

# Design And Development Of Innovative Craft Products Using Bamboo

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*Abstract: Bamboo craft is one of the ancient type of craft practiced in the regions of South and South East Asia. Earlier, people started using bamboo as a vital part in their primitive living in the form of utensils, shelters, etc. Later it was used in the construction of houses in the forms of pipe connections, partitions, furniture. As wood became more expensive, people weren't able to afford them but they needed something that was similar to that of wood with good strength and quality. There arose the bamboo and its handicrafts, home furnishing, elements of construction, etc. The study focusses on the history of bamboo crafts, materials used, forms of bamboo, the products learnt by the researchers, their methodology, final innovative and value-added products created by the researchers. The researchers having undergone a training acquired more knowledge on the preparation, treatments, techniques used in the craft. The study also discusses the combination of both traditional and modern techniques and innovations made in the crafts to reach out people more effectively. The results show the features like durability, aesthetics, strength and appearance of the developed bamboo craft products.*

## I. INTRODUCTION

Home decors are generally done using wood, such as hard and softwood. Most commonly, quality products are made of hardwood which is obtained from oak, maple, mahogany, teak, walnut, cherry, and birch. Alternative raw materials for wood are Bamboo, Hemp, Wood Composites, Plastic, Soy, Cork, Cardboard, etc. Bamboo belongs to the grass variety of family Poaceae. It is the non-wood species that abundantly grows in tropical and subtropical zone. Bamboo is inexpensive, fast-growing, durable, easily available and it also has comparable physical and mechanical properties as wood and natural with lesser involvement of chemicals during their processing sequences. The methods, technology and equipment for wood processing cannot be directly applied in bamboo utilization, but there are specific tools and processes to work with bamboo. Traditional techniques are used along with the modern ones and these crafts are revitalized by

several organizations and individuals as an initiative to promote and protect this valuable craft by various projects, events, workshops. With modern techniques and adapted technologies, bamboo can be processed into a wide range of products which successfully compete with wood and other raw materials.

## II. METHODOLOGY

It was imperative to diversify the bamboo craft and develop innovative and useful products in low cost to attract the people. Keeping these facts in mind, a study was conducted with the following objective:

- ✓ To document the bamboo craft from Kondalaampatty cluster
- ✓ To develop unique bamboo products that has a aesthetic look and available at reasonable cost.

- ✓ To develop accessories using bamboo.
- ✓ To develop multi-purpose and contemporary products.
- ✓ To give value addition to bamboo by dyeing.
- ✓ To create bamboo products using intricate designing.

## PHASE I

### A. CLUSTER VISIT AND SELECTION OF SUBJECTS

The primary information about the bamboo craft was collected from the Indian Handicrafts, Ministry of Textiles, Govt. of India. The study about bamboo craft and craft training was carried out in Naatamangalam at Kondalaampatty post, Salem. The cluster is located in a peaceful surrounding in the rural region of the city. The artisan was trained under the support of Indian government through the Handicrafts department from Assam. The artisans helped in providing information on bamboo products, commercial availability in the market, materials necessary for developing bamboo craft got insight, methodology of production, promoting the products. It is also observed that their children are involved in making the craft. The craft is thus inherited to their next generation.

## PHASE II

### B. DEVELOPMENT OF BAMBOO PRODUCTS

In phase II of the study, the bamboo products were developed. Different methods and techniques were used to develop innovative bamboo products.

- ✓ Bamboo products in the form of accessories.
- ✓ Bamboo products in contemporary style.
- ✓ Bamboo products that are dyed.
- ✓ Bamboo products using intricate designing.

The developed products are unique and innovative from the existing range of bamboo products. The consumer preferences were studied with the help of survey. The developed products were assessed using likert scaling. The nine-point scale was used to rate the developed products based on the consumers' likings. The five point rating scale was used to assess the durability of bamboo over wood (more durable-1, durable-2, neutral -3, less durable-4, not durable-5). Apart from this, open ended and direct questions were also used. The attributes on which the evaluation of bamboo products was done were based on design, functionality, aesthetic appearance, cost of the product, promotion and future of the bamboo products.

## III. RESULTS AND DISCUSSION

### A. FINDINGS OF PHASE STUDY

#### a. HISTORY AND EVOLUTION OF THE CRAFT

Bamboo is known as "poor man's timber". Ethnic tribes of the region use bamboo in their daily life. It has a history as a multipurpose and versatile material. No other plant has as many uses and impacted so many cultures. It has a long and

interesting history dating back more than 5,000 years. In India it is most popularly used in northeast India. It is an extensively used plant resource and its associated with all aspects of human life including food, medicine, craft, agricultural, implements, building material, cordage etc. The north eastern region of India is rich in cultivation of bamboo. In India it is very popular due to their eco-friendly attributes. The bamboo and cane bamboo crafts had been occupying a significant position in India. The bamboo crafts are combined with a cane and had been a part of Indian crafts which is giving rise to tribal art and provide livelihood to the art. The Indian artisans are sure-handed in creating bamboo crafts and arrays of bamboo items like crafts, furniture, utensils, baskets, etc. The craftsmen create different items with the help of bamboo and canes that are locally known as siruvari, sundi, barjali, harua and golla and are used for making furniture and baskets. Generally, the products of bamboo are of two types, products required for day to day use and of medium quality for local requirements and the other type is of products that has finer quality and are decorative and functional to meet the requirements of sophisticated market. Indian states like Assam, Tripura and West Bengal are famous for creating beautiful bamboo items like mugs for rice beer, hookahs, musical instruments, floor mats, fishing hooks and handles. Cane is the type of raw material combined with bamboo to make products. The usage of cane helps in increasing the flexibility. Cane is used to make trays; baskets and many utilitarian objects. Walajapet in Vellore District is famous for cane articles. Bamboo and cane crafts is gaining admiration from all over India and the Indian government is taking steps to promote this type of ancient and tribal craft to capture the international market. The bamboo and cane crafts have been the backbone of the Indian rural economy of the country.

According to [www.connect2india.com](http://www.connect2india.com), India has imported bamboo from 76 countries of value 135.7 million USD in 2018. Largest importers of bamboo to India are Germany, china, Italy, Singapore etc., bamboo is being categorized under has code 200591 based on harmonized system of classification of products. Total import of bamboo in India in recent days is 199.09 million INR.

The cluster gives training to enthusiasts, self-help groups, volunteers in motivation of creating more awareness about the craft. The cluster use both automatic and manual way of production. Though work is tedious and hardworking, they do create quality products with some creative touch.

#### b. TOOLS USED

The tools used are manual, power-based and machineries. Koduva (Figure 1) for cutting and scrapping the surface to make it smooth, Emery sheet (Figure 2) to sand the outer surface i.e., to make it uniform and smooth. Manual driller (Figure 3) to make holes in the bamboo. Hammer (Figure 4) is used to affix the nail onto the surface. Asher blade (Figure 5) to trim the edges, split open the bamboo. Drill bits are those nail-like structures that are been fitted at the end of the driller. Drill bits helps in drilling the hole onto and surface. There are several types of drill bits that can be fitted in the driller. These drill bits are based on inches. There are variations in sizes, twists of drill bits etc. Cutting machines (figure 6) for splitting

the bamboo to required sizes and widths, Puffing or grinding machines (Figure 7) and sanders to make the surface even and smooth, Power drillers are also used to make holes in the bamboo. The power tools and machineries are used in mass production of bamboo products.



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5



Figure 6



Figure 7

**c. RAW MATERIAL**

The types of bamboo and the type of product made from each bamboo type and its place of availability is shown in table 1

S. no	Type of bamboo	Product	Available place
1	Sirubarai	Furniture	Belgaum, Karnataka
2	Kalmoongil	Flower vase	Andhiyur and Yercaud
3	Bamboo ply	Base	Angamali, Kerala

		material	
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Table 1: Types of Bamboo

The raw materials used for making bamboo products are bamboo, Cane strips (figure 9), nails (Figure 10), varnish(Figure 11), chemicals, adhesives like bondtite A and bondtite B (Figure 12), fevicol, etc., Bondtite A and B are those adhesives that are used to stick two or more components together adding strength and evenness in the surface. It is also used to fill the cracks in bamboo and make them uniform as other part of the bamboo. Bondtite A and B are taken in equal proportions and saw dust is mixed to it to make a mucilaginous paste and is applied to fill the cracks. Varnish is used to give the product a glossy appearance and to protect the same from any insect attacks. Varnish is combined with thinner and is applied to the bamboo surface.



Figure 8



Figure 9



Figure 10




Figure 11



Figure 12

The bamboo used for developing products are available in different forms like fibre form, strips, sheets, sticks. The forms of bamboo are shown in table 2

S no	Forms of bamboo	pictures
1	Bamboo strips	



2	Bamboo sheets	
3	Bamboo sticks	
4	Bamboo loops	

Table 2: Forms of Bamboo

*d. TECHNIQUES FOR PROCESSING BAMBOO*

The processing of bamboo involves different techniques like Cutting; Scraping; Marking; Splitting; Dyeing and Burning. Cutting is done to cut the bamboo in required size and shape based on the product to be developed. Scraping is carried out by using kuduval to remove the outer layer of the bamboo to give neat finishing and smoothening. Marking is done to mark the measurement of the product in the development process. Splitting is carried out to break bamboo strips that are used for weaving. Width sizing is done to reduce the width of the bamboo. Dyeing is done to give additional colour to the bamboo to enhance aesthetic look to the product developed. Burning is carried out by using the blow torch to change the shade of bamboo. The Cutting, Scraping, Marking, Splitting processes are shown in figure 18,19,20,21,22 and 23.



Figure 18



Figure 19



Figure 20



Figure 21



Figure 22

*e. EXISTING RANGE OF PRODUCTS*

Flower vase, Pen stand, Photo frame, Lamp Container (weaving), Chair, Mirror, Fountain, Other than these products they also produce interior decors like wall hanging, partitions, false ceiling, decorative lights, furniture like chair, table, cot, dining table, garden set, outdoor decors, easy chair, sofa set etc., Cutlery and stationary products are produced.



Figure 24: Existing Range of products

*f. CHALLENGED FACED IN BAMBOO CRAFTS*

The challenges in this craft are packaging and transportation. Though the packaging is done safe, there are chances for the products getting damaged due to force applied over them during transportation. A simple basic packaging using carton boxes with inner layering like thermocol, hay etc., for the safety of products can reduce the impact in greater levels based on the safety measures taken regarding. Another important threat is the material transportation. Material transportation can be more expensive at certain cases where the raw materials are been sourced from distant regions i.e. different states. Import of raw materials is usually an expensive task to be done to produce the desired products.

*g. WORKING CONDITION AND WAGES*

The working conditions of our trainer is in small scale. He does have a unit on his own fully equipped with necessary machineries. The process of working is more tedious and tough on talking about machineries. They don't have employees as such. The trainer works along with his family on his own and produces the products. He does train local people and thus products are been developed as a part. Mostly he does work on his own and products are been sold. The average profit gained would be around 40%. It is based on the order and demand of the products. The average turnover would be Rs.25000 to Rs.40000 excluding the material cost.

*h. MARKETING OF THE PRODUCTS*

They do have an online retailing through amazon.in (Figure 25, Picture courtesy -Amazon .in) in the name of ASK BAMBOO CRAFTS. They also promote their firm with the help of flyers, brochures, etc., creating awareness among the people in one or the other way. They do sell and display their products in exhibitions conducted.

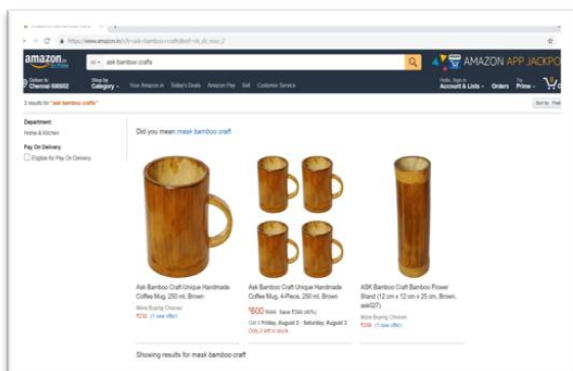


Figure 25: Marking of the bamboo product

**B. FINDINGS OF PHASE II STUDY**

*a. ACCESSORIES*

*Product 1: Two sets of earrings*

Variation 1:

Cut the bamboo cylinder cross sectionally to obtain rings out of it for the base as shown in. The size of the bamboo can

be as desired. Here we have used the medium Size. Sand out the rings using emery sheet to make the surface smoother. Cut the smaller sized bamboo cylinder into smaller portions as shown in. Six smaller rings for an ear ring is needed. Therefore cut 12 such pieces and smooth their surfaces as before. Cut two vertical portions out of the smaller sized bamboo cylinder such that they fit into the base rings as shown in and sand them. Take the strips of bamboo and cut smaller vertical strips so that they can be placed into the base rings. Four such strips are cut out. Glue the base, middle beam, smaller rings and strips together as shown. While it is drying, join the metal rings to the hook. Join the metal ring to the upper smaller cylinder. Glue pearl beads to the bottom portions and let them dry (Figure 26a). Once its dried completely, apply varnish to the outer surface to complete the product. (Figure 26b)

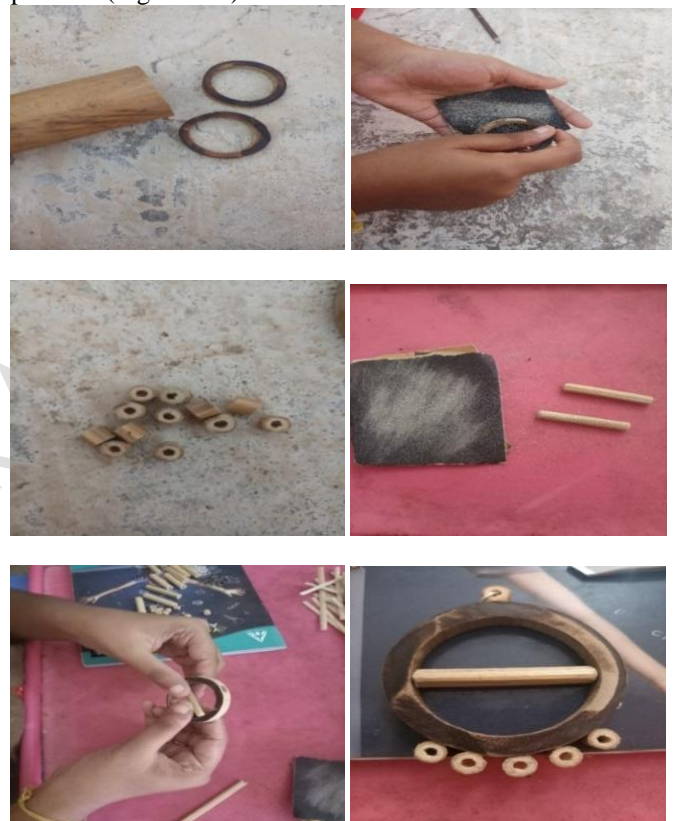


Figure 26a: Sequence of making bamboo earring



Figure 26b: Final appearance of the earring (variation 1)

VARIATION 2

Cut two vertical portions of the smaller sized bamboo such that the node is still present. Sand the outer surface slightly without much effect in the nodes to retain its natural. Take a metal wire. insert it through the hole of the bamboo.

Insert a pearl bead to the end and make a tight twist and secure the end. Twist the upper part of the wire to a loop and secure it. Join the metal rings along with the hook as the previous variation is made. Apply varnish to the outer surface to complete the product. (Figure 27)



Figure 27c: Final appearance of the earring (variation 2 )

*Product 2: Neck piece*

Cut the smaller sized bamboo cylinder into vertical portions of varied lengths. The smaller ones are for the beads, medium ones for the hangings and the larger ones for the support. Cut the pieces as Smaller ones-22

Medium sized ones-18 Larger ones-2 as shown in (figure28 a). Sand the outer surfaces of the portions. Drill holes at the top of the hangings as shown in (figure 28 b). Glue pearl beads to the ends of each medium sized pieces which acts as the hangings. While they are drying, take the larger pieces- supportive ones and drill three holes in them horizontally, one after the other. Take a larger piece and insert three twine threads in each hole. Take a pearl bead and insert a thread into it and make a knot at the end. Similarly make for the other two. take all three strands and insert them together into another bead and make a knot. this secures the end of the neckpiece. The other end of the twines is left free. Now make individual neckpieces as:

- 1<sup>st</sup> neckpiece-2 smaller pieces and 10 medium sized ones
- 2<sup>nd</sup> neckpiece-4 smaller pieces and 5 medium sized ones
- 3<sup>rd</sup> neckpiece-6 smaller pieces and 3 medium sized ones

Insert a pearl bead in between each bamboo bead. Make three neckpieces and insert the ends into the holes of the larger piece as before. Tie pearl beads to each of their ends and connect all of them together with a pearl bead and secure the same. Tie a small loop of twine around the end pearls at both sides. Insert the cord and secure the ends along the loop. Apply varnish to the outer surface of the bamboo beads to complete the product. (Figure 28 c)



Figure 28a-28b: Sequence of making Neck piece



Figure 28c: Final appearance of neck piece

*Product 3: Belt Buckle*

Cut the bamboo cylinder of desired size into quarters vertically. cut one such piece into smaller portions. Take a part and burn the outer surface using the blow torch as shown in (figure 29a) Let it cool under room temperature. Take another cut portion and draw a leaf over it and cut the same using koduva as shown in (figure 29 b). Shape the contour and sand the outline and smooth the same. Cut smaller strips of the bamboo strip and stick them over the leaf as veins. Cut the smaller sized bamboo cylinder into one vertical piece and one horizontal piece. Cut the vertical piece into half. Cut the cane filament into two smaller parts such that they fit to the contour of the base. Cut the medium sized bamboo into cross sectional ring and cut the ring into quarters. save them for future. Glue the horizontal piece of smaller bamboo to the base and stick the leaf at the top of it. Stick the vertical halves and cane in the borders of the base. Glue the semicircular parts of medium sized bamboo at the rear side of the buckle. Apply varnish to the outer surface to complete the product. (figure 29 c)



Figure 29a-29b: Sequence of making Belt buckle



Figure 29c: Final appearance of belt buckle

*Product 4: A Pair Of Cuff Links*

Cut the bamboo cylinder of desired size into quarters vertically. Cut one such piece into smaller portions. Take two such pieces and draw the leaf structure on them and cut the same using koduva as shown in (figure 30a) Shape the contour and sand the outlines and smooth the same. Cut smaller strips of the bamboo strip and stick them over the leaves as veins (figure 30b). Cut four small squares out of bamboo strips which are half the size of the leaf made and stick them together in pairs. Stick each of the square behind the leaves. Cut six vertical pieces out of the smaller sized bamboo where

three for each cuff link. Place them in a line and make holes at the end of the four parts and holes at the center in the remaining two parts. Align three pieces in a column in such a way that 1<sup>st</sup> and 3<sup>rd</sup> piece has holes at the end and 2<sup>nd</sup> piece has the hole in the middle whereas all the three holes align in a same vertical line. Insert a metal wire through the holes and secure the ends such that the middle part can be rotated easily. Similarly make one for the other cufflink. Glue the ends of 1<sup>st</sup> and 3<sup>rd</sup> parts and stick them to the backside of the cufflink over the square stuck already. Similarly make the other cufflink. Apply varnish to the outer surfaces to complete the product (figure 30c).

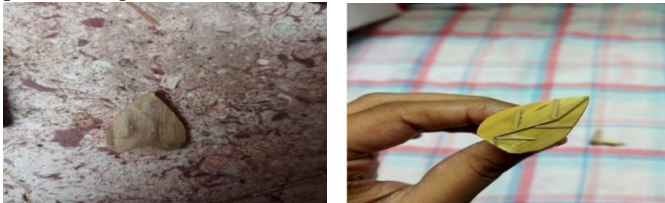


Figure 30a-30b: Sequence of making cuff links



Figure 30c. Final appearance of cuff links

#### Product 5: Brooch

Cut the bamboo cylinder cross sectionally to obtain a ring out of it for the base as shown in (figure 31a). The size of the bamboo can be as desired, here we have used the medium one. Sand out the ring using emery sheet to make the surface smoother. Cut the nodal part of the same bamboo cylinder as shown in (figure 31b) and shape it to the size smaller than the base so that it gets fixed into it. Stick three to four bamboo strips to the backside of the base ring. Once its dried cut them as per the shape of the base. Stick the nodal part onto the base. Stick the pearl beads and sugar beads over the ring. Make a hole at the middle of the brooch and insert a small piece of bamboo which acts as the clamp. Drill another hole in the clamp at the rear side of the brooch and insert a safety pin to it (figure 31c). Apply varnish to the outer surface to complete the product (Figure 31d)



Figure 31a-31c: Sequence of making brooch



Figure 31d: Final appearance of brooch

### C. BAMBOO CONTEMPORARY PRODUCTS

#### Product 6: Bamboo Weaved Musical Stand

The Outer layer of the bamboo is removed by using Sickle (Figure 32a). The outer surface is made smooth with emery sheet (Figure 32b). Random marking is done on the outer surface and the holes are drilled (Figure32c). The holes are blocked with thin bamboo hard stripes (figure 32d). The corners of the bamboo strips are removed (Figure32e). The surface is made smooth with emery sheet (Figure 32f). Small beads are inserted inside the hole. And one end is closed with bamboo sheet. So, once the bamboo is twisted upside down the sound of the water flow is heard. The Bamboo strips are cut into thin strips and pasted in the edges. Two layers of cane strips are wounded at the bottom layer and nailed it. And the weave pattern is created with two up and two down. The beads are filled and the top opening is closed with bamboo sheet. Finally, the varnish is applied on the top (figure 32g)





Figure 32a-32f: Sequence of making bamboo waeved musical stand



Figure 32g: Final appearance of bamboo waeved musical stand

*Product 7: Bamboo Multi-Purpose Pen Stand*

The Outer layer of the bamboo is removed by using Sickle (Figure33a). Measurements to place pen, cards and mobile are made (Figure 33b). The holes are drilled (Figure33c). Raw edges of the holes are made smoother using emery sheet (Figure 33d). Cane stripes are nailed at the end, the bottom is fixed and varnished.



Figure 33a-33c: Sequence of making bamboo multi-purpose pen stand



Figure 33d: Final appearance of bamboo multi-purpose pen stand

**D. DYEING IN BAMBOO PRODUCT**

General dyeing process : The vessels and stirring spoons along with dyes & mordent are taken. Water is taken in the vessel, dyes and mordent are added to the vessel along with the bamboo to dyed. Natural dyes (turmeric powder) and Reactive dyes are used. Stir the solution at regular intervals and heat them for 1 hour. Varnish the bamboo and leave it for one whole night for a glossy. (figure34a)







Figure 34a: Dyeing process of dyeing

**Product 8: Ring Toy**

The hollow bamboo is cut into circular pieces of different sizes (Figure35a), rod like bamboo to hold the circular bamboo and the compressed bamboo stripes for the base were taken. The surface of the bamboo is smoothened using sand paper (Figure 35b). The one side of the circular bamboo is shaped using the grinding machine. then, dyeing takes place using natural & reactive dyes. Natural dyes consist of turmeric and leaves, reactive dyes (hot brand) consist of four different colour shades. (figure 35c)



Figure 35a-35b: Sequence of making ring toy



Figure 35c: Final appearance of bamboo Ring toy

**Product 9: Butterfly Paper Weight**

The required shape of the design is drawn on the bamboo using pencil (Figure36a). The shape is carved using knife (Figure 36b). The surface is smoothen using sand papers. Dyeing takes place using both Natural & Reactive dyes (Figure 36c).



Figure 36a-36b: Sequence of making bamboo paper weight



Figure 36c: Final appearance of bamboo paper weight

**E. BAMBOO PRODUCTS USING INTRICATE DESIGNING**

**Product 10: Construction Steps For Bamboo Peacock**

The hollow bamboo is taken and it is cut into pieces of 2 inches (Figure37a). It is then made even using the sand paper. The bamboo is heated to get the color (Figure 37a). The desired shapes are then cut and small strips of bamboo is cut and decorated over it(Figure 37 c). These pieces are then joined together (figure 37d). The body of the peacock is carved from thermocol (Figure 37e) and wrapped with velvet cloth. The base stand for the peacock to stand is prepared and the pieces are joined together(Figure 37 f). The legs and the wings are attached. Finally, the varnished is applied on the bamboo. (Figure 37g)



Figure 37a-37f: Sequence of making bamboo peacock



Figure 37g. Final appearance of bamboo peacock

*Product 11: Construction Steps For Bamboo Flower Vase*

The bamboo is taken and the outer surface is sliced out (Figure 38a). It is then made even using a sand paper. It is heated using a blow torch with circle patterns over it (Figure 38b). Small rings are placed over bamboo and the circular shape is achieved using it(Figure 38c). Thin strips of bamboo are cut and kept. These strips are then attached to the main bamboo piece using fevicol. Finally, the varnish is applied all over the bamboo. (Figure 38d)



Figure 38a-38c: Sequence of making bamboo flower vase



Figure 38d: Final appearance of bamboo flower vase

*a. COSTING*

The costing of bamboo products are given in table 2 .

S.NO	Product Name	Price in Rs
1	Bamboo Rarring Variation 1 (Product 1)	1,947
2	Bamboo Rarring Variation 2 (Product 1)	708
3	Bamboo Neck Piece (Product 2)	829
4	Bamboo Belt Buckle (Product 3)	2,007
5	Bamboo Cuff Links (Product 4)	1,815
6	Bamboo Brooch (Product 5)	1,766
7	Bamboo Weaved Musical stand (Product 6)	578
8	Bamboo Multipurpose Pen Stand (Poduct 7)	400
9	Bamboo Ring Toy (Product 8)	830
10	Bamboo Butterfly Paper Weight (Product 9)	830
11	Bamboo Peacock(Product 10)	2020
12	Bamboo flower vase(Product 11)	1240

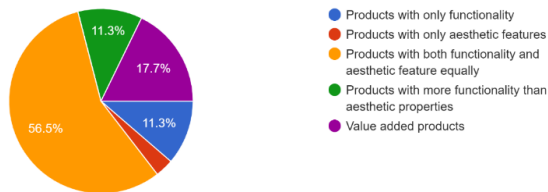
Table 2: Costing of the product

IV. CONSUMERS PREFERENCE ANALYSIS

A survey was conducted for 62 judges consisting of families and friends of age group 20-50 to determine the consumer preference for the developed bamboo products. The survey consisted of subject's name and were asked to give their preferences towards the developed products using the likert rating scale based on the design, appearance, combinations, aesthetics and cost of the product. The results of the consumer preference towards the bamboo products are shown in the Table 1 and Table 2. The results show that about 91.9% of people are aware of bamboo and about 48.4% of them expect their bamboo products to be authentic since bamboo has been used from ages with traditional designs. The percentage of people preferring bamboo over wood are only 40.3% and this maybe due to the constrains in bamboo such as its strength, availability and the cost spent. About 56.5% of people expect bamboo products with both functionality and aesthetics and about 75.8% of people want bamboo in home decors due its appearance, similar finish like wood and durability. The idea of value addition is about 46.8% for combining two or more mediums and this may be due the idea of overcoming the disadvantages of bamboo when combined with other medium. About 48.4% of people are ready to spend over Rs.500-Rs.1000 on bamboo products and regarding the promotion of bamboo products, 26.7% of people prefer conducting workshops since it reaches out more people and helps people to learn about the craft efficiently. The future of bamboo is expected with specific needs and about 45.2% of people have supported it and to achieve this, more research and development process must be undergone to enhance the properties of bamboo.

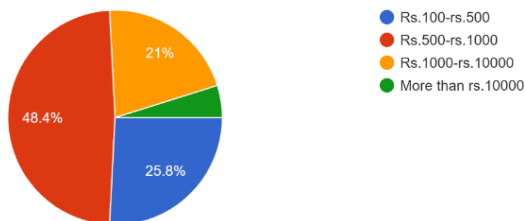
What variety of products do you prefer?

62 responses



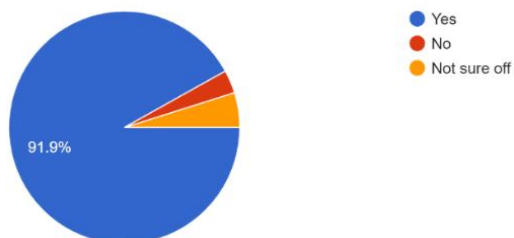
How much would you like to spend on bamboo?

62 responses



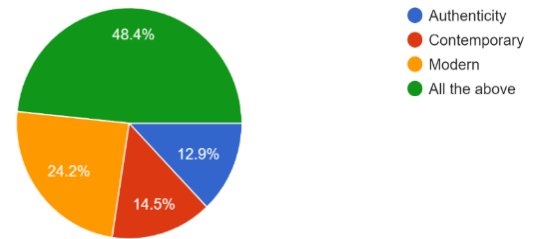
Have you heard of bamboo?

62 responses



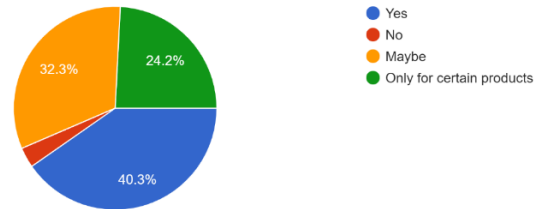
What is your expectation on bamboo products?

62 responses



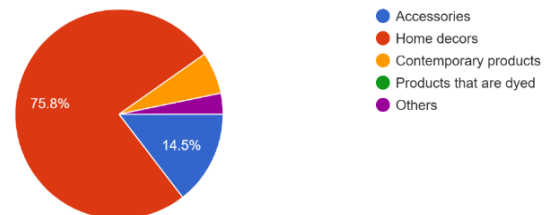
Do you prefer bamboo over wood?

62 responses



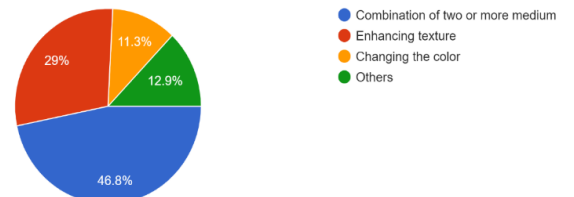
What kind of products do you want from bamboo?

62 responses



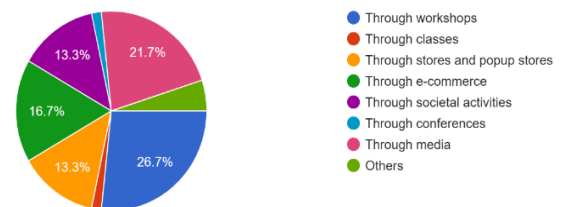
What is your idea of value addition on bamboo?

62 responses



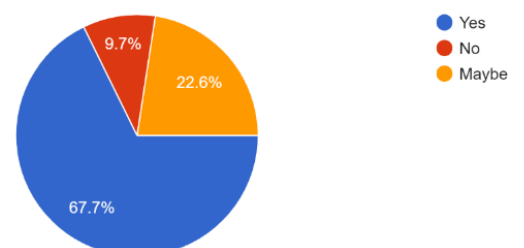
How do you think bamboo can be promoted?

60 responses



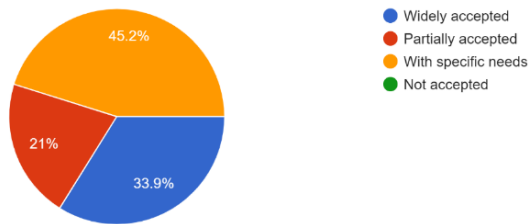
Is bamboo trendy and aesthetic for you?

62 responses



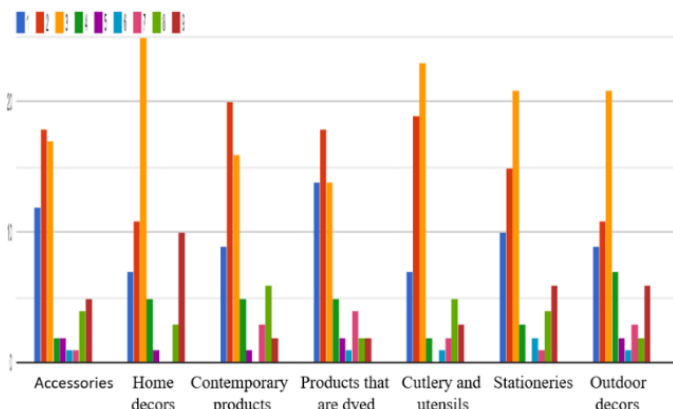
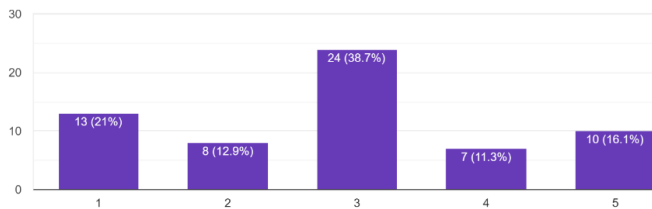
How do you see the future of bamboo products?

62 responses



What is your opinion on durability of bamboo?

62 responses



## V. SUGGESTIONS FOR CRAFT REVIVAL

- ✓ Conducting government funding workshops- government funded workshops can be conducted for home makers and unemployed people to widen the opportunity of the craft.
- ✓ Conducting classes and workshops for school and college students, working people, can increase their self-confidence and also gives mental relaxation from their daily chores.
- ✓ Unemployed people can be given opportunity to work with and can help increasing their monetary stature.
- ✓ Awareness through popup stores at malls can be included.
- ✓ Exteriors and decors of salons, restaurants and other places of entertainment can be made out of bamboo which creates an interest among the people over the bamboo craft and products.

## VI. CONCLUSION

The handicraft of bamboo is one among the oldest crafts better known to man. Being universally practiced at various regions, the artisans had observed to provide beautiful utility articles. Rural people in general are both producers and consumers of this product. The various product line leads to

innovation and attraction among the market. Home decors are such platforms in gaining attention. Being sustainable, ecofriendly and also cost efficient, it has a huge demand in the market. The artisans on the other hand are not recognized and they require a huge support from the government. In this paper, value addition to the products plays an important role as it brings enduse with aesthetics. The products being crafted serve various purposes which are new to the market. The dyes being used are also sustainable and also traditional techniques were used in changing the color of bamboo. Among the various types of bamboo, appropriate species were used depending on the enduses of the products. Bamboo combined with cane overcomes the disadvantages of both the products and thus creating value addition. The bamboo thus has a huge demand in the near future. It must also bring the artisan's effort to get a fresh lease of life with recognition and respect. Thus, it will also help to conserve the local natural resources as well as to revive and develop the age-old tradition of making bamboo handicrafts.

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