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Design and Construction of Bamboo Products and Rattan  
Accessories by the Local Artisans of Lahore Pakistan  
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## Design and Construction of Bamboo Products and Rattan Accessories by the Local Artisans of Lahore Pakistan

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### Abstract

**Purpose:** Bamboo and rattan are two materials that greatly affect all products, fixtures, and items designed and made by artisans in Lahore, Pakistan. The aims of this research encompass the study of the traditional and contemporary practices of design and the construction methodologies adopted by the people in the area regarding the formation of basic bamboo products and rattan accessories significantly basketry manufacture in Lahore. Coming from a backdrop of knowledge transfer within families, global resources and design trends, strong vectors for sustainability, minimalism, functionality, significant development in technique and aesthetics was taken up for analysis in the study. Further, it will discuss the economic stature of local artisans amidst the economic challenges.

**Methodology:** For this purpose, a comprehensive research has been conducted into the bamboo and rattan market in Lahore, Pakistan. The study documented insights from the interviews with local artisans specializing in bamboo and rattan craftsmanship and all their observations. The research has gathered rich first-hand data on design practices, material uses and infusion of modern influence in their work, as it engaged actively with the craftspeople.

**Findings:** The handicraft industry of bamboo and rattan in Lahore is feeling both challenges and opportunities. The industry had then begun to bear strained supplies, with growing costs towards the case of Pakistan's timber industry. Reduced spending by consumers has turned out to disrupt the supply line and eventually the livelihoods of those artisans, since rising material costs and government taxing were on the rise. It is strategic adaptations that will help the industry to prosper with government support and sustainable practice.

**Unique Contribution to Theory, Policy and Practice:** This study presented a number of recommendations for creating an awareness, developing frameworks, improving practices, and encouraging authorities to take major actions in order to support bamboo and rattan artisans in Lahore, Pakistan. It could be focusing on historic handicrafts, modern design concepts and construction techniques. Hence, through this process, the art of producing accessories will be revived, thereby harnessing the economic feasibility of the products and accessories industry of Pakistan.

**Keywords:** *Bamboo, Rattan, Design, Construction, Sustainability*

## Introduction

Artisans of Lahore have been specializing in bamboo rattan wares, an even richer and very ancient tradition of crafting. With a combination of artistry and practicality, they make great oeuvre for the manufacturing of exquisite handmade products. With years of practice and experience, these artisans most of the time are inheritors from ancestors. They live their lives to master the skills handed down from generation to generation (Kassanuk T. & Phasinam K., 2020). Operating mainly from the traditional Bansa Wala Bazar, located in the vicinity of Mayo Hospital, these skilled hands closely knit raw bamboo into various products like furniture, baskets, and decorative pieces.

According to Rahim & Idrus (2019), the intricate and laborious process of creating bamboo rattan crafts begins with the selection of bamboo. It is treated to enable it to last long while being used to make furniture. This has made the artisans use tools that have been in the families for decades to split, shave, and shape with precision. Such careful preparation is followed by the weaving of strips of bamboo, which are tightly intertwined and kept intact, forming the desired patterns and structures. Learning the characteristics of the material well, products not only turn out to be very aesthetic but are also high and functional.

Every piece shows great awareness of the underlying material properties and the workmanship level that bears nothing short of a masterpiece. The workmanship level is that of a masterpiece, which comes together with great commitment to ensure sustenance not only for the families but also for a vital part of the cultural heritage that is, the intricate art of bamboo rattan weaving.

They put so much dedication and expertise making the product. Their product comes in different varieties, starting from home and office furniture to practical items used in daily life, such as baskets or trays. The work they do with bamboo, of course, shows the versatility and beauty of this plant. Common designs involve traditional patterns with their unique motifs, stamping a cultural and historical flavor into each piece.

Besides, the bamboo rattan craft industry in Lahore is one of the important crafts, which helps support the craftspeople and their families. It also opens minds and eyes to tourism and buyers from all over due to the unique and good quality of the works. In this way, the artisans are able to uphold both their faith and their role in the whole economic and cultural scenario of Lahore.

In short, the Lahore-based craftsmen who are working on bamboo rattan artifacts are engaged in more than a specialized job, they are the bearers of a living heritage. By keeping alive the flame of their occupation, these workers ensure that the craft of bamboo work thrives in continued relevance and vigor, thereby enriching the cultural mosaic of the city and providing an opportunity for all to be inspired by and enjoy the articles of beauty and utility.

## BANSA WALA BAZAR

This tradition is more colorful in Lahore; more specifically, within the local bamboo market called "Bansa Wala Bazar" near Mayo Hospital. This has been the biggest and oldest market for bamboo artisans and remained a center for the manufacture and selling of bamboo products for many years. The expertise was polished over time; the variety includes handmade everyday household items to decorative pieces.

Bansa Wala Bazar is not just a marketplace, instead it is a cultural hallmark where the heritage of bamboo craftsmanship still lives. The history of the market is inseparable from the personal lives of the artisans who spent their entire professional career in mastering the art. The artisans in this marketplace use refined techniques passed down the generations, often inventing methods unique to the family or the region. The market in itself is an environment that smelled of fresh bamboo and the tapping noises of the craftsmen. There are many varieties of bamboo products, from furniture to kitchen items to decorative pieces. Their skills are manifested in terms of the quality and uniqueness of each piece, which speaks for both utility and beauty in bamboo as a material.

This living tradition serves not only bread and butter for many families but also upholds an important cultural heritage part. More than anywhere else, the bamboo market in Lahore, especially Bansa Wala Bazaar, reflects that even in the modern age, bamboo craftsmanship never lacks appeal and relevance.

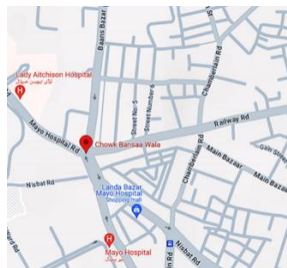


Figure 1 Bansa Wala Bazar, (Google Map Location)

## LITERATURE REVIEW

### BAMBOO

Bamboo is a versatile and sustainable material that boasts strength, resilience, and very fast growth. Unlike traditional hardwood, it can be cut in as little as three to five years, making it a very friendly ecological substitute for many other forestry products. This material has the intrinsic strength of steel, while its weight is light and very workable; hence, quite appropriate for a substantive reach of applications, from construction and furniture to textiles and accessories (Yuming, Kanglin, Shengji & Jiming, 2004). Products are accorded natural, refined aesthetics with the natural aesthetic appeal accorded by bamboo, characterized distinctly with its grain and coloration. According to Akinlabi, Anane-Fenin & Akwada (2017) it is the natural resistance of bamboo to pests and diseases that greatly reduces the use of chemicals, therefore adding to the environmental

credibility of the plant. With growing global demand for sustainable materials, bamboo remains focused on being a core resource in driving green living with low environmental impact.

The artisans here at Bansa Wala Bazar make plenty of products from bamboo, creating items with both skill and creativity. The furniture that has been designed ranges from chairs and tables to beds and shelves. Furniture made out of bamboo has just not turned strong and durable but also creates an aesthetic charm because of its natural look and design. The successful mix of strength and elegance to fit comfortably in the two forms of decor, traditional and contemporary, makes these items very much in demand (Boran et al., 2013).

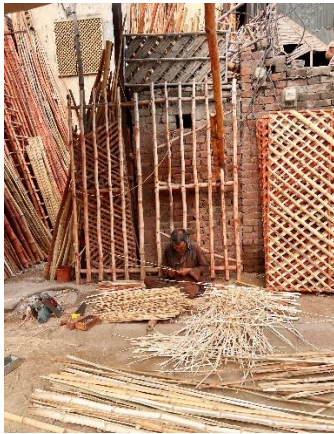


Figure 2 Local artisan splitting the bamboo at Bansa Wala Bazar

Bamboo ladders are all of the same quality and not of much variety but they are so archetypally strong that they are light in weight yet proving to be sturdy. In fact, they set to practical use not just for domestication but even for commercial application, giving a safe and eco-friendly edge over metal or plastic ladders (Susanto et al., 2022). Following closely behind are bamboo segregation panels. Huge popularity has been relished for these for years, majorly used for commercial purposes. The panels offer a multifaceted utility of providing a division within comparatively big space. The natural texture and warmth of the bamboo create a calming, organic feel exactly what you want offices, restaurants, and stores to project for the benefit of workers and clientele.



Figure 3 Bamboo panel design and manufacture at Bansa Wala Bazar



Figure 4 Bamboo chair design and manufacture at Bansa Wala Bazar

In addition, rooftop shades, which have been an aid in residential areas, can be well-made of bamboo. In making these shades, a person can be protected from the sun through space that assures ventilation, bringing out a cool, comfortable atmosphere outdoors. Everything about it is very sustainable, from the guarantee of durability to adding a touch of rustic appearance to home setups (Deng, Lin & Jiang, 2023). Artisans from Bansa Wala Bazar are very skilled in making bamboo utility and decorative items, bearing a tradition that remains eco-friendly and strengthens culture. Bamboo is versatile and allows a lot for invention of resourceful and meaningful ways in its use (Sarkar, 2023).

On the other hand, rattan, which is virtually made like bamboo shavings, is also effectively fashioned into forms like small baskets, holders, containers, and bread baskets. Basically, the uniqueness of rattan is contained in the intricate methods applied to design and weave these accessories into predetermined three-dimensional shapes regarding both functionality and aesthetics (Luo, B., Ahmed, S. & Long, C. 2020). This blending of traditional craftsmanship with

ingenious design underlined an apprentice's skill of adaptation and creation while conserving his or her cultural identity.

## **RATTAN**

Rattan is an extremely versatile and highly sustainable material derived from the tropical palms of the Calamus genus, broadly applied today due to its unrivaled durability and flexibility. Primarily found in the thick rainforests of Africa, Asia, and Australia, rattan is a vine-like plant that may stretch up to several hundred meters in length (Siebert, 2004). Such unique growth makes it very strong and resilient. This is why rattan is considered as an ideal material for creating great strength and durability in a furniture or accessory (Rao et al., 1998).

On the other hand, rattan, though really sturdy, surprisingly is really light in weight. This property makes it highly convenient to use anywhere. Its light and easily manageable transportation really makes it the most appealing to manufacturers and consumers alike. This very pliability, however, allows weavers to come up with intricate designs and realize a myriad of shapes from simple forms to more functional pieces to complex, decorative forms (Belcher, 1998). This way, rattan items have their aesthetic value increased and also extend into functionality, making it possible to produce items that include baskets, lighting fixtures, and furniture. The classic look of rattan is sure to inject an interior with rustic, natural charm. Its texture and coloring seem to complement so easily from traditional to modern styles, hence its universal appeal to interior decoration. For example, it can be left raw or stained and painted to suit color schemes and specific design tastes (Abdullah et al., 2015).

One of the most critical advantages associated with rattan is its sustainability. Basically, rattan grows much faster than traditional hardwood trees; it can be harvested in such a way that it actually helps in the conservation of forests and causes less harm to the environment. Because of its fast growth cycle and regrowth after being cut, it becomes a renewable resource, therefore aligning with the growing global concern and emphasis on sustainable and eco-friendly materials. According to Wahab et al. 2019, apart from these practical benefits, rattan also serves to support local economies in the regions where it is harvested. Cultivation and processing of rattan provide employment and economic opportunity to too many communities, thus contributing toward social sustainability.

The strengths of rattan are inbuilt and combine to make it one of the most sought-after materials for a wide array of products. Rattan, whether in pure form or with enhancements that bring out the characteristic beauty, remains timeless and practical for all purposes, be they functional or decorative, reflecting its timeless popularity and relevance within the modern environment.

## **METHODOLOGY**

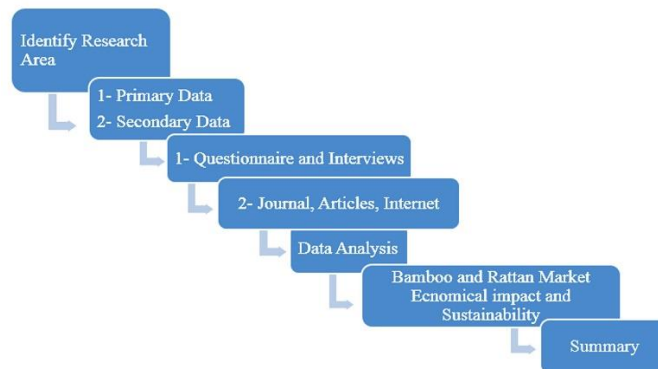


Figure 5 Step by step process of project research

### Objectives of the Study

The present paper focuses on analyzing and discussing the use of bamboo and rattan as primary materials for the construction of baskets within the local market of Lahore. This paper determines the different basic techniques of weaving that were applied in basket development, considering the developments related to design in an attempt to suit the changing requirements of the target audience. The paper talks about the cultural values and economic values of bamboo and rattan craftsmanship for artisans from Lahore, thus showing investment on a greater scale to increase more revenues and improve economic results from this sector.

Different techniques for the combination of bamboo and rattan are provided in this paper by analyzing various styles and techniques through a comparison of different samples of baskets. The comparative analysis is going to be performed on the strength of materials, durability of the finished product, and many other factors. This paper attempts to provide an overview of construction techniques that will help in understanding design evolution and broader impacts of bamboo and rattan basketry on the local community of Lahore.

### Materials and Method

This paper uses observation and documentation techniques to illustrate the materials used in making baskets, as well as their functions and construction methods. It describes how bamboo is treated from its raw material state to become a material which can be used in making products and accessories, structured on its foundation (Bain, 2021). On similar note, it describes the processing of rattan, at which shaving of bamboo into various sizes is done and then using such shavings through several weaving methods to come up with various accessories.

The paper also considers the finishing techniques for bamboo and rattan products, touching on those methods that improve their aesthetic and functional values. This study will also help to ascertain the economic values for the local artisans, considering how government initiatives in Pakistan can open a way for an increase in the income of artisan communities. As stated, by



assisting these artisans, the general economic situation in this country is strengthened. It thus deepens the analysis of how bamboo and rattan craftsmanship generally influenced the cultural, economic, and practical development of Lahore.

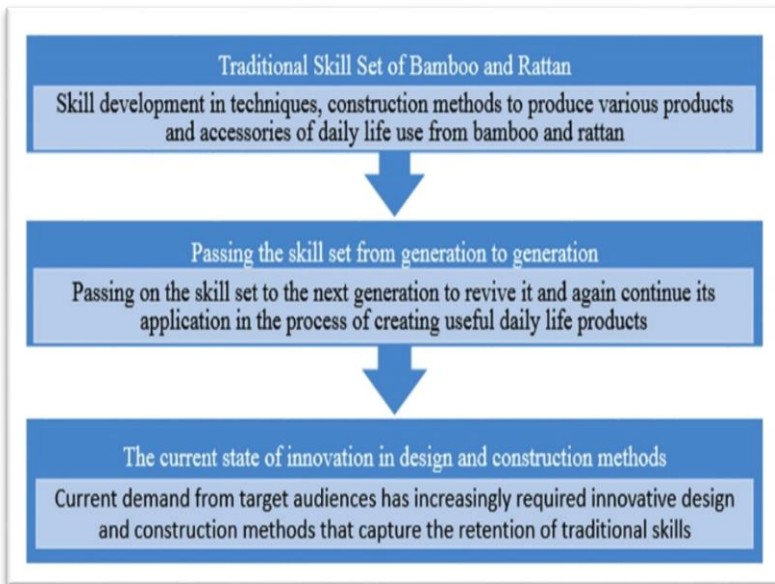


Figure 6 The chart shows the schematic diagram of bamboo and rattan skill set

## RESULTS AND DISCUSSIONS

The following research will be presented in an organized form, based on data gathered from visits to bamboo and rattan markets in Lahore. Furthermore, it will present the description of the bamboo and rattan baskets available in these markets, the design patterns that the local community of artisans follows in constructing these baskets and containers, and finally, the basic finishing techniques applied for the final look of the accessories and products. Moreover, the price range will also be mentioned in the research while selling these products to the audience that these artisans target.

### Cane and rattan baskets in Lahore

The Lahore market remains one of the biggest outlets for cane and rattan-based handicrafts. Its versatility gives rise to a wide array of products that have grown to suit many types of customer needs. In fact, these products range from bamboo bowls to large 4-foot by 2-foot cane containers, offering a wide variety of accessories.



Figure 7 Cane structure and rattan covering

### **Design and Construction**

These accessories reflect the growth in design and construction whereby not only are basic needs met but the fusion of cane and rattan into one piece. This accessory gets its inner strength from vertical cane slats, while an outer ring is created for hanging daily-used things. Further, to provide more strength, the vertically placed and outer slats are joined by horizontal slats. This will ensure that the accessory does not easily break. This kind of basket weaving exposes the traditional form of the closed rattan double twill weave as illustrated by Pazon & Del Rio, 2018.



Figure 8 Closed rattan double twill weave



### **Finishes**

Plants, minerals, and clay are used in the careful preparation of natural inorganic pigments for the finishing of bamboo accessories. The pigments are mixed with natural binders, such as linseed oil or beeswax, to offer an end product that is both hard-wearing and handsome. Appliqué is applied using brushes or cloths in a thin, even layer onto the bamboo surface; it consists of the application of natural pigment mixtures. The application of multiple coats allows for the required color pigmentation to be acquired, with each coat having one's preceding air dry completely before applying the next. Once all the pigmentation processes are done, a final natural sealant coat is applied, usually beeswax or oil/wax blend. Not only does this sealant enhance the natural beauty of the bamboo, but it adds a water-resistant top layer, hence increasing durability to one's accessory. The sealed bamboo is then buffed and polished to a smooth glossy finish where grain

and texture of the bamboo are accentuated, hence an appealing product that is both removable and durable.

**Difference between natural rattan and resin wicker**

The two are very different materials used for furniture and accessory manufacture, both having their own features and benefits. It is a vine native to the tropics. Still, it is brought into a separate category under the name "natural rattan" because of its extremely high strength, flexibility, and natural look. It has an extremely organic look and feel. Since this material is organically derived, it is biodegradable and thus environment-friendly. Though natural rattan is a very great-looking material, it requires periodic maintenance to prevent it from undergoing damage due to moisture and UV rays, which significantly makes it less outdoor-worthy (Amoah, Dadzie, Bih and Wiafe, 2015). In contrast, resin wicker is a synthetic material comprised generally of polyethylene or any plastics designed to imitate natural rattan. Resin wicker makes for very strong outdoor furniture accordingly since it is resilient to moisture and UV rays and very extreme temperatures. It has an extremely low maintenance, and it can bear bad weather without breaking down. Compared to the genuine rattan, the resin wicker is much stronger and provides improved weather resistance, but it does not have its natural charm and eco-friendliness (Raycheva and Angelova, 2017).

Sr.No.	Image	Accessory / Product Category	Material	Finishes	Selling Price (Pakistani Rupee)
1		Basket	Cane, Natural Rattan	Natural Finishes	4500
2		Rectangular Container with Opening Lid, metal lock installed on lid and hinges	Wood, Cane, Resin Wicker	Industrial Dyes	6500



3		Carrying Basket	Wood, Natural Rattan, Cane	Raw / Unfinished	2500
4		Suspended light lamps	Cane, Natural Rattan	Natural Finishes	2000-7000

Figure 9 Table shows the cane and rattan accessories, material specification, finishes and selling cost in the market of Lahore

### Economical Aspect of bamboo and rattan artisans in Lahore

The increased cost of materials is giving a tough time to artisans in Lahore engaged in the business of fashioning and selling bamboo and rattan accessories. Abundantly available indigenous materials were cheap in Pakistan, but a lack of investment in their regeneration and sustainable use has brought about shortages, not so different from what happened with rosewood in the country.

Although these artisans are paid a decent amount for their work, the escalating rising costs of materials and construction add to the final cost of the output price. With the small but loyal customer base for bamboo and rattan products, increasing costs are a challenge to the business in terms of sustainability (Javed, 2018)

A detailed interview was conducted with the owner of Aziz Chic House, who happens to be one of the biggest sellers of items made from bamboo and rattan, and he can be found at Mini Market Gulberg, Lahore. Invaluable views were obtained regarding the behavior of customers and the sales trend in the previous year. He graphically gave figures and observations that point towards growth in the market for bamboo and rattan accessories, along with the problems the market has undergone, thus portraying the potential as well as hurdles in the way of artisans associated with this particular industry.

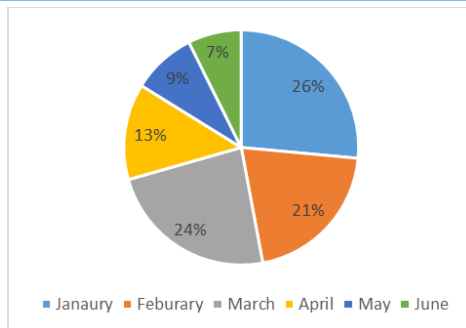


Figure 10 Profit margin of Aziz Chic House, Mini Market Gulberg, Lahore in six months.

According to Aziz Chic House, the owner finds that during the winter months and the beginning of the New Year, the sales for bamboo and rattan items are rather high. Customers seem to come to shops more often to buy new accessories and other products that are supposed to be used in their homes. Traditionally, indoor decorative accessories were a huge part of the bamboo and rattan business for the firm. Interest in furniture made from these sustainable materials has recently grown, driven by the lower costs compared with solid timber furniture and increasing consumer awareness of eco-friendly practices.

However, due to the new policies of the government and the increase in taxation, all this has badly affected consumer behavior. Consumers who used to redecorate their homes regularly now become cautious about their expenditure. This change in behavior has caused people to buy new accessories and furniture for their homes less frequently than usual.

Artisans and small businessmen are most worried by this trend because their livelihood depends on the steady stream of customers coming to their shop. Reduced consumer spending diminishes sales and eventually disrupts the entire supply flow chain, starting from material procurements down to the amount earned by artisans. At the same time, this pushes pressure again to the higher cost either to be absorbed by the business to remain competitive or to be passed on to consumers at the risk of being less competitive than cheaper alternatives. Government policies for the new taxation environment have also placed the bamboo and rattan industry in a very challenging setting. This has held implications for the broader market of home decoration or furniture and thus underlines the immediate need for strategic adaptations and support to traditional crafts in order for them to remain economically viable.

## Conclusion

The deeply tradition-bound bamboo and rattan handicraft industry of Lahore is going to face many challenges and opportunities in today's market. Traditionally, this sector has depended on the plentiful and low-cost indigenous materials of Pakistan. This lack of investment in the sustainable management of resources strained the material supplies, raising their prices, much like what had happened with timber industry of Pakistan. Nevertheless, the industry is resilient and adaptive to

change in spite of all this, it is still being propelled at its core by a mainstream customer base and changing consumer preferences towards more sustainable materials.

Increased material costs and a change in government policies have been followed by increased taxation, hitting hard on consumer spending behavior. The frequency of purchases among artisans and small businessmen has gone down, upsetting the supply chain and causing erosion of the very sustainability of their livelihoods. The sector has also undergone a positive change in so far as the growth of the internet and social media has made key global design trends and techniques accessible to local artisans. Quality and diversity exposure in bamboo and rattan products have increased while incorporating suitability and functional design methods.

In-depth research emphasizes both cultural and economic importance to Lahore of bamboo and rattan crafts. It further brought out the needs for stratagem adaptations, including governmental support and sustainable practices in order to enable survival and growth for the traditional craft. With more investments in resource regenerations and sustainable practice, this will enable the industry to build more resilience to the economic ups and downs in order to thrive in the competitive market place.

In essence, Lahore's bamboo and rattan handicraft industry is at a crossroad, till a fine line between the preservation of traditional skills and what is desired in terms of modern adaptations is drawn. Without strategic support incorporating viability in terms of sustainable practices, there would be little hope to overcome the current challenges for a prosperous future for the artisans of Lahore.

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This article is presented by me. I declare that this manuscript is original, has not been published before and is not currently under consideration in any other journal. Moreover, I declare that no funding was received for this paper.

### **Data Availability Statement**

Data sharing not applicable to this article as no datasets were generated or analysed during the current study.

### **Conflict Of Interest**

The author declares no potential conflict of interest for this article.

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