

# INDUSTRIAL COUNTERPARTS OF BAMBOO WOVEN CRAFT

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## ABSTRACT

Bamboo woven craft was mainly a tribal craft, used to make daily use products out of thinly cut bamboo strips. This research paper focuses on the challenges faced by the craft and the craftspeople at various levels. The objective of this paper is to understand the major industrial counterparts of bamboo weaving craft and how is it affecting the craft, why is it slowly disappearing? Is there any solution for those craftspeople who make a living out of this?

The paper also talks about how the private industries are working with this craft and the changes they are implementing into this. The paper concludes possible solutions and design interventions to support and uplift the craft and help protect the livelihood of the craftspeople.

The interviews with the local craftspeople Rajamma and Nagappa from Bangalore were one of my main sources for this study.

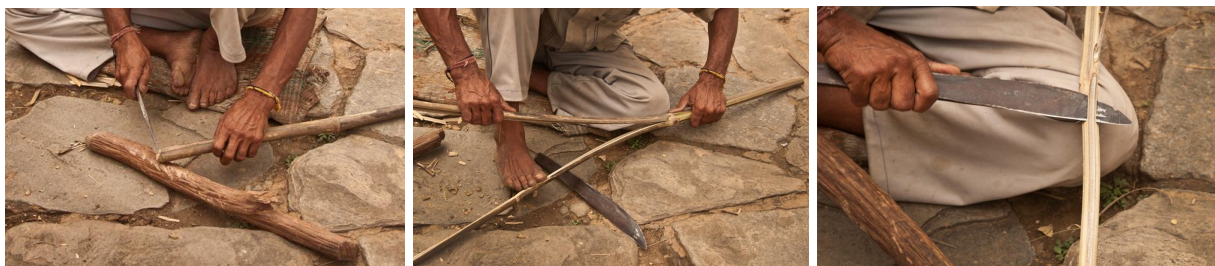
**KEYWORDS** - Bamboo woven products, Indian Forest Act, Plastics, Craftspeople, Private industries

## INTRODUCTION

Bamboo weaving is an art that has been followed for many centuries now in the Indian subcontinent. This craft was followed by indigenous communities, who developed patterns and shapes based on their local techniques and needs. But this practice has slowly been declining.

During an interview with the local craftspeople Rajamma and her husband Nagappa in Bengaluru, I understood that they were natives of a small village in Andhra Pradesh who moved to the city to make a living. Their sales are very low and this beautiful art form is slowly declining despite many efforts taken.

The process of weaving baskets is done manually by experienced artisans.



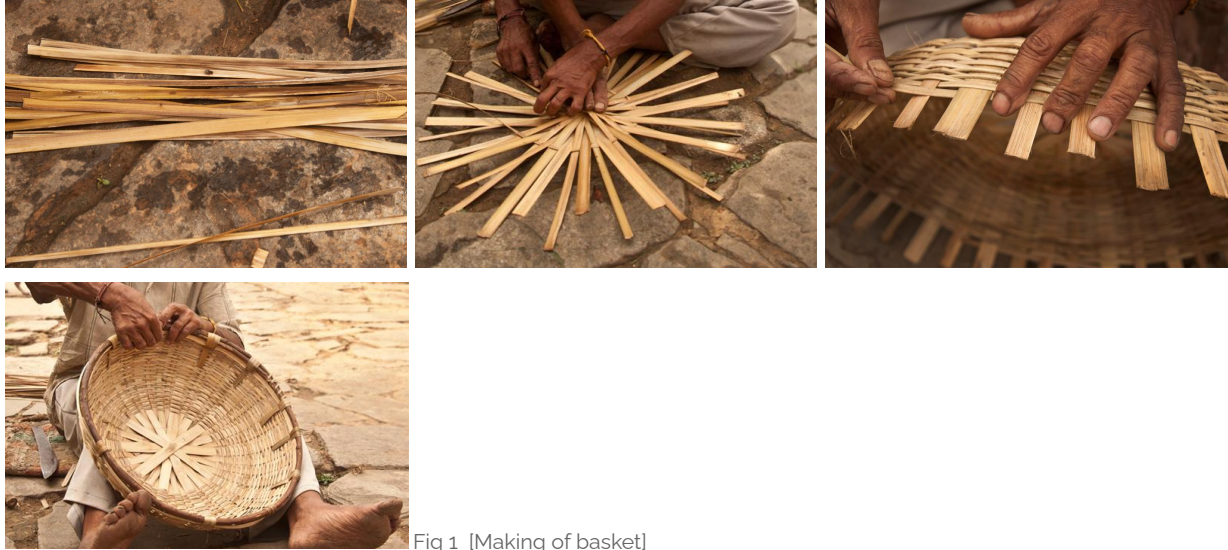


Fig 1 [Making of basket]

Bamboo is divided into strips of different sizes that vary in width, this process done using a sharp knife. Craftspeople arrange the strips in a circular manner to make the base of the basket and it is woven together to form required shapes. Only small groups of weavers are currently involved in this craft, and this number is reducing day by day. [1]

## BAMBOO - RAW MATERIAL

Bamboo is an important natural resource and billions of people depend on it and its related industries for income, food and housing. Although bamboo has immense properties, it is largely being used by the rural communities and *is seen as a cheap material and second to timber in urban areas*.

The rural part of India has better access to bamboo, also as this raw material has immense properties they are used for making many products. But due to their unavailability in the urban sector most of them prefer expensive timber. Due to their lack of knowledge of this valuable material it is looked down upon in the urban areas. [2]

Whereas bamboo and its products have been highly industrialised in few countries like China and whereas in other countries it is still a part of the informal and rural economy, trying to get the attention of the urban dwellers.

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[1] Prof. Bibhudutta Baral, Tushar Barman, Aruna Kumari Y. and Shruti K, Bamboo Basketry, Making process

[2] Priyanka Shukla and Mahendra Joshi, 2020, Social, Environmental and Economic Impact of Promoting Bamboo Furniture Industry in India, Page 7-8, 5/04/2022

Fig 1. Prof. Bibhudutta Baral, Tushar Barman, Aruna Kumari Y. and Shruti K, Bamboo Basketry, Making process

## STAKEHOLDERS

There are multiple stakeholders in the overall bamboo sector, including the state, forest department, local communities, artisans, industry, and civil society organisations. The main issue is between the state comprising the forest department, state or central government versus the society, in general, comprising local communities, artisans, and the tribal people.[3]

Although bamboo is a grass, *according to the Indian forest act, 1927 bamboo is defined to be a tree and when cut is considered to be timber, which is subject to trade restrictions.*[4]

### INDIAN FOREST ACT, 1927

The **Indian Forest Act, 1927** was mainly based on previous Indian Forest Acts which were implemented under the British. The British wanted to take control over everything, including the big and small trade that happened within the country. Their main aim was to regulate movement and transit of forest produce, and duty leviable on timber and other forest produce..[5]

Later on *around the year 2018* the government amended the forest act and brought changes to this act. Before it gave power to the government to regulate the trade and movement of bamboo, which deeply affected the livelihood of forest communities. Now it is not illegal to grow and cut bamboo. [6]

The other main reason is that in India the paper and pulp industry has traditionally been using bamboo and has tried to use innovative methods in its manufacturing due to its low supply. After this very little is available for other applications by the local communities. [7]

Uses	Consumption %
Pulp	35%
Housing	20%
Non - residential	5%
Rural uses	20%
Fuel(non - industrial)	8.5%
Packing,including basket	5%
furniture	1%
Others including ladders,mats etc	3%
Total	100%

[Source: Kumar and Tanya, 2015] Fig 2

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[3] Abhishek R Gawande, 2021, The Wicked Problem of Sustainable Bamboo Management, "Wickedness" of bamboo management.

[4] Arnab Hazra, Industrialization of the Bamboo sector, Page - 10

[5] Indian Forest Act, 1927, Wikipedia.

[6] Suneel Pandey, 2018, The amendment to the Indian Forest Act, 1927 will create new markets & jobs for poor communities.

[7] Arnab Hazra, Industrialization of the Bamboo sector, Page - 9, 14

Fig 2. Priyanka Shukla and Mahendra Joshi, 2020, Social, Environmental and Economic Impact of Promoting Bamboo Furniture Industry in India, Page 4

There are no policies and plans to rejuvenate the degraded bamboo forests, increase its yield and manage the distribution of the raw material. Bamboo needs to be effectively grown and distributed, [9]

## PLASTICS

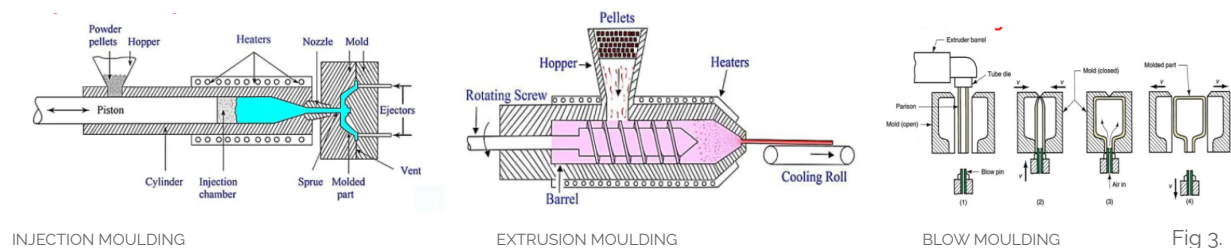
Based on my interaction with Rajamma and Nagappa, people are now shifting to plastic products as they find them more reasonable, long-lasting and cheaper. Currently the products made from bamboo weaving have parallel material counterparts like metal, wood, paper, cloth, glass, ceramics etc, *but out of all these plastic products are a huge threat to them.*

Plastic products are available in various ranges and are much cheaper than bamboo products. They are available in multiple colours and forms and many prefer it over bamboo ones.

## COMPARATIVE ANALYSIS

### MANUFACTURING

These plastic ones are manufactured in large scale at factories, by using methods like injection moulding, blow moulding, etc. For this the labour charges are very low, and the machines that initially cost a lot, they last for many years and hence invested upon. These processes help in mass manufacturing of products.



### PROPERTIES

Plastics have certain unique properties, i.e they can be used at a very wide range of temperatures, are chemical- and light-resistant and they are very strong and tough, but can be easily worked as a hot melt. Whereas the bamboo woven products are hand made and time taking.

Bamboo has properties such as high compressive strength, flexibility whereas plastics are light, tough and flexible material and long lasting.

Due to these properties and their low cost the annual worldwide demand for plastics has been drastically increasing.

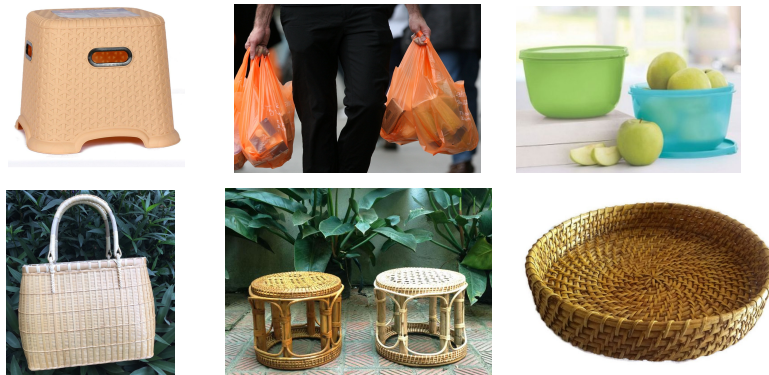
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[9] Arnab Hazra, Industrialization of the Bamboo sector, Bridging supply gap, Page - 15, 16

Fig 3. Digvijaysinh Gohil, Plastic processing, slideshare.



Largely the lower middle class and the poor of the society, want to invest in products that are cheap and can stay for a long time. And the rich tend to buy bamboo products merely as a show piece with the rest of the furniture either expensive leather, plastics, metal or other material.



Bamboo products and its counterparts

## PRIVATE INDUSTRIES INVOLVED IN THIS CRAFT

Currently there are certain private industries who directly work with the craftspeople. They work on developing new designs and products for the current urban context. The craftspeople weave them into beautiful products.

Bamboo Pecker is one such private institution located in Bangalore that is well known for its elegant bamboo products with intricate weaving patterns.

### **What is Bamboo Pecker doing? Are they helping the craft or are they industrialising it in a different way.**

Bamboo pecker uses India centred and earth centred approach, and through innovation and design provide sustainable alternatives to products used in daily life. Their idea is to uplift traditional craft with strong branding, utilitarian design and provide stable livelihood to craftspeople. Also to resolve the often-ignored yet growing issue of waste, high-embodied carbon products and the over reliance on concrete and metal products.

They are working on reducing the manufacturing time by introducing machinery, helping artisans to produce more in a shorter period of time. By introducing *design with technology to reduce the processing time*, they seek to become an interdisciplinary and manufacturing hub for designers to design and manufacture products with natural materials and rural artisans.[11]

My observation after visiting their store was that their user group is restricted to a few people, as their products are quite expensive. They seem to be selling their products only to certain sections of the society. That way their aim to promote sustainable, eco friendly products is very limited.

*The very idea of reducing the processing time is disrespecting the essence of the craft.*

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[11] Bamboo Pecker website, <https://bamboopecker.com/pages/our-story>

Though their intention to uplift the craft and the artisans is right, they are following the path of industrialising the craft by introducing machinery to increase the number of products produced in a given time, wanting to become a manufacturing hub for designers.



Fig 4.

## WORLD'S PERCEPTION AND MARKET

With depleting natural resources and changing policy scenarios, bamboo is increasingly looked upon as the most preferred alternative wood material. Despite having such enormous potential for both nature and society, the bamboo industry in the country is still at a growing stage. Although bamboo has immense properties, it is largely being used by the rural communities and is seen as a cheap material in urban areas.

Traditionally, bamboo has been harvested in the natural forest and its use has been limited to temporal constructions and low-quality utensils prone to rapid decay. Consumption or utilisation has therefore been direct and restricted to poorer people with low income and low purchasing power. Market linkage has as a consequence been weak or non-existent in many countries.[12]

Unlike the other industries bamboo products do not have a connection between consumer demands, taste, manufacturers and artisans.

The bamboo sector in most other countries is still a part of the informal and backward rural economy. There has been an inability to grab the large potential, which has been successfully demonstrated by the Chinese bamboo industry.

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Fig 4. Bamboo Pecker website, <https://bamboopecker.com/pages/our-story>

[12] Arnab Hazra, Industrialization of the Bamboo sector, Bamboo based Industrialisation, page - 8

In India bamboo plays a very important role in the lives of the people of North-east states. The bamboo craft tradition of the North-East has earned much popularity through the craftsmanship of the regional tribes. North Eastern Region (NER) of India.

The region is composed of different tribes and tribal groups, each with its own distinct culture and features. One of the excellent craftsmanship of the various North-Eastern tribes is their vigorous bamboo craft tradition. A large population is capable of this sophisticated craftsmanship. [13]

## COMPARATIVE ANALYSIS TABLE

Bamboo woven products	Plastic products
1. <i>Sourcing of raw materials -</i> Bamboo is comparatively difficult to source.	1. <i>Sourcing of raw materials -</i> Plastic is easy to source.
2. <i>Time involved -</i> It is a hand woven craft and involves processes to treat bamboo, hence time taking. Only a few products can be made in a day.	2. <i>Time involved -</i> These products are produced in mass number. Hence many products can be produced in a day.
3. <i>Sustainability -</i> Bamboo is a grass and grows very fast. It is one of the most sustainable material. The complete process of cutting of the grass, treating it and making final products using traditional methods consume less energy and do not emit any harmful substance in this process.	3. <i>Sustainability -</i> Plastic products are very harmful. The material can not be degraded and products end up in landfills after use. The process of making these plastic products requires high amount of energy and also releases harmful substances into the environment.
4. <i>Community involvement -</i> It is usually practised by a group of families and the craft is passed down from generation to generation. It creates a sense of community among people.	4. <i>Industrialised -</i> They are meant for mass-production, with low labour workers. Does Not create a sense of community.
5. <i>Government support -</i> Does not gain a lot of support from the government. No incentives are provided or subsidised tools and raw materials.	5. <i>Government support -</i> These industries are highly profitable and hence gain a lot of support from the government.

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[13] Prasansha shah, Bamboo/cane weaving in North-east, 2020

## SUGGESTIONS

All the study and research have made it apparent that change needs to be brought into this sector for the good of the craftspeople, the environment, and the ecosystem as a whole.

### **Awareness :**

Local communities are unaware of the recent high demand of bamboo products as they are more sustainable. Many of them are still continuing to make only the traditional products and not developing the designs based on the current scenario.

Also there is a lack of awareness among the urban dwellers, who always choose plastic products for convenience even when parallel bamboo woven products are available at reasonable rates.

### **Policies :**

There is also a lack of an organised market for bamboo farms. *Few policy changes could bring huge changes to the acquisition of raw materials and production of products.*

### **Incentives:**

The craftspeople need to be given incentives by the government as a source of encouragement and support for making sustainable products.

### **Perception:**

Perception towards the craft needs to be changed. Most of them are seen making baskets near the footpath and roadside tents. They do not even have a decent workspace to work at.

Many years back this was a community thing, but now you can only see a few families involved and no sense of community anymore. These issues could also be the reason why the craft is perceived to be cheap and unimportant.

There is a need for basic tools and a decent workshop space to work at and try to bring up the sense of community again. Conducting competitions and exhibitions to test their skills at the craft could also encourage them and also give them a platform for better opportunities.

## CONCLUSION

India has one of the most extensive bamboo resources in the world, but they are not utilised effectively. Over the years the industrial counterparts have almost replaced these beautiful handicrafts. They simultaneously made a lot of craftspeople lose their jobs and also have a tremendous impact on the environment.

These traditional crafts arose and grew as a community thing and is extremely important to preserve this skill and craft. These craftspeople can be provided with incentives by the government. Local communities can be set-up by the municipal corporation.

People can be encouraged to produce the least amount of plastic waste. Those who choose to buy bamboo woven products over plastic ones in large quantities could be provided with advantages.

These tiny steps could help create a path to change the future of this craft and make it more acceptable in the society and not see it as a cheap product anymore.

