Digital Learning Environment for Design - www.dsource.in

Design Resource **Natural Fibre Lamp Shade - Alleppey, Kerala** Eco-friendly Lamp Shade

Eco-friendly Lamp Shade by Prof. Bibhudutta Baral and Ranjitha M. C. NID, Bengaluru

Source: https://dsource.in/resource/natural-fibre-lampshade-alleppey-kerala

- Introduction
 Tools and Raw Materials
 Making Process
 Products
- 5. Video
- 6. Contact Details



Digital Learning Environment for Design - www.dsource.in

Design Resource Natural Fibre Lamp Shade -Alleppey, Kerala

Eco-friendly Lamp Shade by Prof. Bibhudutta Baral and Ranjitha M. C. NID, Bengaluru

Source: https://dsource.in/resource/natural-fibre-lampshade-alleppey-kerala/introduction

- 1. Introduction
- 2. Tools and Raw Materials
- 3. Making Process
- 4. Products
- 5. Video
- 6. Contact Details

Introduction

Natural fibres are hair-like raw materials that are continuous filaments like pieces of thread. There are two types of fibres: natural fibres and synthetic fibres. These natural fibres can be spun into filaments, threads or ropes. Nowadays these natural fibres are being used in the textiles, building, plastics and automotive industries. Natural fibres are further classified according to their sources like vegetable fibres, animal fibres and mineral fibres. In vegetable fibres, cellulose is the main component, whereas these fibres are further classified into the following types,

• Seed fibres - These are the fibres from seeds or seed cases for example cotton and kapok.

• Leaf fibres - These fibres are collected from leaves, for example- sisal and agave.

• Bast fibre or skin fibre - These are fibres which are collected from the skin or bast surrounding the stem of plant source. These fibres have higher tensile strength than other fibres. Hence these fibres are used for durable yarn, fabric, packaging and paper. For examples flax, jute, kenaf, industrial hemp, ramie, rattan, soybean fibre and even vine fibres and banana fibres.

• Fruit fibres - These fibres are collected from the fruit of the plants.

• Stalk fibres - These fibres are really the stalks of the plants like straws of wheat, rice, barley and other crops including bamboo and grass.

In 19th century, the use of natural fibres significantly decreased and there was a massive rise in the production of synthetic fibres. Whereas now the situation has especially due to the environmental concern in favour of natural fibres as they are biodegradable and sustainable materials. India has huge resources of natural fibres like banana, khus, sisal, korai grass, talipot, palm leaf, coconut, pineapple, screw pine, golden grass, jute, sabai etc. The rural artisans converted these fibres into value-added finished products like bags, table mats, cushion covers, hats, floor coverings and lampshades etc., which provides large employment to the rural poor, especially the underprivileged class.

Lampshades are one of the earliest discoveries of man-made lighting. In the early 17th century, Paris streets were lit with oil lamps that were fit with reflectors above and alongside in which the flame projected the light downward and from side to side. Then those oil lamps were followed by gas lights and were filtered by opal glass or shades with fabric stretched on a wireframe but the drawback of these gaslighting was overheating of air and high oxygen consumption which pollute the environment.

Digital Learning Environment for Design - www.dsource.in

Design Resource **Natural Fibre Lamp Shade - Alleppey, Kerala** Eco-friendly Lamp Shade

Eco-friendly Lamp Shade by Prof. Bibhudutta Baral and Ranjitha M. C. NID, Bengaluru

Source: https://dsource.in/resource/natural-fibre-lampshade-alleppey-kerala/introduction

Introduction
 Tools and Raw Materials
 Making Process
 Products
 Video
 Contact Details



Eco-friendly lamp shade made of natural fibres.



Artisan working with natural fibres.



Mastercraftsman Mr. Chandradas explains his unique ideas.

Digital Learning Environment for Design - www.dsource.in

Design Resource Natural Fibre Lamp Shade -Alleppey, Kerala

Eco-friendly Lamp Shade by Prof. Bibhudutta Baral and Ranjitha M. C. NID, Bengaluru

Source:

https://dsource.in/resource/natural-fibre-lamp-shade-alleppey-kerala/tools-and-raw-materials

Introduction
 Tools and Raw Materials
 Making Process
 Products
 Video

6. Contact Details

Tools and Raw Materials

Tools and raw materials that are used to make natural fibre lampshade:

- Basic Structure: Its made of iron rods by welding according to the required design.
- Gunny Cloth: It is used to stitch at the backside of the lamp.
- Natural Fibers (jute coir): It is made of jute plants that are used to make lampshade.
- Scissor: To remove unwanted fibres.
- Needle and Thread: To join the knitted fibres together.



Basic structure for a lampshade made of metal rods.

Digital Learning Environment for Design - www.dsource.in

Design Resource **Natural Fibre Lamp Shade - Alleppey, Kerala** Eco-friendly Lamp Shade

Eco-friendly Lamp Shade by Prof. Bibhudutta Baral and Ranjitha M. C. NID, Bengaluru

Source:

https://dsource.in/resource/natural-fibre-lamp-shade-alleppey-kerala/tools-and-raw-materials

Introduction
 Tools and Raw Materials
 Making Process
 Products
 Video

6. Contact Details



Gunny cloth and sticks of coconut leaves are used to stitch at the backside of the lamp shade.



Natural fibres are used to make lamp shade.



Scissor is to remove the unwanted fibres.



Needle is used to join the edges.

Digital Learning Environment for Design - www.dsource.in

Design Resource Natural Fibre Lamp Shade -Alleppey, Kerala

Eco-friendly Lamp Shade by Prof. Bibhudutta Baral and Ranjitha M. C. NID, Bengaluru

Source: https://dsource.in/resource/natural-fibre-lampshade-alleppey-kerala/making-process

- 1. Introduction
- 2. Tools and Raw Materials
- 3. Making Process
- 4. Products
- 5. Video
- 6. Contact Details

Making Process

Early lampshades were made of paper and then these lampshades became elaborate and the craft of designing shades using different materials became an art. The lampshades were used to soften and disperse the light from candles and oil lamps. These natural fibres are considered as a gift from the environment to mankind. One can find many advantages like natural fibres have a low specific weight that results in higher specific strength and also stiffness than glass and are producible with low investment at low cost which makes an interesting product. These natural fibres are also friendly processing with no skin irritation.

Initially, the basic structure for the lamp is done by welding iron rods according to the required design and size. Then the natural fibre threads are winded neatly to the basic structure of the lamp. Then artisan starts to knot the thread one by one which is made of jute plant at the top. Then the process continues with the knitting process where the artisan picks alternate threads and knots the threads tightly to obtain the required design. The lampshade made of natural fibres is done by weaving the threads so that all the threads are interlinked which creates fine-looking apparel. Once done with the knitting process, the artisan starts to join the knitted threads by stitching with the help of a needle and the thread. Whereas jute cloth is stitched at the backside of the lampshade.

Digital Learning Environment for Design - www.dsource.in

Design Resource Natural Fibre Lamp Shade -Alleppey, Kerala

Eco-friendly Lamp Shade by Prof. Bibhudutta Baral and Ranjitha M. C. NID, Bengaluru

Source: https://dsource.in/resource/natural-fibre-lampshade-alleppey-kerala/making-process

- Introduction
 Tools and Raw Materials
 Making Process
 Products
- 5. Video
- 6. Contact Details





Flow Chart:

 The basic structure for the lamp is done by welding iron rods.

 Threads made of natural fibres are winded to the basic structure of the lamp.





3. The process continues with the knitting threads.

 Lamp shade made of natural fibres is done by weaving and joining the threads.





Stitching the knitted threads to obtain a required design.

6. Jute cloth is stitched at the back side of the lamp



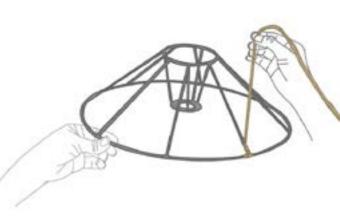
Digital Learning Environment for Design - www.dsource.in

Design Resource **Natural Fibre Lamp Shade - Alleppey, Kerala** Eco-friendly Lamp Shade

Eco-friendly Lamp Shade by Prof. Bibhudutta Baral and Ranjitha M. C. NID, Bengaluru

Source: https://dsource.in/resource/natural-fibre-lampshade-alleppey-kerala/making-process

- Introduction
 Tools and Raw Materials
 Making Process
 Products
 Video
- 6. Contact Details



Natural fibre is coiled to the basic structure made of thin iron rods.



Tying the fibres strand to the stand.



Artisan picking the strand made of natural fibres.



The tied fibres strand is tightened.

Digital Learning Environment for Design - www.dsource.in

Design Resource **Natural Fibre Lamp Shade - Alleppey, Kerala** Eco-friendly Lamp Shade

Eco-friendly Lamp Shade by Prof. Bibhudutta Baral and Ranjitha M. C. NID, Bengaluru

Source:

https://dsource.in/resource/natural-fibre-lampshade-alleppey-kerala/making-process

- Introduction
 Tools and Raw Materials
 Making Process
 Products
- 5. Video
- 6. Contact Details



Artisan counting the fibre strands to start with knitting process.



The fibre strands are knotted and the process continues with knitting.



Joining the edges of the knitted fibre strands.



Tightening the sewed threads for long lasting.

Digital Learning Environment for Design - www.dsource.in

Design Resource **Natural Fibre Lamp Shade - Alleppey, Kerala** Eco-friendly Lamp Shade

Eco-friendly Lamp Shade by Prof. Bibhudutta Baral and Ranjitha M. C. NID, Bengaluru

Source:

https://dsource.in/resource/natural-fibre-lamp-shade-alleppey-kerala/making-process

- Introduction
 Tools and Raw Materials
 Making Process
 Products
- 5. Video
- 5. video
- 6. Contact Details



The extra thread is cut with the help of scissor.

The unwanted fibre strands are removed for neat finish.



The gunny cloth and sticks are stitch at the back side of the lamp with the help of needle and thread.

Digital Learning Environment for Design - www.dsource.in

Design Resource **Natural Fibre Lamp Shade - Alleppey, Kerala** Eco-friendly Lamp Shade

Eco-friendly Lamp Shade by Prof. Bibhudutta Baral and Ranjitha M. C. NID, Bengaluru

Source: https://dsource.in/resource/natural-fibre-lampshade-alleppey-kerala/products

Introduction
 Tools and Raw Materials
 Making Process
 Products
 Video

6. Contact Details

Products

Lampshades are used to diffuse the light emitted from a fixed object as time passes these lampshades are also used for decorative purposes. Mastercraftsman Mr. Chandradas from Cherthala, Alleppey, and a well-known artisan who does artifact using natural fibres which is eco-friendly and also got a national award for his unique talent. He turned the waste natural materials into a beautiful craft. Whereas the price for the craft depends on the size and design of the craft.



Well-designed eco-friendly lampshade made of natural fibres.

Digital Learning Environment for Design - www.dsource.in

Design Resource **Natural Fibre Lamp Shade - Alleppey, Kerala** Eco-friendly Lamp Shade

by Prof. Bibhudutta Baral and Ranjitha M. C. NID, Bengaluru

Source: https://dsource.in/resource/natural-fibre-lampshade-alleppey-kerala/video

Introduction
 Tools and Raw Materials
 Making Process
 Products
 Video

6. Contact Details

Video



Natural Fibre Lamp Shade - Alleppey

Digital Learning Environment for Design - www.dsource.in

Design Resource Natural Fibre Lamp Shade -Alleppey, Kerala

Eco-friendly Lamp Shade by Prof. Bibhudutta Baral and Ranjitha M. C. NID, Bengaluru

Source: https://dsource.in/resource/natural-fibre-lampshade-alleppey-kerala/contact-details

- Introduction
 Tools and Raw Materials
 Making Process
 Products
- 5. Video
- 6. Contact Details

Contact Details

This documentation was done by Prof. Bibhudutta Baral and Ranjitha M. C. at NID, Bengaluru.

You can get in touch with him at bibhudutta[at]nid.edu

You can write to the following address regarding suggestions and clarifications:

Key Contacts: Shri. T. G. Chandradas, Proprietor and Senior Craftsman Alleppey, Kerala India Cellphone: 0478 2863499

Helpdesk Details: Co-ordinator

Project e-kalpa R & D Campus National Institute of Design #12 HMT Link Road, Off Tumkur Road Bengaluru 560 022 India

Phone: +91 80 2357 9054 Fax: +91 80 23373086 Email: dsource.in[at]gmail.com