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Design Resource

Chick Mat Making - Gujarat Chick Mat Making - Ahmedabad

by

Prof. Bibhudutta Baral, Divyadarshan C. S. and Rakshitha

NID Campus, Bengaluru

Source:

http://www.dsource.in/resource/chick-mat-making-gujarat

- 1. Introduction
- 2. Tools and Raw Materials
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Introduction

Bamboo is a well-identified plant all over the world; predominantly in Asian countries especially in India bamboo is very famous since epic age. Lord Krishna is associated with it as his flute was made of bamboo, so bamboo is more ancient than Krishna i.e. more ancient than the poet who apprehended the idea of Krishna. The introduction to Maha Bhagavata mentions about the groves of bamboo. There doesn't exist any sign that anyone went to study about bamboos till the visit of a Dutch scientist Van Rheede to India in 1678 AD. He has described in his work "Hortus Malabaricus" two species of bamboos, which are now recognized as Ochlandra rheedii and Bambusa arundinacea. Subsequently more such research continued and more bamboo species were acknowledged. So India has the greatest demand for bamboo varying from region to region. Some says that India is the origin of bamboos.

During post-independence period many number of paper mills were established, bamboo remained as a chief raw material for manufacturing paper. So the bamboo plants were cultivated in large-scale as they grow quickly. Bamboo was traditionally identified not only for the purpose of paper making, strip boards, mat boards, veneer, plywood, particleboard and fiberboard but also being a cheap raw material it was used for building rural dwellings, manufacturing utilitarian goods like baskets, mats, different crafts, weaving and revolving apparatus in textile jobs, storage bins and ornaments making. And the other use of bamboo includes agriculture as well.

Bamboo is included in the family of gramineae grasses. They are large plants with stems of woody character. Bamboo is generally grown rapidly in the rainy season. In general there are 75 and 1250 bamboo species discovered. India is the second largest country in the world as China stands first in place in both the variety of bamboo species and their distribution. Also bamboo is grown in USA, Japan and other neighboring countries along with China and India. In the year 2008 the annual production of bamboo in India was expected to be 4.5 tons and in this less than half of it is being used by paper manufacturing industries. Most of the species we come across in our country are original, of them there are 2 primary species Dendrocalamus asper and Bambusa arundinacea. They are generally suitable for house constructions and are mostly found in dry and moist regions. Bamboos also suffer from fungal attacks. The remedy adopted by laymen is to cut them after they become 5-6 years old and left standing with the leaves in a vertical position for a week or so to drain away the water. They should be cut only during certain months. Rainy season should be avoided for cutting.

The other practice followed by our villagers from ancient times is to keep the bamboos submerged in water for three months and then dry them. The water helps in the removal of sugar and carbohydrates. There are also other methods that are followed. The bamboos are stalked on lofts above the fireplace. Smoke bamboos are used for manufacturing the superior quality bamboo items, which are meant for exporting. The bamboos are also chemically treated depending on their end products. Numerous chemical combinations are used in different methods of treatment. Usually manufacturers need cost effective and also environment - friendly treatment methods for mist bamboo during its susceptible stage. Recently hydrochloric acid has been shown to provide good protection for bamboo when compared with sodium hydroxide.

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Dendrocalamus asper is the bamboo species, which is most commonly used for making crafts and utilitarian things as it is found in large quantity in India, Sri Lanka and other neighboring countries. This dendrocalamus asper bamboo is also known as rough bamboo or giant bamboo and its origin is from Southeast Asia. This Dendrocalamus asper bamboo grows up to a height of 15 to 20 meters. And the thickness of the bamboo walls is approximately 11 to 20 mm. As it goes towards the top the thickness of the bamboo walls tappers. The origin of this dendrocalamus asper bamboo probably originated from northern Malaysia.

Dendrocalamus asper bamboos are used as a construction material. The bamboos are also used as containers for any kind of fluids, laminated boards, furniture, musical instruments, chopsticks, everyday utensils and crafts. Young branch are sweet and considered as a delicious vegetable. Dendrocalamus asper bamboos are used for these chick mat making. These mats are used as window shades and blinds in summer season. Chick mat making is quite an ancient craft, but simple and stylish and it produces remarkable outcomes. The specialty about this craft is that it has a large supply of raw materials and needs very less tools. These mats are eco-friendly with manually functioning systems. As the natural bamboos are used for making chick mat, it keeps the room temperature cool and pleasant. These chick mats are sleek and adds an earthy feeling with contemporary flair to the room. Best of all is they are easy to make and inexpensive.

Gujarat is very famous for handicrafts, one among them is 'Chick mat making'. A glimpse of West Indian handicrafts help us to realize that West India is filled with the large number of talented people who are well versed in artistic works. These crafts are not only known to people of India but also it is famous all over the globe. People of South Gujarat mainly depend on making variety of crafts out of bamboo and earn their living. Whole of the family members work jointly in preparing this chick mat making and it is their family occupation. These people are economically unstable and are educationally backward. Bamboo plays a major role in providing employment to these people. Not only that, it also provides employment to the whole of the family members by minimum investment. These people go to the forest area and bring the bamboo bundles loaded on their head. They go in a group of 3 or 4 members in search of bamboo and bring them. Per day an individual can cut around 30 to 35 bamboos. While cutting the bamboo people see to that the average length of six feet is cut down so that they get 4.5 m long bamboo for their work.

One among the nomad families who are dependent on making bamboo wares is Rajesh's family at Gujarat. His ancestors are from a different country. Rajesh's family took up this 'Chick mat making' for leading his livelihood as he found this job to be learnt easily and with very less investment. His education is upto 4th standard and his wife's educational qualification is upto SSLC. So his wife looks after the finance and Rajesh works on the orders he gets for chick mat making. They buy the bamboo from the wholesale dealers and they directly start making mats without treating the bamboos as Rajesh's family come from financially weaker sector and they are unable to afford for treating the bamboos. His whole family works in the process of mat making. They divide the work among themselves and make mats for a living.

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A good length of chick mat completed.



Bigger bamboo stick being tied with nylon threads as the base.



Equal length of sleek bamboo sticks cut and held.

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Exchanging rubber pads to lock the bamboo sticks.



Bigger bamboo stick being tied at the mat as the border for the mat.



The chick mat is complete and the extra bamboo stick is cut later.

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Tools and Raw Materials

Some of the tools and raw materials used for making the chick mat are listed below:

- Bamboo: It is used as the raw material for mat making.
- Saw: It is the tool used for cutting the bamboo.
- Sickle (Dao): Sickle is used for slicing the bamboo into pieces.
- Wooden Stick: It is used in tapping on to the sickle while slicing the bamboo.
- Nylon Threads: It helps in weaving the chick mat.
- Rubber Pads: It is tied at the ends of nylon thread for the weight purpose.
- Knife: It is used for cutting the nylon threads and peeling bamboos.



Wooden stand along with bamboo.

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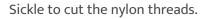
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Saw is used to cut the sleek bamboo sticks.

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Rubber pads tied to the nylon threads.

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Sleek bamboo sticks tied to make mats.

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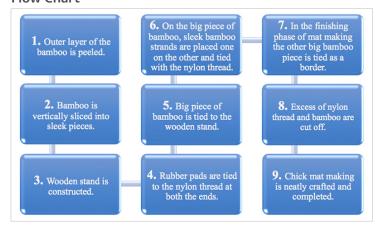
Making Process

Chick mat making looks simple, but it takes lot of practice and hard work to gain the expertise. The whole of the family members get involved themselves in the process of making chick mat. The craftsmen begin the process by taking the customer's order. The measurements of the windows and doors are taken. Initially the first outer layer of bamboo is peeled with the help of a knife. Then they are cut by the saw tool according to the measurements. Bamboo is made into two equal pieces vertically, later it is sliced into sleek pieces through the help of the sickle. The wooden stick is tapped on the sickle with a force, to slice the bamboo.

At a distance, big wooden beam is placed in the middle horizontally, by taking the support of the other wooden beams in both the ends, to make a stand like structure. After the structuring of wooden stand is made, the rubber pads are tied to the ends of a large nylon thread for the weight purpose. In some places instead of rubber pads even the stones are used. Numerous lengthy nylon threads along with the rubber pads tied at its corners are used for making a single mat.

Initially, the big piece of bamboo is tied to the wooden beam with the help of the nylon thread. From the second step the sleek bamboo strands that are sliced are kept one on the other on the big piece of bamboo and tied by the nylon threads, by rotating the nylon thread's ends vise-versa so that the bamboo strand gets locked within the nylon thread. And this process continues till the required measurement of the mat's length. And in the finishing phase of mat making the other big bamboo stick is added and both the corners of this bamboo stick is chiseled a bit for the grip purpose. This bamboo stick is also tied with the nylon thread at the end as a border for mat making. Later the extra nylon thread is cut and removed by the knife. The excess of bamboo strips, which are exceeding the measurement is also cut by the sickle and the crafting of chick mat is completed.

Flow Chart



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Bamboo pole is sliced to obtained strips which is a main material in mat making.

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Hard fibers are removed from slices using a metal blade.



Stand to construct the mat.

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Nylon threads with a counter-weight tied at the end to as guides.



Guides are suspended at equidistant and strips are fasten.

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Strips are fasten one after other with the help a nylon thread.

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It is important for artisan to maintain the distance and fastening the strips in balance.



Unwanted length of strips are trimmed.



Big bamboo strip is fasten at the end which acts as counter weight to mat.

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Extra length nylon threads are also trimmed.

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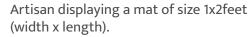
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Products

Mats: Chick (bamboo) mats are of affordable rates. It is available in various sizes to suit the customer's requirements and different shapes like rectangles and squares are produced. These chick mats are sold for Rs.35/sq.feet.







Husband and wife displaying the Chick mat.

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Many times, semitransparent cloth also used as mat.

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This documentation was done by Prof. Bibhudutta Baral, Divyadarshan C. S. and Rakshitha at NID Campus, Bengaluru.

You can get in touch with

• Prof. Bibhudutta Baral at bibhudutta[at]nid.edu

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

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