



## **Hibla ng Lahing Filipino Travelling Exhibition, Lecture Series, Weaving and Embroidery Demonstrations and Workshops**

featuring

### ***Piña-Seda: Pineapple and Silk Cloth from the Tropics***

#### Introduction

*Piña* (Spanish, pineapple) cloth is considered the finest and the queen of Philippine textiles while *seda* (Spanish, silk) cloth is undeniably the smoothest woven fabric in the world. *Piña* combined with *seda* indeed exudes elegance as fine and delicate as pineapple and as smooth and luxurious as silk.

*Piña* and silk fibers were exclusively worn and associated with the urban elite during the Spanish colonial period in the Philippines. The use of silk by the masses in the lowland was only limited to accessories such as *pañuelo* (large square cloth) and wrap-around over skirt as part of the traditional formal wear of women. There were also few ethnolinguistic groups that had access to silk / that exemplify the link of silk to social status such as the Itneg of Abra as embellishment in the belt and loincloth of the *babaknang* (members of the upper class); the Maranao royalty of Lanao del Sur in their *sutla malong* (pure silk tubular cloth); the Yakan of Basilan in their *seputangan* (headcloth); and the Tausug warriors of Jolo, Sulu in their *pis siyabit* (headcloth) and *kambot* (belt) in tapestry weave.

European travelers in the 15<sup>th</sup> century discovered *piña* (*Ananas comosus*) in the American tropics. The pineapple, regarded as the “princess/prince of all fruits,” became an object of social and economic value. It was brought to the Philippines in the latter part of the 16<sup>th</sup> century by the Spanish colonizers as food. It was successfully grown in Panay Island and the locals skilled in weaving fabrics also utilized it as additional fiber resource. *Piña* cloth, similar to woven cotton cloth produced in the northwestern part of Luzon, was highly valued and collected as tax during the Spanish colonial period. It was one of the major products exported to Europe and was considered as gift for the royalty. A *piña* handkerchief presented as gift during the wedding of Princess Alexandra of Denmark to Prince Edward, Prince of Wales in 1863 is now part of the Victoria and Albert Museum *piña* collection in London.

Dignitaries and government officials during international and national events would wear embroidered woven pure *piña* or *piña-seda barong Tagalog*, the male national costume and *baro at saya*, the female national dress. In celebration of the 100<sup>th</sup> Anniversary of Philippine Independence in 1998, government officials and employees were required to wear *Filipiniana* attire during flag raising ceremonies in government offices every Monday, and has been made as the standard formal wear during special

official functions and occasions. One instance was when the country hosted the Asia-Pacific Economic Cooperation (APEC) Summit in 2015 and Association of Southeast Asian Nations (ASEAN) Summit in 2017, woven and embroidered *piña-seda barong Tagalog* and *Filipiniana* dress were provided as gifts to the economic leaders and their spouses to wear during the welcome dinner.

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[Map of the Philippines showing the location of piña plantations and sericulture's and centers of piña-seda weaving and embroidery]

### *Piña fibers*

The Province of Aklan in Western Visayas is recognized as the center of *piña* fiber production and *piña* cloth weaving in the Philippines. *Piña* fiber is extracted from the leaves of the Red Spanish (*Bromella pigna*) variety of pineapple plant, locally known as *piña* or *pinya* [pin.'ja]. It is said that the leaves of this variety yield excellent fibers for handweaving. The plant is grown in the Municipalities of Balete, Madalag, Libacao, Malinao and Kalibo, while the weaving centers are concentrated in Banga, Makato and Lezo, as well as in Balete and Kalibo, the capital of the province. Recently, the Provinces of Negros Oriental and Palawan have started to cultivate the Red Spanish variety from Aklan and skills training program on *piña* fiber extraction and weaving are ongoing.

The planting of *piña* buds commences during the start of the rainy season. Before planting, locals traditionally offer comb, to prevent the fibers from tangling; stone, to produce heavy-weight fibers; abaca, to allow the plants to grow tall; and sugar, for the fruit to taste sweet. The presence of fruit signifies that the leaves have matured enough for harvesting. The leaves can grow to approximately one to two meters in length within 18 months to two years and an average of 15 to 20 leaves can be harvested from each plant.

Fibers from the leaves are extracted through hand scraping and decortication. A broken porcelain plate or shard is used to abrade the leaf surface in order to extract the first layer of coarse fiber locally called *bastos*. The edge of a coconut shell is used next to extract the second layer called *liniwan*, the finer and softer fiber used for weaving *piña* cloth. In the past, the *bastos* was discarded as waste, but today, it is incorporated in some handicrafts. Pure *liniwan* is preferred in making high quality *piña* textiles and it can only be processed and woven by expert weavers.

The degumming process of removing all remaining colloidal substances in the *liniwan*, follows extraction. This involves repeated rinsing, beating, air-drying, combing, and stripping to separate the strands. Rinsing is done in a flowing river or stream and the fibers are beaten with a wooden paddle before being air-dried, combed, and knotted to produce long continuous strands.

Traditionally, *piña* fibers are finer and longer than the ones used today. The high demand have resulted to early harvest of immature leaves with shorter fibers that require frequent knotting. Weavers source out their fibers from partner knotters or they would buy a plot of pineapple plant and supply the scrapers and knotters with

leaves. The knotted strand is called *tinagak* and it is sold to weavers by *sikapat*, the unit of measure.

In the latter part of the 20<sup>th</sup> century, *piña* weaving was revived through the initiative of concerned manufacturers, designers and government agencies. Due to the scarcity of raw materials and increasing cost of *piña* fiber, *piña-seda*, a combination of *piña* as weft and *seda* as warp was developed in 1992.

Today, *piña* fibers have also been combined with cotton and other indigenous fibers and synthetic threads. In addition, indigo (*Indigofera tinctoria*) and other natural dyes are being introduced as part of their product development, however, further research is still being conducted on their effects to the “material integrity” of the fibers and woven cloth, particularly *piña*.

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### *Sericulture*

Silk is produced from unwinding the cocoons spun by the domesticated silkworm (*Bombyx mori*) that feeds solely on mulberry leaves (*Morus alba*). This involves hand sorting to eliminate cocoons with internal irregularities and to classify them according to size. Selected cocoons undergo maceration or cooking to soften the sericin and to allow fast and uniform reeling. The end filaments of the cocoons are captured by the threader and transferred to the reeler before being laced and folded to a skein.

Before the Spanish colonization, silk was primarily sourced from Chinese traders through established maritime trade routes in southwestern Mindanao and northwestern Luzon but the earliest documentation of local silk production was only in the late 18<sup>th</sup> century.

The first silkworms were sent to Manila in 1780 from China by Father Galiano of the Order of Saint Augustine. In 1785, the *Real Compañia de Filipinas* (The Royal Philippine Company) encouraged the production of cocoon, which involve the cultivation of mulberry, rearing of silkworm and textile weaving. Sericultures were initiated in what are now the City of Batac in Ilocos Norte, Baliuag in Bulacan, Villahermosa in Negros Oriental, and Iloilo. Silk produced in Batac was dyed in deep indigo and woven into wrap-around over skirts worn by women during special occasions. Baliuag became the source of silk for the ruling class in the central, lowland areas of Luzon while Iloilo and Negros Oriental supplied the silk yarn to weavers of *patadyong*, plain-weave plaid skirts of pure cotton that have sometimes been woven with silk and to Aklanon weavers for their *piña-seda* cloth.

In 1830, the privileges of *Real Compañia de Filipinas* were revoked and the ports were opened for the entry of silk yarns from China leading to the decline of local silk production.

In the 1970s, sericulture was introduced in the Province of La Union through the supervision of the Don Mariano Marcos Memorial State University (DMMMSU) in its campus at the Municipality of Bacnotan. The Philippine Textile Research Institute (PTRI) has also established a research center in La Trinidad, Benguet, and had been

assisted by the Fiber Industry and Development Authority (FIDA) in establishing mulberry plantations. In 1992, the Sericulture Research and Development Institute in DMMSU was created through Republic Act No. 7359 with the mandate to educate and train sericulturists, conduct researches on mulberry and silkworms, and coordinate with government and private agencies in cocoon production, weaving, and product developments. There are now 32 provinces in the Ilocos Region, Cordillera Administrative Region, Western Visayas, northern, southern and western Mindanao that are engaged in sericulture, and more or less a dozen cooperatives all over the country assisting mulberry farmers and cocoon rearers.

- About 25-35% of the fibers extracted from one *piña* leaf are *liniwan*
- A scraper can process 500 to 1,000 *piña* leaves a day
- 1,260 strands of *piña* fiber are needed to weave a *piña* cloth with a 30-inch width
- 500 to 1,200 meters of silk can be reeled from a single cocoon
- 1,700 to 2,000 cocoons need to be unraveled to have enough silk threads for one dress
- 1,500 to 2,500 cocoons produce one pound of silk

#### *Piña-seda weaving*

The peak of *piña* weaving in Kalibo was in the late 18<sup>th</sup> to the early 19<sup>th</sup> centuries, using the *tanhaga* (wooden foot loom) to produce pure *piña* cloth called Kalibo or Calivo.

There are different techniques in weaving *piña-seda* fibers. One technique is called *pili*, *suksuk* or *pechera* in other areas of the province. It involves the insertion of fiber into the warp following a systematic counting that depends on the desired design or pattern. This is commonly used in cloth intended for *barong Tagalog* without embroidery. Another technique is *rengue*, which uses a three-pedal loom to create a lacework pattern similar to lace Bronson.

In the past, men plant *piña* buds and harvest the leaves, while women extract and knot the fibers for weaving. Every female member of each household knows how to process and weave *piña* fibers. Since *piña* weaving is not their main source of income, it was only done during their free time.

Knowledge on the different processes and designs has been commonly passed on from mother to daughter, or grandmother to granddaughter, at an early age. Children are first taught how to knot the fibers, followed by preparing the warp and weaving of plain *piña* cloth; design techniques were taught later. Weavers have individual techniques, hence every weaver masters her own loom and warping techniques.

Men are now engaged in weaving, particularly in the preparation of threads for the warp and the weft, and arranging and inserting the warp into the heddles and reed. The *piña* weavers of Aklan believe that the warp should be arranged in the loom during high tide and pregnant women are encouraged to stand beside (or go near) the loom to increase productivity.

The Royal Philippine Company introduced the wooden foot loom to Northwestern Luzon and Panay Island in the 17<sup>th</sup> century. In the middle of the 20<sup>th</sup> century, innovations on the loom included the replacement of the reed from bamboo reeds to metal and mechanization of some of the processes in loom operation. Four pedal looms were also distributed by the Department of Trade and Industry (DTI) and PTRI in 1997. Recently, the DTI again distributed foot looms through the Handicraft of Aklan Multi-Purpose Cooperative (HAMPCO) to five weaving centers in Kalibo, Lezo and Makato. The National Commission on Culture and the Arts (NCCA), in collaboration with the Office of Senator Loren Legarda, also launched a project entitled, *One Loom, One Family*.

At present, most of the looms are found in weaving cooperatives, or souvenir shops that may also serve as weaving centers. Weavers in those centers work as employees that are paid per yard or meter of their woven cloth. Home-based weavers who work under weaving cooperatives or enterprises are usually provided with yarn and the supplier or owner dictates the design of the cloth.

In addition, the NCCA in collaboration with the Technical Education and Skills Development Authority (TESDA) and private sectors are developing a competency standards for handloom weaving.

#### *Piña-seda embroidery*

Plainly woven *piña* and *piña-seda* cloth from Aklan are decorated with flat, raised or relief embroideries such as flowers, fruits, vines, tendrils, leaves, butterflies, and geometric designs. The designs and patterns are initially of Spanish, French, Belgian, Iranian and Chinese origins that were later combined with indigenous plants and animal motifs such as jasmine (*Jasminum sambac*, L.), ylang-ylang (*Cananga odorata*), rice grain (*Oryza sativa*), guava leaves (*Psidium guajava*, L.), bamboo (*Bambusa*), carabao (*Bubalus carabanensis*, L.), and rooster (*Gallus*) to name a few. These were handed down from one generation to the next with minor alterations and the terms used may vary from place to place.

Aklan woven *piña* cloths are traded to different parts of the country to be embellished, especially in areas known for their embroidery heritage, such as Lumban in Laguna and Taal in Batangas. There are also embroiderers in Molo in Iloilo, Bocaue and Santa Maria in Bulacan and Cities of Malabon and Parañaque in Metro Manila.

It is believed that the art of ornamenting fabric with needlework started in China and was brought to the Philippines through trade. This was reinforced when the country became a colony of Spain in the 16<sup>th</sup> century. Initially, European missionaries taught lowland Filipino women the art of embroidery and lace making for church linens and vestments for priests and statues of saints then it became part of the goods brought to Europe for the galleon trade. Due to the popularity of Philippine embroidery, shawls manufactured and embroidered in China that passed through Manila before going to America and Europe were erroneously called *mantones de Manila*.

The embroidery of *piña-seda* cloth involves a number of individuals and stages. The woven cloth is first brought to the *nagdidibuho/nagguguhit/nagpipinta* (designer)

where the actual size of the design was drawn, traced or stamped on the cloth. This is passed on to the *nagbuburda/nag-ooras* (embroiderer/hourly-paid embroiderer). The cloth is stretched through the use of a loop made of rattan (*Calamus*) called *bastidor* in Bulacan and Batangas and *tambor* in Lumban. Preliminary stitches known as *palaman* or *bituka* (intestines) are made using cotton threads to give an embossed effect. The *calado* is done to highlight the embroidered parts, entailing *pagbubunot/pagbabakbak* (drawing or pulling-out of threads), *paglalala/pagsasara* (gathering and stitching of leftover threads to form a fine net), and *paglalaman/pagmumunggo* (set of stitches resulting into varying intensities of light passing through the *calado*).

Each embroiderer has a specialization, be it *tapado* (embossed), *sombrado* (shadow appliqué), “ethnic” (free-form motif), or *calado* (open-work); the most coveted skill is *sombrado* and *calado*.

The embroidered cloth is turned-over to the *naglalaba* (laundry) to hand wash the cloth using tap water and mild detergent to remove the traces of the indigo dye and other stains. The cloth is stretched and applied with *almirol* (starch paste) before sun- or air-drying.

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In the latter part of the 17<sup>th</sup> century, weaving and needlework were included in the curriculum of primary education. The Americans saw the economic potential of embroidery and they had it retained in the public school system. This was also taught to women inmates in correctional institutions to provide them with a skill for making a living after they had served their term, as well as to abandoned and neglected children to prepare them to be self-sufficient when they leave the orphanage.

In Lumban, their town fiesta was turned into the *Barong Tagalog* Festival in 1998, renamed *Burda* (embroidery) Festival in 2001. An association of embroiderers in Lumban was established in 2005 to unite embroiderers and producers to ensure the sustainability of the embroidery industry. Embroidery is also included in the Home Economics subject of the local schools, which may help in the transmission of the tradition. There are also competitions held during the *Burda Festival* in recognition of the skills of the local embroiderers. Training programs are also being developed with the assistance of the Department of Trade and Industry.

Sewing machines were introduced in the Philippines in the 1930s. Machine embroidery competed with hand embroidery, however designers and *bordadares* still prefer hand embroidery, finer method which evinced their artistry of form, light, color and texture on cloth.

In the past, a *bordadora* (embroiderer) performs all the steps of embroidery even the selling of the finished cloth. Nowadays, they tend to specialize and there is a production line under the manager or owner of the shop. Although mainly tailored for *barong Tagalog*, *baro at saya*, and *pañuelo*, hand woven and embroidered *piña*-based cloths are now used for wedding gowns, table linens, hand fans, and bags. Noted Filipino couturiers in the local and international fashion scene are now using the fabric in their haute couture creations. Filipino communities in different parts of the globe would also wear traditional or Filipiniana inspired clothing during special occasions as

representation of their Filipino identity and as tribute to the weavers, embroiderers and designers of *piña-seda* heritage.

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