.

Dharamavaram Silk: Known for goldplated borders, Dharamavaram silk originates from Andhra Pradesh, and is also known as 'Silk for the Bride.'

Narayanpet Silk: Originates from Andhra Pradesh, the textiles of Narayanpet have a checked surface design with embroidery and the border or pallu have intricate ethnic designs such as a temple.

Pat/Paat Silk: Produced in Eastern India, Pat silk is known for its distinctive brightness, high quality, and durable nature. It comes in brilliant white or off-white shades.

Cotton Silk: A well-blended combination of cotton and silk, Cotton silk is cheaper-priced silk. When you want to keep it simple yet classy, cotton silk is a perfect choice. A beautiful hybrid of cotton and silk yarns, it gets its soft feel from the silk yarns and its airy weave from the cotton yarns. A heavier look can be achieved as it can support embroidery, and that it comes in crafts like Kalamkari Cotton Silk, Mughal Prints, and more, that impart the traditional, sophisticated look to your saree.

Mashru Silk: Though majorly made out of silk yarns as compared to its cotton component, this fabric has the unique feature of having a silky feel on the outer side of the fabric, while having the comfortable cotton weave on the inner side of the fabric. This fabric is on the thicker side, weighing around 210 grams per meter, but which also allows heavy detailing to be done on it. Going as simple as just having crafts like Ajrak, Kalamkari, Shibori done on it, or as heavy as embossing with embroi-

COVER STORY 11

dery work, either would turn out to be a silky look and traditional feel.

Kanchipuram: Silk from the village called Kanchipuram in Tamil Nadu, India, is known for its durability and shine. The rich quality combined with an amazing finish makes them last longer.

Bhagalpuri Silk: Known as the 'Queen of all fabrics', Bhagalpuri Silk originates from West Bengal and is very well known for its unique and striking resilience and superior quality.

Uppada Silk: Also known as Uppada Pattu (Silk in Telugu), Uppada silk comes from Andhra Pradesh. Usually woven in cotton warp, this one is known majorly by the length and breadth count of threads.

It is known for its luxurious texture and vibrant appeal. With silk, you have a plethora of choices to pick from, be it 'Kanjeevaram' silk, 'Sambalpuri' silk, or 'Assam' silk. Moreover, silk sarees remain our savior for weddings and parties; we bet you agree!

1. Synthetic fabrics - Synthetic materials like nylon and polyester are most commonly used to make this fabric. These materials can be easily dyed into different colors. The synthetic Chiffon is also economical and sturdier than its silk variant.

Chiffon is a lightweight plain-woven fabric with a mesh-like weave that gives it a transparent appearance. The word Chiffon has a French origin which means a cloth. It is primarily made from cotton, silk, or synthetic fibers like nylon, rayon, and polyester. Chiffon is most commonly used to weave Sarees. The sarees were made exclusively with Silk until Nylon was invented in 1938. After the introduction of Polyester fabric in 1958, the polyester chiffon blend became more popular because of its durability and economic viability.

It is a plain balanced weave where similar weighted weft and warp threads are used on the loom for manufacturing. The criss-cross pattern weave which is generally used for Chiffon gives the saree a checkered, mesh-like effect.

The yarns used in weaving the saree are alternately twisted which results in

the slight crumpling of fabric in different directions.

For example like crepe, rayon and chiffon are ideal for those who are not regular sari wearers. Known for their lightweight yet soft and smooth texture, they are easy to pull off for those who are not used to managing the elaborate fall and the pallu of heavier sarees. In the form of Saree, the fabric adds shimmer and texture to the overall appearance.



Georgette Satin -Georgette comes in a number of variants, one of which is the Georgette Satin, which gives a silky look and feel, and the flexibility of being designed with heavy work with sequins, chatons, rhinestones, and the works

4. Art Silk - Artificial silk or art silk is any synthetic fiber that resembles silk, but typically costs less to produce. Frequently, "artificial silk" is just a synonym for rayon or viscose. The material is commonly referred to in the industry as viscose rayon. In the present day, imitation silk may be made with rayon, mercerized cotton, polyester, a blend of these materials, or a blend of rayon and silk. Short form for artificial silk, art silk is manufactured by a synthetic fiber like Rayon that very much resembles the silk fiber; however, costs a lot less on the front of manufacture and production When made out of bamboo viscose it is also sometimes called bamboo silk. These sarees are popular for their unique blend of style and comfort. Designer party wears sarees crafted from this fabric feature unmatched fluidity without compromising on comfort. Besides, they are organic and lightweight, which makes them ideal for events like summer evening parties.

It is a fiber cellulose fabric that has a lightweight, fluid texture. From office wear to party wear sarees.

5.Modal Silk: This one is a soft, silky, and highly lustrous fabric, developed by interlacing modal fibers, known for their strength and shrinkage resistance properties, and silk yarns, that append a refined delicacy to the fabric. This can again be worked on with different rich Indian Crafts like Ajrak, Tie & Dye, worked on with sequins, embroidery, or zari work, to suit the desired level of opulence.

6.Bamboo Fibre - Bamboos have always set themselves apart with their unusually slender, and beautiful appearance. We all have witnessed the use of Bamboo strips, or rather straws, in hats, and shoes. The bast fiber (the fibers extracted from the inside of bamboo plants) is spun using yarn to model the bamboo fabric. Bamboo does not just seem green but is green in terms of temperature. With commendable absorption capacity, bamboo fibers engulf the heat, making it breathable and cool to wear in summers. That, and its potency to fight bacteria has made it the new-age sustainable fiber.

The fleecy texture of bamboo fibers that matched the smoothness of silk led the weavers to create a perfect amalgamation of both fabrics to tailor Bam-



boo Silk sarees. Available in various designs, hand-block-printed bamboo sarees carry the authenticity of being all-natural. With traditional prints and fine embellishments making the weaved zari prominent, these sarees are a fine choice for any occasion. Add a unique grandiose to your femininity by draping a magnificently designed bamboo silk saree with patched heavy borders and elaborated "buttons". This piece of Indian attire is bound to make you look well-heeled regardless.

Cloth made of bamboo yarn is stronger than denim weavers from Tamil Nadu

12 COVER STORY

has weaved sarees from natural banana fiber and bamboo yarn. The required yarn cannot be extracted directly from bamboo. First bamboo pulp has to be made with some natural process, then the needed yarn is obtained.

7.Banana Fibres – Also known as "Vazhai Naaru", fibers created from the banana plant have proved that creativity knows no bounds. Banana cultivation is significantly high in the southern states of India, and that's where banana fiber saree was born. A very few people would reminisce the existence of Pattu saris, and fewer would know that these now-bygone sarees were made from the same fibers. Banana fiber sarees have become a pioneering choice among working women for their sumptuous simplicity when adorned.

Seeing a saree crafted from 100% banana yarn will definitely make you long for one that very moment. With the finesse of manual craftsmanship, banana fiber sarees last long without losing their authenticity. Infused with bright colors and weaved using a highend zari with finer details in the pallu, a banana fiber saree must have a place in every woman's wardrobe.

Yarn from banana fibers, extracted from banana stems are made In the South of India, this is available in plenty. While the banana stems are available in plenty, the manual extraction of fibers from the stems is labor-intensive and time-consuming. The process involves the stem of the raw material (banana or pineapple) is dried and scraped to remove dust. Then, each strand of the fiber is taken out manually to make yarn. The sarees are treated in various



herbs, spices, and even cow-dung for their antibacterial properties which are good for the skin. Also, medicinal herbs like Tulsi and mint can be used to ensure those skin allergies of all kinds are at bay.

8. Linen Fibres - Linen's inception as a clothing accessory can be traced back to as further as 5000 BC. Coined from the Latin word "Linum" and a Greek word "Linon", this beautiful fabric owns an equally beautiful history. The affluence of this fabric is not something that is recognized only by us, the millennials, but the Egyptians too considered it to be an exquisite piece of cloth. Linen is made from the inner section of the Flax plant which does not require water in ample quantities like cotton does making it the new age eco-friendly fabric.



The ease and comfort that this princely fabric imparts have made it a great option to beat the Indian heat. The first Linen saree was built around a similar centric idea. Woven in pit looms, Linen sarees have restored the age-old richness in the most organic way possible. The raw texture of linen is often highlighted with plain solid borders making it a perfect pick for formal attendance, and the art of weaving is constantly being explored which has introduced us to the finely crafted floral weaves making this Indian drape absolutely irresistible.

Linen Sarees

tend to have a fantastic fall and fit and are best suited to formal wear. As linen has a very rough, natural look to it, it is always more aesthetically pleasing to pair this saree with simple minimalistic accessories, such as wooden jewelry. When wearing white linen or cream linen, colors work very well in accessories, in that this saree really helps them stand out. This saree is extremely popular because it is considered to be a cool and refreshing fabric to wear, which makes it ideal for the hot temperatures in the Indian subcontinent.

9.Jute fibers - The dawn of Jute, "The Golden Fibre", was upon Indians in 1856 when the very first jute mill initiated its production. Extracted from the most economic skin of the vegetable plants, jute fibers have always been important to India. All households in our country have seen jute sacks at some point in their lifetime. In fact, jute was synonymous with a grain sack for Indians. However, the weavers definitely changed things for us.

Being completely biodegradable and reprocessable, Jute is one of the organic fabrics used today to craft apparel including sarees that are bound to spread resplendence. Embroidered using even minimal threading gives a phenomenal aura to the jute saree. With an array of options for embellishments, sarees crafted from this fabric can be draped to enhance any formal, or family function. Floral or checkered prints on pure jute sarees make a definitive statement that no other material can beat.

10.Soyabean Fibres ;

In 1931, soybean fibers were experimented with to produce artificial silk which was named Azlon.

These sarees are woven with silk in the warp and soy fiber in the weft.

An essential portion of the dialogue of sustainability is finding alternative, sustainable fabrics, and yarns. Soy fibers are a byproduct of soya bean processing and are sustainable and renewable.

Soy yarn is stronger than cotton and wool, wicks moisture, and breathes well. When combined with silk, the fabric has the majesty of silk and yet a special subtle allure.

