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Design Resource

Banana Fiber Mat

The Craft of Making Mats by Mr. J. Antony William, Mr. Tushar Barman and Mr. Srikanth Bellomkonda NID, Bengaluru

Source:

http://www.dsource.in/resource/banana-fiber-mat

- 1. Introduction
- 2. Tools and Raw Materials
- 3. Traditional Twine Making
- 4. Mat Weaving
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Introduction

Banana plant provides textile fiber - The Banana Fiber. These fibers are obtained after the fruit is harvested by experienced women artisans. These fibers possess many characteristics which make their use advantageous, they are - abundance in nature, low cost, low density, biological degradability, renewability, good mechanical properties and non-toxic. Banana fiber is a great substitute for synthetic fibers, plastic and paper.

Place and People:

Lakkavanahalli is located in Hiriyur taluk of Karnataka state. Around 25 to 30 families engaged in banana fiber mat making. Around twenty amilies work regularly while some families work seasonally. Some women work on the handloom and others make hand woven products. All the artisans in the village have formed a Self Help Group (SHG) to help each other and work in a systematic fashion. Artisans of Lakkavanahalli even use Kora grass; Lavancha Hibiscus, Bamboo and wool along with banana fiber to create innovative contemporary products which are useful in daily life. IDF – Initiative for Development Foundation gives training to the weavers in order to bring out their innovative ideas to create new designs.



Artisan engaged in working on spinning wheel to make banana yarn.



Continues addition of banana fiber is required to get a lengthy yarn.

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Artisan engaged in peeling thin fiber strips from banana bark.



Bag- a product of banana fiber from Lakkavanahalli.



Group of artisans with finished banana yarn.

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Mat decorated with different colored threads.



Artisans working on handloom.



Processing of mat in handloom.

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Tools and Raw Materials

Banana fiber is a natural skin fiber. No chemicals are used in the manufacture of its products. The interest in using natural fibers has increased significantly in the last few years because of its natural and Bio-degradable properties.

Tools and Machines Used:

- Spinning wheel for banana yarn and spool and spindle making.
- Hand loom to weave mats.
- Scissors.
- Measuring tape.
- · Hacksaw blade.
- Pulling-needles used while setting the loom.

List of Raw Materials Used:

- Kora grass.
- Bamboo.
- Sheep wool.
- · Cotton threads.
- Banana fiber from Banana plant.
- Lavancha- procured from Mangalore and Kerala.
- Hibiscus- Pudi Naaru imported from Andhra Pradesh.



Banana yarn is prepared using spinning wheel.



Artisan filling the spindle with threads using spinning wheel.

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Banana bark-Fiber is extracted from Banana Bark.



Colored threads.



Stack of colored wool and cotton threads.

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Bundle of wool threads used in designs.



Fly shuttle with bamboo yarn.



Handloom.



Measuring tape is used to measure the product.

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Pulling needles.

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Hacksaw blade used to cut and gives shape to the product.



Scissor used to cut excess part of the product.



Environment view of the work place.

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Traditional Twine Making

Artisans collect Banana bark from surrounding villages of Lakkavanahalli. Banana twine making is done in the streets preferably in the early morning. The bark is first split into small strips and soaked in water. Due to water treatment, the bark becomes smooth and soft. The strips are then hooked to the spinning wheel to make the lengthy yarn. As the spinning wheel starts rotating, the artisan walks backwards by adding the smaller strips of banana bark to form a long yarn. The yarn is reeled into small bundles and sent to weaving section for making mats and other eco-friendly decorative items. Minimum of 3 to 4 people required for yarn making. One person for operating spinning wheel and remaining for making twines.





Banana bark is split into small slices. The fibre is soaked in water before twisting.

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Artisans engaged in twine making.



Two strands are being twisted/intertwined.

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Yarn is made into small bundle.



Banana yarn is ready for product making.

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Mat Weaving

The mat weaving process is similar to other weaving techniques. Weaving is traditionally done in basic pit looms. The type of weaving practiced in Lakkavanahalli is very simple without using any Jacquard machines to create extra designs. The aesthetic look is created by using colorful threads, wool, kora grass and few other natural yarns. The steps involved in making process are spinning, warping and weaving.

Spinning:

Pure cotton thread is wound into spools and spindles with the help of traditional spinning wheel to make warp threads. The thread from the bundle of cotton yarn is reeled to spool and wound on it. The prepared spools and spindles are used in warp as well as weft processing.

Warp Making:

The yarn from the number of spools are taken and reeled to big circular wooden warp machine. Length of warp is loaded into the weaving loom and tied to the weavers beam.

Weaving:

Once the warp threads are loaded into the loom, weft is prepared. Banana yarn is wound on the flat wooden stick which acts as fly-shuttle. The shuttle passes through the opens of warp shed to process weft.



Artisan spinning the cotton threads.



The spools are fixed to the warping machine to prepare the warp.

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Warp threads passes through the reed.



Weaver loading the warp into the loom.



The threads are attached to the weavers beam.



The loom is ready for weaving process.

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Banana yarn is wound on the shuttle.



View of inserting fly-shuttle into the warp threads.



Joining the warp and weft threads.



Mat is ready to be removed from the loom.

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Products

Handcrafting banana fibre products is the source of livelihood for many families of Lakkavanahalli of Hiriyur taluk, Chitrdurga District, Karnataka. In the recent past, banana fibre had a very limited application and was primarily used for making items like ropes, mats, and some other composite materials. But with the increasing environmental awareness and growing importance of eco-friendly fabrics, banana fibre has also been recognized for all its good qualities and now its application is increasing in other fields too such as apparel garments and home furnishings.

Craftsman of Lakkavanahalli mainly works on making Globe lamp, mats, yoga mats, dining mats, prayer mats, handbags, window blinds, cushion covers, door mats, and purse. They also get the opportunity to exhibit their work in exhibitions at various places in the country. The products are marketed in Bangalore, Delhi, Bombay, England, Maldives and Dubai.



Hand bag is also a popular product made of Banana Fibre.

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Colored threads are used for designing the mats.

Dining mats are made of banana Fibre.



Even, randomly placing Banana Fibre can form beautiful products like lamp shades.

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This eco-friendly folder is made of banana fibre.



Basket made up of Banana Fibre.



To give different form and design, cotton or jute cloth is also used in the weaving process.



Classical Banana Fibre mat.

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This documentation was done by Mr. Antony William, Mr. Tushar Barman and Mr. Srikanth Bellomkonda at NID, Bengaluru.

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