

Design Resource

Cane Furniture - Panaji, Goa

Reed and Rattan Furniture

by

Prof. Bibhudutta Baral, Divyadarshan C. S. and

Vijay G.

NID Campus, Bengaluru

Source:

<http://www.dsource.in/resource/cane-furniture-panaji-go>



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

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Introduction

Using natural fiber to weave or bind products like basket, chair, head and body gear has been used from the time man discovered social skills. Nature could be the best possible teacher for men, guiding him step by step to achieve basic necessity of life. Not only man but other creations of Mother Nature like spiders, how each species spider has its own way of weaving its web, how birds weave their nest. At first looks, their nest looks very messy and random but when we carefully observe the little craftsmen weaving his (generally, male birds make the nest and female choose only the best weavers to father their chicks) nest, he carefully chose the right kind of fiber, and grass. Interlocking them with each other and creating the best possible nest. Hence the man has learnt the art of basket / furniture weaving from the best teacher, Mother Nature. It is believed by many archeologists that basketry was one of the main reasons for man to develop social skills. With the help of basket, man used to carry food items to their house and caves rather than eating it on the field. Sharing the food with each other helped in developing the social skill as believed by the archeologists who have discovered natural fiber basket dating between (10,000- 8,000 BC).

Some of the best known materials used by man from centuries are bamboo, rattan, withies and wands, split wood, bark, roots, grasses, reed and sedges, rushes, straw, palms, pandanus, leaf fiber, other vegetal fiber, skin and hide, wood and hair, metal and synthetic fibers. There is no standard rule that a particular product has to be made out of a single or combination of specific materials. Material chosen by the artisan depends upon the availability of the materials and artisan ability to manipulate it to create the desirable product he wishes to create. Generally in Asian countries, furniture made out of bamboo, rattan, cane and reed are popular.

What is rattan? Rattan comes from the family of palm tree, having features of vine which can grow large and rapidly in the dense forest of south Asian region. It has a shape of pole and diameter ranging from one to three inches and having an ability to grow up to 150 meter tall, rattan is grown 1200 to 3000 m above sea level, around the world there are about 600 species of rattan but there are only 20 types of rattan used commercially. Rattan is generally a wild crop which is cultivated in hilly regions of eastern Indian states like Assam, Arunachal Pradesh, Manipur, Nagaland, and Tripura. Rattan palm is peeled to reveal the core part, the core is known as rattan. The peeled skin is known as cane. Reed is a type of grass which is also known as common reed, dry and processed reed is used in furniture making.

Many believe that rattan and wicker furniture are the same or are made out of the same materials, due to which there is a huge confusion over the selection of the right kind of furniture for indoor or outdoor. In a general sense both rattan and wicker furniture come under the same furniture category even then one can find a remarkable difference between both of them. Compared to bamboo poles, rattans have a strong core and are even hard to break and are also more durable. Now when we talk about wicker, wicker is not a material like rattan or cane or bamboo. Wicker is a style, an ancient technique of weaving or binding furniture.

1. Introduction

2. Tools and Raw Materials

3. Making Process

4. Products

5. Video

6. Contact Details

Design Resource

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

So wicker furniture could be just made of any two or more natural and synthetic materials. The strength of wicker products like chair, sofa, bed etc. depends upon the materials used to build the products hence the final product may or may not be strong and durable. In case of rattan based furniture which are made out of rattan and cane/reed (round reed / semi-round reed) will possess great strength and durability. Generally, rattan furniture possess natural color which are white and brown, exposing it in sun light and atmosphere may change color of rattan furniture, due to which the rattan furniture are used indoor. Wicker furniture are painted synthetic colorful paints, due to the nature of paint, they don't fade away or react with atmosphere, and hence wicker furniture can be kept inside or outside.

Rattan in Asia and southern Asia

Rattan is not a new discovery or a new material to Asian country. Rattan is generally cultivated in large dense forest area of the hilly region, rattan as a vine grows very fast with the help of existing vegetation available. In these dense forest over 30 % of the total cultivation is grown wild and rest of the cultivation is maintained by the local villager and the traders. Jali bet, golla bet and bhudum bet. Jali bet is used for weaving, netting, binding, crossing and design work. Golla bet is used for framework, structure, support and bracket and design also. Bhudum bet is mainly used mainly for hard structural works. Rattan, cane and reed furniture provides great employment opportunities to the native people of eastern India and also western ghat. The origin of rattan product were originally to full fill their basic needs, most of the earlier made product were limited to the eastern states of India, it is believed that in early 15th century was the era when rattan furniture along with other bamboo furniture was introduced to rest of the world by the foreigners who came to India. Around the same era many other Asian countries were experimenting with bamboo, rattan, cane and other natural fiber. Some of the countries which took up natural fiber products making were china, Indonesia, Thailand, Vietnam, Philippines, Nepal, Mongolia, Indonesia, and Bhutan are some of the well-known countries which produce natural fiber products.

Rattan in goa

Rattan and natural fiber products are not new to goa and its surroundings, since Vasco-da -Gama landed in southern state of India called Calicut, later Portuguese declared the state of goa their Indian capital in approximately 1510, soon after this there was a huge export of indian based article. Some of the majorly exported items were fabric, natural fiber, tea and spices. This could be termed as the ear of export. Goa become a main trading place for the import and export. It provided an opportunity people of different category to find right kind of work. In the early 20th century goa has become a place for trading and a major tourist attraction. Natural fiber products like rattan and bamboo generates employment and value added products. Natural fiber product are also a part of cottage industries. Many artisan from different parts of India like Bombay, Bangalore, Delhi, madras and largely from Assam have settle in Goa. Annually about 2,00,000 artisan travel to goa for seasonal and permanent jobs. Natural fiber based industry generates about 15 crores of business annually.

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1. Introduction

2. Tools and Raw Materials

3. Making Process

4. Products

5. Video

6. Contact Details



Photo of Artisan with his family members.



Artisan involved in working with cane.



Artisan showcasing the cane work.



Chair made of cane.

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



Sofa made of cane.

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Tools and Raw Materials

The tools that are required for cane furniture are:

- **Raw Material:** Rattan and reed are used a raw material.
- **Shaping Tool:** Wooden tool which helps in shaping.
- **Propane Torch:** It is used to introduce heat to the raw material.
- **Blade:** To remove the burnt surface.
- **Hand Saw:** It is used to cut the raw material into require length.
- **Nail:** Helps in holding two material.
- **Hammer:** Hammering nail into required material.
- **Tape:** To measure the length of raw material.



Measuring tape is used to measure and cut the canes in to required size.

1. Introduction

2. **Tools and Raw Materials**

3. Making Process

4. Products

5. Video

6. Contact Details

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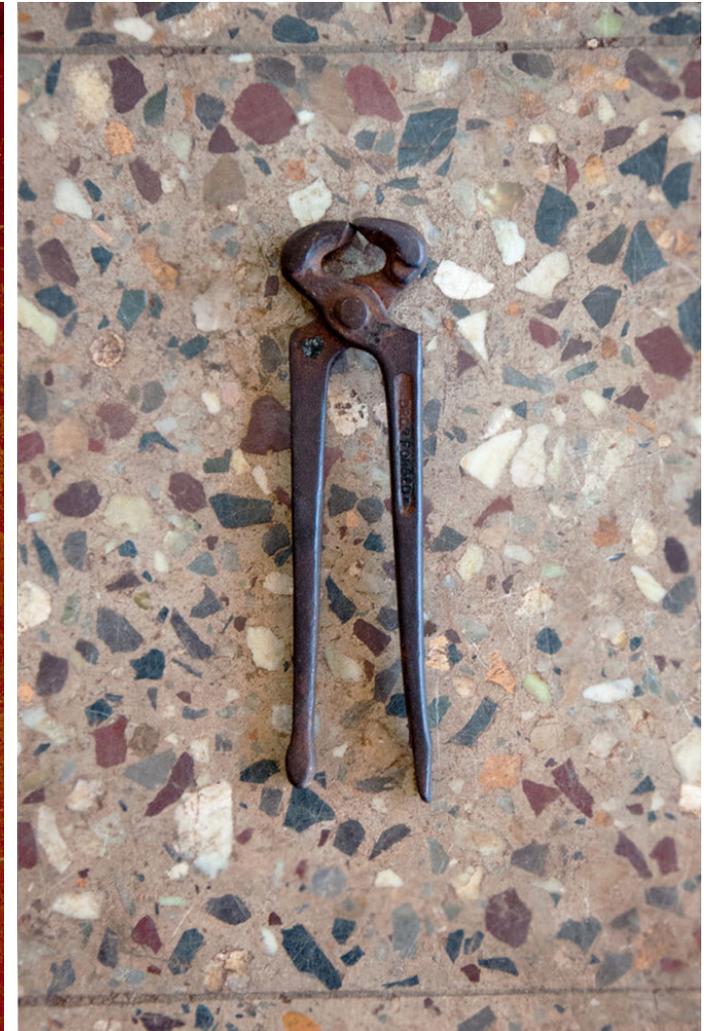
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1. Introduction
2. **Tools and Raw Materials**
3. Making Process
4. Products
5. Video
6. Contact Details



Synthetic Resin Adhesive is glue used in making of cane furniture.



Cutter used to cut the cane.

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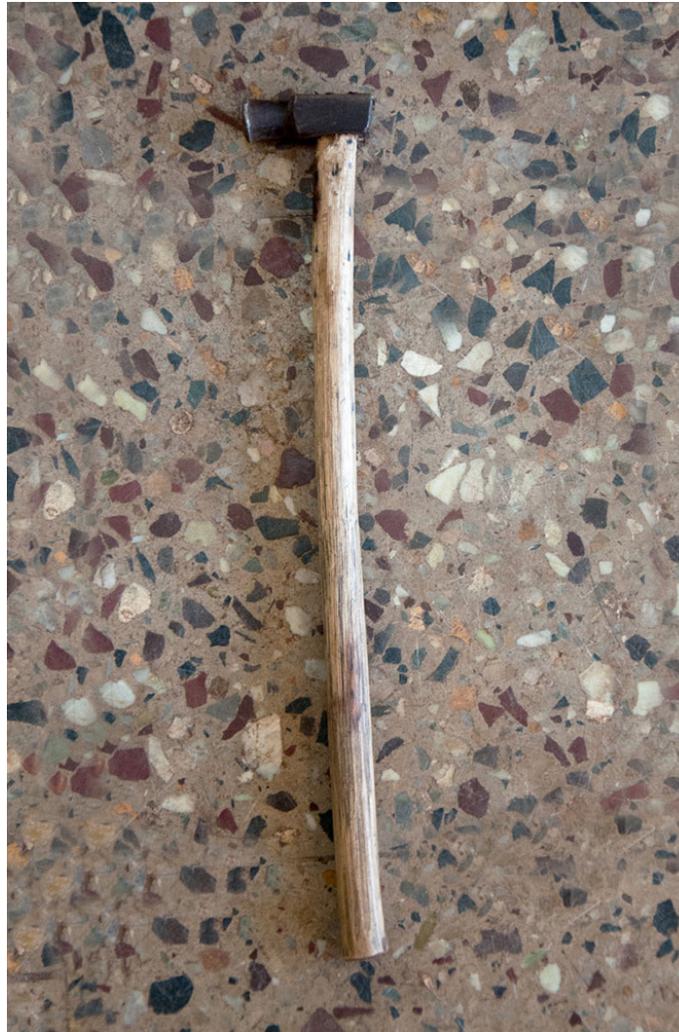
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<http://www.dsource.in/resource/cane-furniture-panaji-goa/tools-and-raw-materials>

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



Hammer used in the process of making cane furniture.



Knives used to slice the cane.

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<http://www.dsource.in/resource/cane-furniture-panaji-goa/tools-and-raw-materials>

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



Axe blade used to cut the cane.



Pliers with sharp blades are used to cut the cane sticks.

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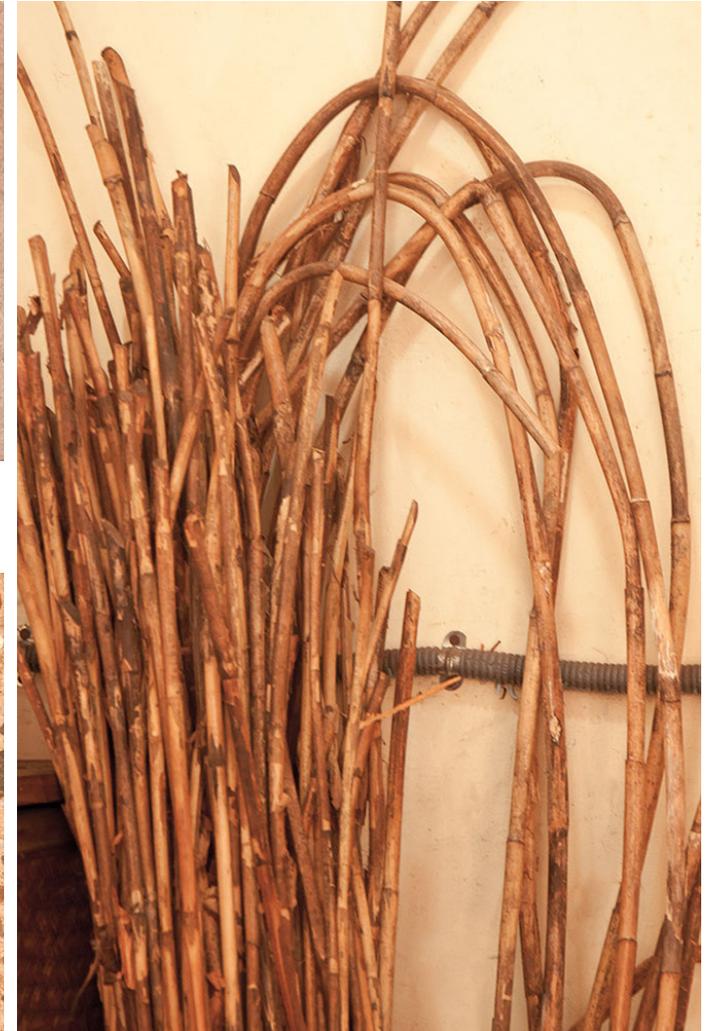
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Polish used to apply on the cane furniture to give it a shining look.



Small nails used in making of cane furniture.



Cane sticks which are used in making of cane products.

1. Introduction

2. **Tools and Raw Materials**

3. Making Process

4. Products

5. Video

6. Contact Details

Design Resource

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<http://www.dsource.in/resource/cane-furniture-panaji-go/tools-and-raw-materials>

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



Customized slicing tools used to make thin cane strips.

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Making Process

Generally, harvested rattan is processed immediately, depending upon the type of rattan number of treatment is applied to transfer raw rattan into processed rattan. Processing of rattan helps in improving the quality of the rattan which helps in the product making minimizing the loose of time and money. There are two method of processing rattan.

Traditional Method:

Generally, harvester wear long trousers, long-sleeved shirt and plastic boots to avoid spines which are present on the surface of rattan, as soon as rattan arrives to the workshop/work area, the outer skin is scraped off with help of blade. Rattan is now allowed to dry for about seven days, which helps in reducing the water content. Removing the moisture from rattan helps in preserving it for about one and half months. Large diameter dried rattan can be used for making the frame of the furniture and the small size rattan are used for binding and weaving the frame.

Modern Method:

Many consider modern method are more costly and highly toxic, hence the people involved use face mask and pair of certified gloves. Diesel oil is filled in the curing tank

Although more expensive, this method produces higher quality products. In addition to the tools required in the traditional method, it is also necessary to have two chains, a curing tank, face masks and a pair of gloves. Metal chain is wrapped around the rattan bundle and it is dipped in the hot boiling oil. The oil treatment completely depends upon the type of rattan and time of harvest. Freshly harvested rattan is given 30 minutes of treatment and 3 days before harvest rattan is given 20 minutes of treatment. This treatment helps preserving rattan from 1 to 6 months. This treatment helps to remove larva and insect from the rattan, addition to that it brightens the color of rattan. It is important not to boil oil more than 100 degree centigrade otherwise the oil may catch fire.

Rattan is placed upright for 12-16 days, the dried rattan are inspected for any defects and defected pieces are rejected on the spot, large size rattan undergoes the transformation process after they have been scrapped. The small size rattan are scared and used in the weaving or binding process.

Weaving or Binding:

There are literally 1000's of pattern and style of weaving a natural fiber basket and products. Weaving style is not only limited to an individual but also it can also tell us a lot about its place of origin. Style and pattern also depends up on the type of raw material chosen by the artisan. Some of the commonly found weaving styles are: - coiling, plait coiling, plaiting, multi-directional plaiting and twining.

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

Design Resource

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Source:

<http://www.dsource.in/resource/cane-furniture-panaji-goal/making-process>

1. Introduction

2. Tools and Raw Materials

3. Making Process

4. Products

5. Video

6. Contact Details

Coiling: When a single or bunch of rods of natural fiber (like Reed or cane) are made into coils, the process is known as rod coiling. Generally coiling pattern weaving starts with spiral coiling. As the weaving progress, each turn is secured with previous turn by binding them. When materials like rattan is used, it is nailed to the previous coil when making large size basket. The interlocking between the stitches may or may not happen, which is depended weaver. Same technique can be to weave vertically. Using this technique shape like cylinder, cone and jar can be made.

Plait coiling: It is one of the simplest form of weaving products, it involves places of two set of strips vertically but slighting towards 60 degree angle and other set of strap interlacing them , so that each strap pass over one and under one, this process is continued still the required weaving pattern or result is obtained. Twilling can be done using the same technique, where one strip passes through more than 2 strips.

Multi-directional plaiting: Multi-directional plaiting is similar to the above mentioned process, the main difference is the implementation of the technique, multi-directional plaiting can be generally seen on the sitting chairs. The process is carried out on a chair frame with holes, these holes are made so that the strips can be passed through them. Artisan use three or more strips which are plaited in different direction. Once the weaving is completed, hole can be seen in the pattern which are hexagonal or octagonal depending upon the number of strips used.

Twining: This technique generally requires two set of elements. Generally, both the elements are the same materials. One element act as a passive and other act as an active element. In some of the product passive element could be the frame of product. Passive element is considered as wrap and active as weft, weft elements work as a pair. One weft strip passes below the passive element and other pass over it. They are twisted which helps them swapping over, nails are also used to strip permanently.

Artisan introduce heat to material like rattan and bamboo, which helps in shaping, these material are generally used as a main frame of the product to be made. The burnt outer layer of the frame is removed with the help of Sharpe blade. An artisan can use a single or all the technique to weave the required item. Depending upon the product to be made and availability of the raw materials.

Design Resource

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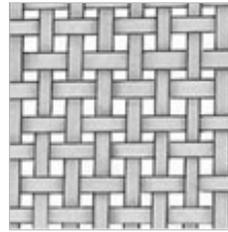
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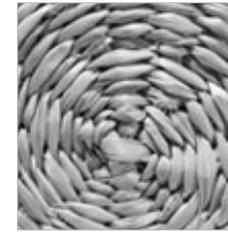
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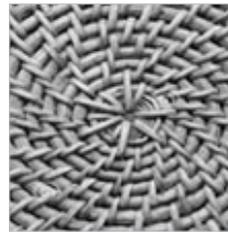
Some of the most commonly used pattern are:-



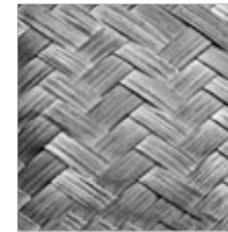
Circular weaving



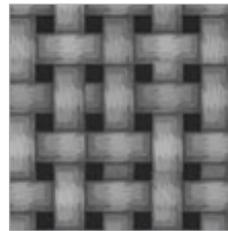
Rectangular weaving



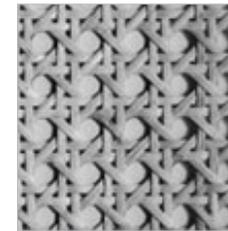
Cross weaving



Spiral weaving



Hexagonal Weaving



Square Weaving



Twisted Weaving



V-shape Weaving

1. Introduction

2. Tools and Raw Materials

3. **Making Process**

4. Products

5. Video

6. Contact Details

Design Resource

Cane Furniture - Panaji, Goa

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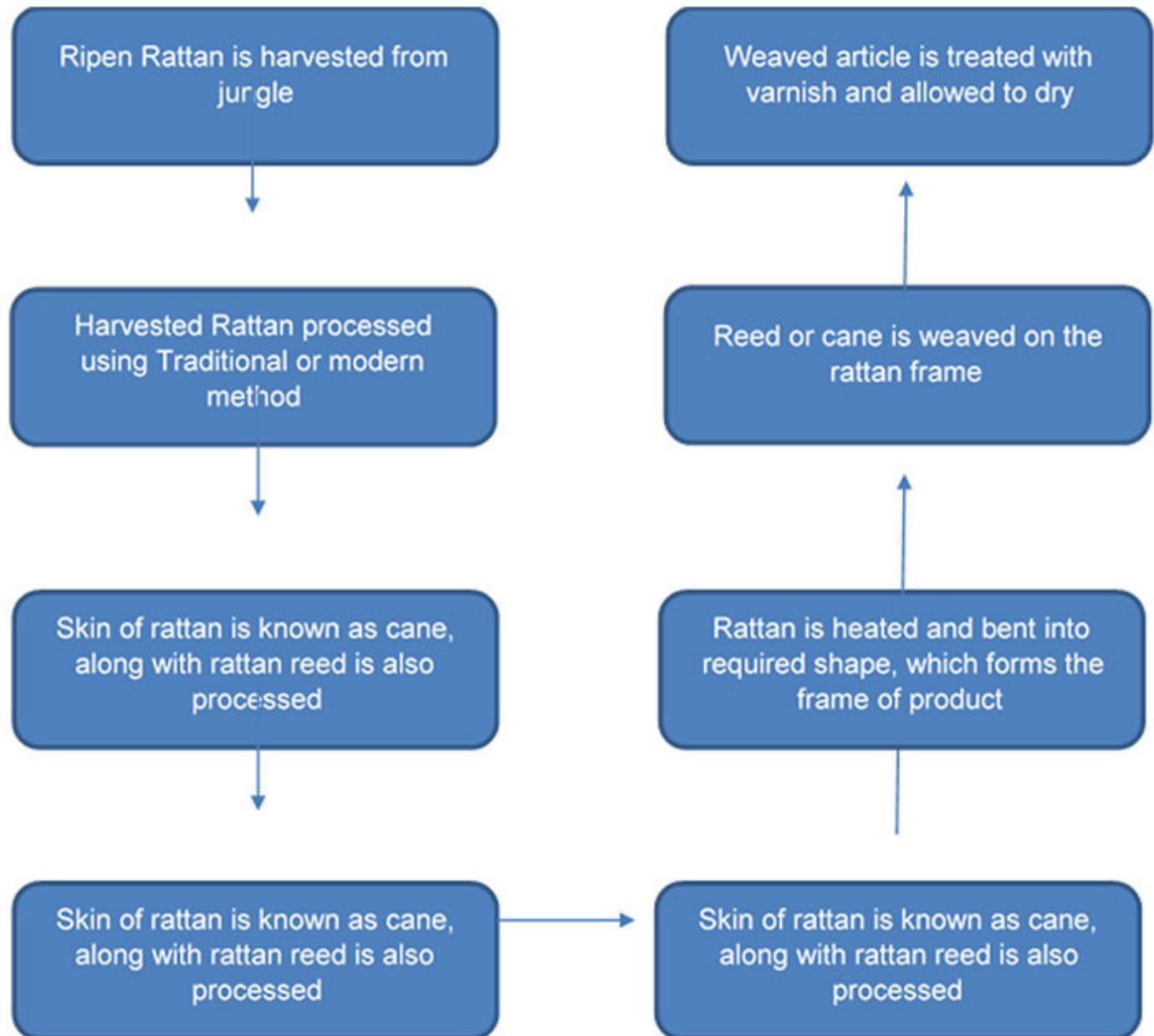
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Flow chart:



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

Design Resource

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Reed and Rattan Furniture

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Artisan is cutting the cane strips into a required size.



Cane strips are being dipped in water.



Cane sticks are being cut into required size.



Burner is used to heat the cane.

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

Design Resource

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Source:

<http://www.dsource.in/resource/cane-furniture-panaji-goa/making-process>



Using the burner cane is bent to the required shape.



Artisan is marking on cane using measuring tape.



Cane sticks are being arranged and nailed by artisan.



Artisan involved in making of cane light lamp.

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

Design Resource

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<http://www.dsource.in/resource/cane-furniture-panaji-goa/making-process>



Cane sticks are sliced using customized tool.



Cane strips are then knitted with patterns to make light lamp.



Artisan involved in making of cane work.

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

Design Resource

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Source:

<http://www.dsource.in/resource/cane-furniture-panaji-goa/making-process>



Artisan involved in using burner to remove the extras.



Polish is being applied on the finally completed.

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

Design Resource

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Reed and Rattan Furniture

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Source:

<http://www.dsource.in/resource/cane-furniture-panaji-go/products>

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

Products

As there is no limitation of the size or pattern of the products, there is a huge variety of available in the local market of Goa, generally the products made out of cane and rattan are home decoration items, wall hanging, chairs, swings, light shades, basket etc. the size of the product varies from one feet to 6 feet and the price varies from INR1000 to INR 60,000. The price of the custom made products can go in lakhs.



Relaxing chair made of cane.



Coffee table made of cane.

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Source:

<http://www.dsource.in/resource/cane-furniture-panaji-goja/products>

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



Sofa made of cane.

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Source:

<http://www.dsource.in/resource/cane-furniture-panaji-goa/products>

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



Side stool made of cane.



Chair, which can be used with coffee table.

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Source:

<http://www.dsource.in/resource/cane-furniture-panaji-goja/products>

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



Cane stool, which can be used in leaving room.

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Video



Cane Furniture - Part 1



Cane Furniture - Part 2

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

Design Resource

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

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You can get in touch with

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