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Design Resource **Eco-friendly Fiber Bags - Alleppey, Kerala** Green Products

Green Products by Prof. Bibhudutta Baral and Sandhya B. NID, Bengaluru

Source: https://dsource.in/resource/eco-friendly-fiberbags-alleppey-kerala

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#### Introduction

In this era of plastic, it is much needed to notice the eco-friendly products and use them. Eco-friendly as we all know literally means earth-friendly/ not harming the surrounding or environment. Using eco-friendly products saves the environment from contamination with products that aren't biodegradable. We all must include these products prior to those of plastic and enhance our living.

Natural fibers that appear as hair-like raw material can be defined as bio-based fibers or fibers that are obtained from vegetables and animals, meaning all natural cellulosic fibers such as cotton, jute, sisal, coir, and flax, hemp, abaca, ramie and protein-based fibers such as wool and silk. They can be spun into filaments, threads or ropes and can be woven, knitted, matted or bound. Since natural fibers are obtained from natural sources, they do not need any formation. They are convertible into nonwoven fabrics such as felt or paper, after spinning into yarns to woven cloths. Though nature abounds in fibrous materials, especially cellulosic types, only a small number can be used for textile and other industrial purposes. The effectiveness of the utility of fiber for commercial purposes is determined by properties such as length, strength, pliability, elasticity, abrasion resistance and more. There are various advantages of natural fibers, the materials that are produced from natural fibers are the least harmful to our environment, natural fibers don't cause skin irritations, and they are biodegradable. A truly eco-friendly product keeps both environmental and human safety in mind, it includes the use of sustainably grown ingredients produced in many ways that do not deplete the ecosystem. Hence they are known as environmentally friendly or green products as they cause minimal harm to people and the environment. Jute is called as a golden fiber as it plays a key role in the fibre industry. It is one of the strongest natural fibers and stands in second place in cotton in terms of global production. They are approximately 4 meters long, soft and shiny. It consists of cellulose and lignin making it biodegradable, and eco-friendly. Water hyacinth is another plant that helps to make products that are eco-friendly. The plant is picked up from the water, the leaves and roots are cut, and stems are allowed to dry completely. These dried stems are used to produce various products.

Alleppey is also known as Allappuzha (in Malayalam language) is a landmark between the broad Arabian Sea and a web of rivers flowing into it. The name is derived from the geographical positioning and physical features of the place. It is noted all over the world for the coir and coir products production. Cherthala is a town located twenty-two kilometers north of Allappuzha and Thiruvizha is five kilometers south-west of Cherthala. The use of fibers to make eco-friendly products is observed in the place and the master craftsman Chandradas has gained many awards for taking the fibre handicrafts to another level. Mr. Chandradas has been in this business from the past thirty-five years. With the support of the Indian and the Kerala Government, he has been intensively working on producing ecofriendly products and teaching them to others. Workshops are held mostly for women folks in order to help them grow and enrich themselves. Training in producing these ecofriendly products has been given to the people who have come from Gujarat University, Gandhi Samara Seva, and the Ministry of textiles – about natural dye and natural products, business people who have been active in the natural fiber market. With passionate research, the way of putting these natural fibers to use has been founded by the artist.

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Artisan is involved in knitting ecofriendly bags.



Artisan is receiving award for his work in eco friendly bags.



Artisan is knitting the fiber to make bags.

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### **Tools and Raw Materials**

Tools and raw materials that are used for making of fiber bags:

- Natural Fiber: Jute, water hyacinth and palm are few of the raw materials used to make eco-friendly products.
- Scissors: A pair of scissors is used to cut the fiber.
- Knife: It is used to peel the fiber into thin strips.
- Cylindrical Rod: It is used to tie fiber and begin with the platting.
- Varnish: It is used to protect the fiber and give a finished appearance.



Natural fibers used in making of ecofriendly bags.

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Scissors are used to cut the extras.

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#### **Making Process**

The eco-friendly fiber bags are very useful as they are very good for the environment. There are varieties of fibers available and only a few are helpful to produce products that can be useful. The jute is one of the plants grown and processed to obtain fiber. The fiber is dried well and proper drying decides the quality. There should not be moisture content. It is made with twine or yarn, which can be further used to produce other products. To make a bag the twine is knotted to a rod making a loop for the opening of the bag. Smaller loops are made along with the bigger ones by tying knots to the adjacent loops, adjusting the knots to be of the same length by comparing them with an end-to-end loop. More loops and knots are made to extend the length of the bag. The bag is removed from the loop once it is knotted to a good length and folded. Tying it with additional twine of jute fiber locks the two sides and another extra twine is inserted along with the loops on top and tied to form the handle for the bag. The stem of the water hyacinth is dried and used to make products like mats, file holders and more. The fiber is cut lengthwise to make twine or is directly used sometimes. Palm fiber is another major fiber that is used to produce eco-friendly articles.



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Artisan tying the fiber to begin with the work.

These fibers are manually knitted to make natural fiber bags.

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Extras are being cut using Scissors.



Artisan is making bags using natural fiber thread.





Using tying method fibers are knitted.

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Fiber Bag.

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#### Products

The production of fiber is seen all over India, and Kerala is one of the states that is said to be contributing more of it. Products like Handbags, File Holder, Mats, Dinner Table Mats and more are made out of this jute, palm and water hyacinth fibers and are in great demand because they are environment friendly. After the process, even the wastage can be put to use by converting it into biofuel. Hence the fibers play a vital role and must be supported.



Sling bag decorated with natural fibers.

Carry Bag made using natural fibers.

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#### **Contact Details**

This documentation was done by Prof. Bibhudutta Baral and Sandhya B. at NID, Bengaluru.

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