Artisan's Village

"A platform to revive the culture of Multan through the preservation and enhancement of local handicrafts."

Final Year Thesis Report

In Partial Fulfillment of the Requirement for the Degree of

Bachelor of Architecture

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SADA school of art design & architecture NUST

Artisan's Village

Thesis Report

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A thesis submitted for evaluation to School of Art, Design and Architecture on 30 May 2022, in partial fulfillment of the requirement for degree of B.Arch.

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Abstract

Multan is known all over the world because of its rich cultural heritage. It is one of the oldest cities of Pakistan which has been inhabited for more than 2000 years now. The city is mainly associated with the famous tombs and mausoleums situated in its heart along with its traditional essence and rich culture. For centuries, Multan has been a hub for traditional arts and crafts. The major handicrafts of Multan include embroidery, khussa, baskets, chunri, blue pottery, and camel skin lamps.

The two main handicrafts which need immediate attention are blue pottery and camel skin lamps as these handicrafts are associated to Multan only and their artisans are only located in this region. It is extremely unsettling to see that the fast-growing city lacks a platform to preserve and showcase its most important cultural heritage and identity. Through conducting primary research, it has been analyzed that these artisans are not being recognized for their services and there is a dire need to bring these artisans to one platform with our locals and young generations to prevent and promote this art. Moreover, to promote and keep the art alive, it is important to bring innovation through research and experiments which can be done through the collaboration between local artisans and designers with modern technical skills.

This thesis aims at providing a collaborative platform for the local artisans, designers, and public, to preserve, promote and innovate traditional handicrafts. The platform will provide the artisans with a working environment in their natural setting and these workshops provided will serve as a live museum for the visitors. The site chosen for the thesis is located at Bahadur pur, Bosan Road, Multan. The site lies on education avenue, in close proximity to all the targeted user

groups. The design concept is to interpret the spaces in a way to familiarize the user with the process behind the final product, through excitement, knowledge, and hands-on learning experience.

Keywords:

Handicrafts, Blue Pottery, Camel Skin Lamps, Artisans, Preserve, Promote

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Chapter 1

Introduction

Culture is a sphere that reveals the evolution of human beings over time. It is an effective social tool that helps to develop the social intellectuality of individuals. Handicrafts being the tangible representation of culture, play a great role in preserving a nation's culture and boosting its economy. But rapidly increasing globalization and urbanization have greatly affected the handicraft sector as the carriers of this knowledge are not being provided with enough facilities and value. This paper deals with an architectural solution to the issues faced by our local artisans and craftsmen and the preservation of our lost culture. Bringing together local artisans with diverse skills and backgrounds to a platform to preserve, innovate and promote the cultural heritage.

1.1 Background:

Pakistan is known for its rich heritage and culture all over the world. This diverse culture is influenced by many different nations who came to this land. It is a blend of Indian, South Asian, Central Asian, Persian, Afghani, and Turkish culture having a diverse variety of ethnic groups, languages, religions, foods, skills, and art. These include Punjabi, Balochi, Sindhi, Kashmiri, Pashtun people, and their distinct languages and lifestyle. Although all these groups differ in their lifestyles and beliefs yet collectively, they define the country's identity.



Figure 1: Showcases cultures of Pakistan according to their specific regions on the map (Ahmed et al.)

Zooming into southern Punjab, this part of the country is blessed with multiple skills and art which have spread across the world. Kaam Daani¹, Mukesh², Gotta³, Chunri⁴, etc are some of the very famous fabric crafts from Bahawalpur. Taar kashi⁵ work is produced in Multan, Kahror Pakka, and D.G.Khan. D.G.Khan is also famous for its Kacha Tanka⁶, Balochi and Mirror work, and

¹ "Kaamdani" is a kind of embroidery in which a needle inserted with metal wire is pulled through the cloth to create motifs.

² "Mukaish" is also a type of metal embroidery on clothes. In mukaish, metal strips are passed through the fabric and then twisted on the other side to fix the work on its place.

³ Gold Ribbon embroidery with applique technique.

⁴ A long scarf worn by women in traditional colors and prints.

⁵ "Taar" means wire and "kashi" means inlay. It is a kind of embellishment on household object, where a pattern is grooved on the surface of an object and then it is filled and pressed with metal

⁶ Type of hand embroidery on clothes

prayer mats made of date leaves. Multan is famous all over the world for its blue pottery, camel skin lamps, leather products, clay pots, and the very famous nagashi art of Multan.



Figure 2: Showcases different handicrafts of Southern Punjab (DBA)

Multan, commonly known as the city of saints was once known as the "City of Gold" and "City of Peace" because of the treasures and temples present in the city. It is the sixth-largest city of

Pakistan. The city had always been a hub for different nations who tried to conquer and rule the city. From Alexander conquering Multan in 200 B.C to the British invading the town in 1900 A.D. Multan had faced many battles and many nations including Chinese, British, Hindus and Muslims ruled over the city. Every nation brought their cultures here and now the essence can be seen in the architecture and crafts of the city.



Figure 3: Historical timeline of Multan City (DBA)

Handicrafts are a tangible representation of the intangible culture of a place. Due to the diverse nature of these crafts, every nation has its own definition of handicrafts but UNESCO gives a common definition that covers the diverse aspects of handicrafts (UNESCO);

"Artisanal products are those products by artisans, either completely by hand, or with the help of hand tools or even mechanical means, as long as the direct manual contribution of the artisan remains the most substantial component of the finished product. These are produced without restriction in terms of quantity and using raw materials from sustainable resources. The special nature of artisanal products derives from their distinctive features, which can be utilitarian, aesthetic, artistic, creative, culturally attached, decorative, functional, traditional, religiously and socially symbolic and significant."

The handicraft sector plays a huge role in income and employment generation which in turn helps to reduce poverty in a country. Handicrafts also serve as an identity of a nation.



Preserve Culture

Role of Handicrafts



Identity of a Nation



Tool of Poverty Reduction



Connection to Past

Figure 4: Role of Handicrafts (DBA)

The method of production, materials used, design, and colors are a great reflection of their lifestyle and beliefs, and they also act as a narrative of their story. But today, as our nation is constantly making its name in the scientific world, our culture is slowly fading away in that race. This sector which holds the most from our ancestors is being neglected the most. The artisans of these traditional arts and crafts who have been carrying our culture till now, do not have access to the basic facilities and recognition anymore.

1.2 Rationale:

Thus, a platform is needed for the community to promote cultural autonomy of the region, to support the relationship between culture and individuals. These centers become a venue for organizing leisure for the community, providing an opportunity for self-expression, initiatives, and cultural education, and are helping bring different communities together. In present times, where the world is running after a mirage, the nations need to hold onto their heritage and their culture because that is the only thing that gives them their own identity.

The problems faced by the artisans, lack of infrastructure, documentation, and recognition call for a center where the artisans will be provided with a working space and a platform where they could present their crafts and generate revenue. This hub will also provide a learning opportunity for the young generation so they can explore and learn more about the cultural heritage. The educational zone provided will serve as an innovation hub where designers and artisans will combine their skills to keep the art alive and updated. This will also serve as a motivation to bring the youth back into this field.

1.3 Thesis Statement:

This thesis intends to create a socially sustainable complex that is inclusive and transparent towards a diverse community aiming at providing opportunities to artisans to grow and spread their knowledge, as well as opportunities for the designers to collaborate with traditional artisans to bring innovation to culture. "Creating a public platform to revive the culture of Multan through the preservation and enhancement of

local handicraft."

1.4 Thesis Objective:

- To provide a collaborative platform for the local artisans, designers and public
- To bring forward the real face of the people who are carrying our culture and art
- To educate the people about their cultural heritage and identity
- To Cater the drying handicrafts of Multan

1.5 Thesis Questions:

The thesis aims at targeting the issues faced by the local artisans and craftsmen and architecturally resolving them. For this, the following questions need to be explored during this process

- What will be the role of Architecture in resolving the issues faced by artisans and how will architecture enhance their productivity?
- How will the spaces create interaction between artisans and the public to promote handicrafts?
- Spatial connections based on programmatic and user needs.

1.6 Scope:

The scope of this project is to develop a platform and a workable environment with the provision of all the necessary facilities for the artisans and craftsmen of the region. The project also aims at providing the artisans with updated knowledge of the world to upgrade and innovate the traditional handicrafts to keep the culture alive.

1.7 Conclusion:

This chapter serves as a base for the design interventions discussed in the next sections. It will create a research methodology that will be utilized throughout the thesis. And the gathered information will help analyze the root problems and it will also help in formulating an innovative architectural solution. The

Chapter 2

Precedent Study and Analysis

The previous chapter deals with the intent and objectives of the thesis. As discussed earlier, this thesis intends to create a socially inclusive platform to bring designers and local artisans together to promote and innovate traditional handicrafts to preserve and promote the culture. The main objectives are to establish a hub that provides the artisans an opportunity to practice, display and promote their skills. The platform will also function as a center to bring innovation to traditional handicrafts.

2.1 Literature Review

Culture plays a very important role in giving identity to a nation. V.Jurenience in his research paper discusses that ethnic culture is much more than just heritage. The law based on the *National Protection of Ethnic Culture* defined ethnic culture as the totality of cultural values that are transferred from generation to generation and are constantly renewed. (V. Jurenience, 2012; LHR 2004). Culture is subdivided into two categories: Tangible and Intangible. According to UNESCO Tangible cultural heritage refers to physical artifacts produced, maintained, and transmitted intergenerationally in a society. It includes artistic creations and built heritage etc. Intangible Cultural Heritage' indicates 'the practices, representations, expressions, knowledge, skills, etc. (RICHES Resources, 2014).

2.1.1 Challenges and Constraints

Although the importance of the handicraft industry is very well documented in the literature, certain challenges and constraints are contributing to the setback suffered by this traditional heritage. To every artisanal or craft product, there is a value and emotion associated with it by its user and creator. The craftsman leaves his permanent permeating mark on every product he creates with his hands. (Giovanni Maria Conti) The challenges and constraints faced by the handicrafts industry are; Lack of availability of sufficient data, Industrial and Mass production challenge, Unwillingness of young generation to continue the profession, Lack of availability of basic infrastructure, Lack of Innovation and Technology, Lack of education, lack of education and training facilities and Lack of Financial Resources (Yongzhong Yang).

2.1.2 Handicrafts in Pakistan

The traditional handicraft industry in Pakistan occupies a significant position as compared with other industries because this industry embodies rich culture, history, and traditions in conjunction with conventional and contemporary designs. The recently available statistics indicate that the handicraft industry contributes 14.60% of national employment. As the handicrafts involve the cultural heritage and traditions handed down from generation to generation, this justifies the need to protect traditional knowledge and skills to keep the identity of local communities alive. Pakistan is a culturally rich country; therefore, Pakistan must safeguard its culture and traditions by developing handicraft enterprising communities. This industry uses a vast number of the rural labor force and develops traditional cultural values. However, due to industrialization and globalization, Pakistan's traditional handicraft industry is facing several critical issues that restrict its sustainable development (Shafi, 2020; Shafi et al., 2019a; Yang and Shafi, 2019).

Most handicraft enterprises globally, including Pakistan, are operated informally and their activities are often unregulated and unrecorded, hiding their actual economic and social contribution (Mohsin Shafi). The Pakistani handicraft industry has been developed for the past 5000 years (Evans et al., 2014; Khan, 2011; UNIDO and UNESCO, 2007) (Mohsin Shafi).

2.1.3 Problems faced by Pakistani Artisans

Most of the artisans engaged in this profession in Pakistan belong to the rural and economically weaker areas and frequently face problems due to a lack of resources. Many micro rural entrepreneurs are also facing financial resources constraints as there is a gap between earning and financial requirements. As far as the provision of credit facilities are concerned, there are several institutions/schemes which provide funding facilities but most of the rural artisans are unaware about such schemes and generally, financial institutions require security to pay back the loans, which is a major obstacle for artisans as they hardly can provide any security (Yongzhong Yang)

2.1.4 Policies to Preserve and Promote Handicrafts

(Yongzhong Yang) have analyzed in their article, different ways which can be considered to preserve and promote the handicraft industry. These include differentiating between handmade and manmade products, Recognition of Artisans and their creativity, Emphasis on the role of technology and Innovation to promote and preserve craft traditions, Emphasis on provision of education and training, Improvement of basic infrastructure, emphasis on advertisement and promotion.

2.1.5 Innovation in Handicrafts

Handicrafts are the narrators of a nation's culture, norms, beliefs, and lifestyle. These objects have been associated with different meanings in different phases of history. One way to keep these handicrafts alive is to bring innovation to them so they can be used as functional objects rather than being used merely as showpieces. In ancient times, innovation used to be defined as changing the colors, material, or form of an object but in present times innovation is more about altering an object to resolve problems, making objects more functional and convenient to use which is done through researching and experimenting and adding technological features.

On one hand, where traditional artisans are the living knowledge and carriers of our cultural heritage, the designers act as a mediator between producer and consumer. Designers are trained to learn and comprehend user needs and innovate objects to bring out maximum functionality. A designer's role is to interpret needs and transform them into answers which

further interpret culture and cultural values and eventually create a blend between traditional and modern art. (Giovanni Maria Conti)

2.1.6 Design-Driven Innovation

This is where the concept of cross-fertilization is brought into the design field. Crossfertilization is used to indicate relations between different fields of study and human knowledge and generate connections between them. In design-driven innovation projects, the experienced bodies in particular fields formulate ways to transfer this knowledge and skills to other designers and producers. These projects are carried out in places where there is a huge gap between products and innovation. (Giovanni Maria Conti)

2.1.7 Handicrafts in Multan

Multan has been a hub for several handicrafts since centuries. These handicrafts are the reflection of cultural aspects of the city. The essence of its vast rich history can still be seen in these crafts.

a) Embroidery:

Embroidery is known as a sort of painting done with threads and needles. It had been a form of expression of emotions and aesthetics in the sub-continent for centuries. Multani embroidery is deeply rooted in the handicrafts sector all over the world because of its rich historical connections with various nations and its religious and cultural

importance in the world. It has a very high demand on national and international levels. Multani embroidery also has various types based upon the origin, material and method. These include *kacha tanka*, *pakka tanka*, *sheesha work*, *chikankaari*, *phulkari* and *shadow work* etc. It is not only done on clothes but also on bags, shawls, shoes and accessories etc.

b) Blue Pottery:

Blue pottery is considered to be the identity of Multan. The origin of blue pottery was Iran, where around 15th to 16th B.C Gila Lazwart was discovered and it brought a drastic change in clay pottery. On the other hand, the Chinese were making pottery with Porcelain and Celadon, but it only got its vibrant colors from Gila Lazwart. Around 300 artisans were invited from China to practice this art in Iran and was given the name of *Sangine* or *Aatike* which means "made out of stone" while the British named it *Blue Pottery*. After that it went to Afghanistan, Multan and Jaipur making them the only major hubs of this handicraft all around the world.

c) Camel skin and bone products:

Multan is known to be the origin of Camel skin products. In the subcontinent, people used camel skin to make small bags for carrying water during travelling. In 1910, Malik Ashiq Naqqash from Mohalla Kashigaran of Multan, did the first experiment with lamp made up of camel's skin because of its translucent nature. Introduction of Naqqashi

onto these lamps created colorful shadows and these lamps soon became famous all over the world.

Animal bones have also been used in different utensils and accessories for a very long time all around the world. Camel bone is preferred for these products because it is stronger and when dyed it gives a unique look. Multan is also a hub for these products since centuries.

d) Mina Kaari

Mina kaari also originated from Iran and its major hub in today is India. Mina kaari is a form of decorative art on dishes, utensils and decorative items. The literal meaning of Mina is heaven, but it also gets its name from the paste used in these products. Geometric and floral art is done with the help of beads and mirrors on metal or ceramic and a paste made up of heated powdered glass is used afterwards to bind the embellishments onto the surface.

e) Multani Khussa:

Multani khussa is a blend of different arts of Multan which include *Multani Embroidery, Mesh Work, Leather work* and *mirror work*. Multani khussa has its demand all over the world. And it is a very successful example of how innovation keeps the handicraft alive and promotes culture. Multani khussa has been serving as a statement piece since the beginning, by adapting its shape, colors and designs with the ongoing

trends whether its cultural, eastern or contemporary style. Its upgradation with time has been keeping the art famous all over the world.

The list goes on with qaleens, daigs, woven mats and baskets, but most of these products have completely adapted the industrial techniques of production. UNESCO-NORWAY funded a project to map the cultural assets of some cities of Southern Punjab in collaboration with *THAAP*. A survey was conducted for the project in Bahwalpur and Multan to analyze the status and scope of local handicrafts, their production centers and the availability of their artisans in the region. Although the targeted community was the women artisans of these regions, but the results suggested some of the endangered handicrafts of this region which needed immediate attention. The analysis concludes the need of basic facilities and a bigger platform to practice the art and elevate it to help the artisans and culture.

Endangered Crafts Multan				
Craft	Remarks	Availibility of skilled artisans		
Natural / Vegetable Dyes	Good Methods Extinct	- Difficult. - Keror Pakka was visited, Haji Amer Bakhsh (best reputed) could not prepare acceptable products,		
Palm Leaf Weaving	Limited Products	- Moderate : Can be explored		
Building Decorative Crafts (Fresco and Naqashi)	Very Limited, thoough Master Craftsmen available, Limited usage	 Low : Can be done at a later stage. Would involve ustads to take up revival and contemporary usage. High potential for future. 		
Jewellery	Traditional Methods and styles not popular	- Low : Lack of interest / Commercialization		

Figure 5: Survey conducted by THAAP for the endangered crafts of Multan

2.2 Research Methodology

To dwell deep into the problems faced by the artisans, structured quantitative research was conducted, where different local artisans were interviewed to know their needs and problems to make the thesis more inclusive towards the primary user. Multiple artisans from Tevta Institute of Blue Pottery Multan and Ustad Alam Blue Pottery Institute were interviewed to understand and document the diversity of artisans and current status of the handicrafts. The survey also helped in knowing the materials and process behind the production of these handicrafts which helped analyze the programmatic and spatial requirements for the thesis.



The general information regarding the artisan was needed to analyze the current working environment and future needs for them. 34% of the artisans were elder than 50 years, 28% of the artisans belong to the age group of 30 to 50 years, 25% were teenagers who were mostly

working as a helping hand with their elders. While only 13% of the artisans belonged to the age group of 20 to 30 years. This data shows the dying interest of this generation in their culture. The decrease in number of artisans creates the need of a platform where these skills can be taught to the young generation. Moreover, the platform needs to have promotional activities for the handicrafts to develop interest in them. The male to female ratio among practicing artisans in the market stated the need for a comfortable inclusive environment, that would encourage the female artisans to come forward and promote their skills.



Another major concern concluded through the survey was that only 26% of the artisans were those who inherited this profession and mastered it through their forefathers. Multan has always been a hub for skilled craftsmen and artisans who were the carriers of centuries old culture and traditions. The families used to be named after their skill or profession and these skills were transferred through generations. But today there are very few artisans left who are carrying our traditional skills. Whether it is due to the lack of interest of younger generation or non-availability of proper resources. This creates a need for an interaction between these artisans and the younger generation to promote the knowledge and skills. The skilled artisans are those who either got training form the institute or through hands on learning experience.



One of the causes behind the decay of these cultural handicrafts is related to the economic conditions of this sector. IBP is a government institute for the preservation and promotion of the most prominent handicraft of Multan (Blue Pottery) but the institute does not get enough funding to hire artisans on permanent basis. Around 72% of the artisans are working on daily wages. This situation discourages these artisans to stay connected with this sector. The survey concludes the need for a place, where these artisans can own their workplace with the help of government fundings which will encourage them to excel in the field. Providing the artisans with all the resources and a sense of belonging would create a positive environment for the artisans as well as the culture.



The main traditional element along with the production techniques of these handicrafts is *Naqashi*. The difference between trained (43%) and untrained (57%) artisans becomes visible when we compare the naqashi done on the pieces. Those artisans who have got the training from master artisans produce the cultural *Naqashi* patterns that holds the stories and essence of the city. This data helps to analyze the focus on the training of the young artisans. This training would be done by the master artisans who have the centuries old experience and knowledge about the culture.





Yes No

But most of these artisans don't have the know how of computers, which creates a huge gap between the culture and modern world. To keep these handicrafts alive, there must be upgradation brought to the design, style and production techniques of these handicrafts. This is only possible through the interaction between cultural and contemporary knowledge. Design labs and co-working spaces must be designed as a bridge between the artisans and designers who have digital skillset.



The last part of the survey was an overview of the marketing tools used by the artisans. Only 11% of the artisans could have direct connections with the customer while the rest must involve a middleman to reach their clients. "Middleman" is another big issue in this sector, who takes up a big chunk of the profit from both parties leaving the artisan in loss. These artisans work extra hard to meet the expenditures on these handicrafts and hence this becomes a loop. This shifts the focus solely to earn a livelihood rather than preservation of the culture. This analysis helped with the concept of a live museum, where the artisans themselves will be the museum. The live museum will help in bringing the artisans to the front side and it will exclude the middleman from this loop. The direct linkage will be the acknowledgment and encouragement of the living treasure of our nation.



Figure 6: Interview of a young artisan working in IBP (DBA)



Malik Abdul Rehman Naqqash



Figure 7: Interview of an international acclaimed artisan (DBA)

a) Blue Pottery

Currently, there are three production sites for the blue pottery including IBP, Ustad Alam Institute of Blue Pottery and one private factory. The production process is divided into 11 steps which have different spatial requirements.

The first step requires the mixing of all the dry base materials; Quartz, Feldspar and Clay. Quartz and feldspar are grinded together with the help of stone, in a ratio of 1:1. Clay is added afterwards in same quantity. Silicate or Soda is added to the mixture for thinning and to prevent the pieces from cracks.



Figure 8: Mixing of the dry materials

This mixture along with zinc, chips and China clay is then mixed with water in 5:3 and the grinding and mixing process goes for 6-7 days.





Figure 9: Grinding and pressing of the paste

After the paste is ready, it goes through pressers to drain the water and in the next step it is either stored in the form of small dish size pieces called as "cakes" or goes to the machines that are used to make cups/glasses.

Storage spaces with proper ventilation and light are required for the material. The machine room also require proper light and ventilation along with water supply and drainage facility. The machine rooms need to be placed with buffer to avoid the noise. Storage spaces will require direct connection with the service lane for the easy access of trucks and with the individual workshops to easily distribute the prepared material.

The cakes are used to make other pieces such as plates or vases etc. Some pieces take more than one step to get into shape, it includes potter's wheel, attaching the base and handles and then it is smoothened with the help of water and a satin cloth. After that the pieces are left to air dry.



Figure 10: Molding

Molding requires large spacious rooms with large tables, natural light, ventilation, and direct access to open/semi open space for the drying process.

When the pieces are dried perfectly, these are taken to the Naqash. The process at this stage becomes very crucial as the pottery is unbaked and unable to take any pressure. The main element in blue pottery's color is cobalt. Oxides of cobalt are grinded together with an edible binding agent and this paste is then used to make the colorful patterns on the pottery.



Figure 11: Preparing the color and drawing patterns

The process of naqqashi also requires large spacious rooms for the artisans to easily move around their pieces and materials. As Naqqashi is the major traditional element of these handicrafts, the workshops will be designed in such a way that the naqqash room would be the central point and all the other programs will be placed around it to develop a visual and physical connection between the spaces.

Once the pottery is painted, it is taken for glazing. The glaze is prepared by heating together powdered glass, zinc oxides, borex, potassium nitrate and boric acid. This paste then forms a lump upon cooling down which is again grounded into a fine powder and a paste is made by mixing the powder with flour and water. The pieces are placed in sunlight to let the glazing dry completely.



Figure 12: Naqqashi

The final step is firing the pieces in a wood kiln for 4 to 5 hours at a temperature of 800 to 850°C. After that the kiln if left to cool down on its own that takes 2 to 3 days to completely cool down and the pieces are taken out checked for cracks and color.

The kiln needs to be placed outside the workshop with direct linkage to the open area, to ensure safety and avoid thermal discomfort of internal spaces. The process requires open planning of the workshops so there is a smooth flow of users and material. Every workshop would also need storage and display areas for the finished products.
b) Camel Skin Lamps

Camel skin lamps are not being produced at a proper setup, but the production is scattered between different artisans. These lamps can be sourced from the craft bazar of Multan, but the manufacturing process is subdivided into people who prepare the skin, potters and naqqash.

In the first stage, camel skin is trimmed and washed by *Dabgars*⁷. After that the skin is passed through heavy rollers and then it is minced to make fine paste.

Bringing the handicraft to one platform would require proper spaces for the whole process. Large storage areas would be required for the raw material. It would also have direct linkage with service lane and internal workshops.

On the other side, *kumhaar⁸* prepares clay pots in the required shape. The minced skin is then pasted over these clay pots which takes 2 to 3 days to dry. Once dried completely, the clay pot is hammered down and camel skin shell is taken to the Naqqash. All the workshops would need a specific area for the potters, which would accommodate potters' wheels and their supplies.

After Naqqashi, the lamps are coated with final glaze and light fixtures are added to its base. For the final and most important step, a large spacious room with direct visual and physical access is required. This would be the heart of the workshop and other spaces will be arranged around it.

⁷ Dabgar is a cast originated from India, who deals with raw animal skins and leather products

⁸ Kumhaar is an urdu word used for Potter; a person who makes utensils with clay using a potter's wheels



Figure 13: Camel skin lamps at Craft Bazar Multan

2.3 Precedent Studies

2.3.1 Living, Learning, Design Center, Kutch

Location: Ajrakhpur District, Kutch, Gujrat

Architects: Uday Andhare and Mausami Andhare

Site Area: 8 Acres

Built Area: 120017.6 sq.ft

LLDC was conceived as a project when the region was suffering through the after-effects of the earthquake in 2001. It was meant to be a 'place' that would become a tactile and visual repository of various crafts of Kutch. Its primary role as a resource center for artisans doubles up as a museum and a place for demonstrative and hands-on learning.



Figure 14: Living, Learning and Design Center, Kutch

The LLDC plays its role in bridging the gap between artisans and consumers. It provided the dying art with a platform to survive and thrive. The programmatic zoning is done in such a way that the museum interlinks the craft school and retail area. The project follows the local architectural language and plays with heights to create visual connections.





The activities are overlapped and juxtaposed through the clubbing of courtyards and providing spaces for impromptu workshops in the corridors.



Figure 16: Impromptu workshops in the corridors

The design follows passive techniques to make it an environmentally as well as financially sustainable project. Small openings in corridor walls allow ventilation keeping the building cool and less dependent on energy resources. Also, windows in the west walls allow the winter sun to give warmth while keeping the summer sun away due to their carefully placed positions.



Figure 17: Section showing the functioning of cooling tower in LLDC

Another very important feature is the cooling tower, which is a vertical shaft with an overhead water tank. There are stacks of drinking water bottles in the water almost 3 floors high creating a thermal mass in the shaft. Nighttime cool air passes over this stack and through the ducts running below the floors, this air is guided to the auditorium.

Conclusion:

The selected precedent helps in the programmatical zoning of the projects. Also, being located in the same climate as my thesis project, the precedent develops a guideline for using passive techniques to maximize sustainability. Moreover, the careful selection of spaces and programs, derived from in-depth user analysis keeping in mind the needs and lifestyle of the artisans set up inspiration for the thesis to be more inclusive towards its primary users.

2.3.2 Khamir Crafts Resource Center, Bhuj

Location: Kukma, Bhuj, Kutch

Architects: Nelkanth Chhhay

Built Area: 87120 sq.ft

Khamir means "intrinsic pride" in Kachchhi – the local language. Instituted after the earthquake of 2001, it is a space for engagement and development of Kachchh's rich creative industries. Khamir was also a project based in Gujrat, to bring the artisan community together.

The project was designed to be based on local development style, so the artisans could reside, work and collaborate.



Figure 18: Conceptual zoning of Khamir Craft Resource Center (DBA)

The basic module comprises three areas: workshop, office, and storage areas. The planning is inspired by local streetscape style, where there are integrated internal and external courtyards in between built spaces which helped in creating collaborative spaces for the artisan community.



Figure 19: Ground floor plan of Khamir Craft Resource Center

These spaces also served as a living museum, as when the visitors passed through the

streets on Khamir, they could see and experience the artisans working.



Figure 20: Connection between artisans and visitors



Figure 21: Showcasing the communal nodes generated between different workshops

The programs are placed as in there is a street connecting all the spaces and there are adjoining foyers in every module which connect the artisan workshop to the street. The provision of shaded spaces on the circulation pathway creates thermal comfort for the users.

Conclusion

The selected precedent creates an example of catering to the user mindset and needs to create a hub that does not feel alien to the users. The use of local material and architectural language helps the user feel included and creates a sense of ownership. The streetscape style creates an example of a living museum.

Chapter 3

Architectural Program

The research proposed a way to cater to the concerned problems through different programs and helped to analyze the nature of space which will help in achieving the aim of the thesis. This chapter highlights how architecture will play its role to preserve and promote the traditional culture which is in its dying phase. It will also focus on how different zones will overlap to create a physical and visual connection. Moreover, the communal and inclusive nature of spaces will also be explored along with transforming visitors' journey into a live museum experience.

3.1 Architectural Typology

The thesis intends at providing a platform that will serve to preserve, promote and innovate cultural handicrafts. The intent divides the built spaces into three major zones, Workshop, Education, Museum. The spaces will be arranged in such a way that the workshop and education zone will overlap and the resulting circulation space will serve as the museum circulation space where the workshops will be acting as a live museum.





Figure 22: Programmatic zoning (DBA)

The distinctive nature of these zones makes the built space a blend of three different typologies: public, semipublic and private. Where the public zone will comprise of exhibition areas and the artisan workshops along with communal and interactive spaces. The private zone will be allocated to the artisans residency while the semipublic zone will be for students' vocational training.



Figure 23: Zoning of the site based on user requirements and needs (DBA)

3.2 Nature of Spaces

The user groups are divided into artisans, designers, and the public. The spaces, accessibility, and programs will be arranged according to the needs of all the user groups. The zones will have a visual connection and control physical connection to decide the users' journey, to benefit both the user and the artisan.



Figure 24: Showcasing the nature of spaces (DBA)

The workshop zone will be a blend of open and closed spaces to make the process transparent which will serve as a live museum. To achieve that, the workshops will be blending with courtyards, and transparent material will be used to develop a visual connection.

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Figure 25: Showcasing the link between different programs and users (DBA)

3.3 Program Brief

The research and literature helped in analyzing the programs required for the thesis. The primary research helped in deciding the nature and sizes of spaces required for different programs. As the zone are divided according to their programs and user accessibility, each zone consists of different functions.

3.3.1 Public Zone

The first zone which is placed at the front (west) side is the public zone, for the direct physical and visual connection with the locals. The metro route in front of the site will help in boosting user access. Also, the public zone at the front will help in providing a buffer to the other zones that require privacy and control. The public zone is divided into admin block, exhibition spaces and workshop area for the artisans. The public zone would be further divided into two parts to make the user pass through a journey of excitement, recreation and knowledge.

Conceptually, this zone will also be categorized as the *Preservation Zone*. The production and exhibition of the handicrafts will strengthen its link with the community and the art will thrive.

- a) Admin Block: With an area of around 2000 sq. ft. admin block will act as the control and access point for the craft village. All the management of workshops, exhibitions, materials and guest residency will be done through this block.
- b) **Exhibition:** Two types of exhibitions would be provided at the craft village. The first step of the user would be to pass through a welcoming exhibition area to create excitement and then it would lead the user to the artisan workshops acting as a live museum. The required area for the exhibition would lie between 3000 to 3500 sq. ft.

c) **Workshops:** Modular workshops would be introduced catering to all the user needs and spatial requirements of programs. Workshops would require a natural setting for better productivity of the artisans. 25,000 to 30,000 sq. ft. would be given to the artisans' workshops.

3.3.2 Semi Public Zone

The vocational center with an area of around 16000 sq. ft. would lie in the semipublic zone as the center needs to have a direct visual connection with the public but with controlled physical access. The vocational center would have its own administration catering to the secondary user of the site which are students and the designers. Individual studios catering to different handicrafts will be arrange around central interactive spaces and with a close connection to the artisans' workshops. Another important aspect would be the collaboration between designers and artisans, through these interactive nodes and studios which will help bring innovation to the handicrafts.

3.3.3 Private Zone

Although metro bus acts as a strong connection between the users and site as it connects almost all the areas of the city. But in order to accommodate those living in the far-off rural areas, and the guests, residency would be provided in a private zone placed at the back of site to ensure buffer and separate entrance as well.

3.3.4 Service Zones

Service zones play a huge role on the site, because of the collective storage of materials and machine rooms. The service zone would also require a separate route for the loading and unloading activities of the materials.

3.4 Conclusion

These programs help meet the goal of the thesis. The workshop programs will help the artisan community of the region to practice this art and it will help in generating revenue for them. The education zone will help bring innovation. The public will have a learning and recreation opportunity for them.

Chapter 4

Site Study and Analysis

4.1 Site Selection

As discussed in the previous chapters, the thesis deals with creating a platform for the preservation, promotion, and innovation of local handicrafts of Multan. The in-depth analysis of literature and the current problems faced by the local community as well as their needs helped in selecting the targeted user group for the thesis. The primary users will be the local artisans and designers/students, whereas retail and exhibition will cater to the public which classifies as the secondary user.



Figure 26: Important nodes around the site (DBA)

The user group further helped in setting up the site selection criteria for the thesis, i.e.,

- The site should be easily accessible for the primary user.
- The site must have access to transportation facilities.
- The site must be in a suitable zone for this type of activity.

4.2 Site and Thesis Statement

So according to the thesis intent, there were certain points that aided in site selection.

- The site is located at a place, where the user influx is quite dense which aids in creating a platform both sustainable and inclusive.
- The concept of innovation in handicrafts can be well carried out at this site because the primary targeted user can easily access the site and there is a huge opportunity to generate such activities on this site.
- The site is located between green fields, which should create a productive environment for the artisans.

4.3 Site and Program

Based on the conclusions from previous chapters, the basic programmatic division is as follows.

Education (Innovation)	Exhibition (Promotion)	Workshops (Preservation)
------------------------	------------------------	--------------------------

Site is located on the educational avenue of the city. Bosan road connects all the dense educational and commercial activities going around and the residential area lies on the back end of these activities. The selected site can be accessed from the front through Bosan Road and Ahmedabad Road from the back.

Currently, the inner walled city receives a greater influx of the artisan community. The site can be accessed from the inner city through Metro Bus, in 10 minutes. It should be easier for the artisans to commute from their workplace to the inner city to promote their work. Moreover, it should also be accessible to public visitors.

Site being near Bahauddin Zakriya University, Multan College of Arts, Institute of Southern Punjab and other educational institutes, should act as cultural research and learning hub for the students in order to innovate traditional handicrafts through modern skills and tools.

The site is in a developing area, with commercial and recreational activities being promoted in the surroundings. Moreover, the site is located on a road connecting the housing societies located on the outskirts of the city such as DHA and Buch Villas to the main commercial hub of the city.

4.4 Site Study and Analysis



Figure 27: Collage showcasing the important nodes of Multan (DBA)

4.4.1 Climatic Factors

Multan is in South Punjab, which is a deserted region with extremely hot summers and mild winters. One of the major issues with the site is its hot climate and not enough rainfall.

According to stimulated historical climate and weather data of Multan, following is the graph representing the maximum and minimum temperatures of the city over the year. The temperature goes above 40° C for 5 months in a year. Climatic data would then decide different techniques for design sustainability.





The following graph shows the amount of sunny to cloudy days throughout the year. This ratio will further help in deciding the ratio between open, semi open and closed spaces. It will also help to analyze the landscaping and vegetation required.



Figure 29: Ratio of cloudy to sunny days in Multan

Moreover, analyzing the sun path and wind data would also help in building orientation, because the programs require open and well-lit spaces.



Figure 30: Sun path diagram of the site

4.4.2 Vegetation

Site lies in a zone where there are multiple activities going on in the surrounding. Although site is in its developing stages so there are still empty patches of land, also there are multiple fields in the neighborhood as well. Some of the existing trees on site are Sheesham, Bakain and Banyan tree.



Figure 31: Existing vegetation at the site

According to the climatic and weather data of Multan city and the type of programs included in the thesis, the site required ever green and shady trees which can survive in less rain. So the suggested trees for the site are; Bakain, Moringa Tree, Bahain Tree, Arjuna Tree, Kachnar Tree, Hibiscus Flower Tree, Banyan Tree, Gul e Nishter.



Figure 32: Suggested trees for the site

4.4.3 Circulation

Vehicular circulation around the site is through Bosan Road as the Primary Road and Ahmadabad Road as the secondary road. Three entrance nodes can be generated on the site for vehicular and pedestrian entrances.



Figure 33: Vehicular circulation around the site (DBA)

4.4.4 Land Use

The selected site has diverse land use, as it exists in a convertible developing zone. The site is located at a node which has educational, commercial and industrial activities going on in the context. The diverse use of context makes it an ideal site for the thesis as it would be possible to cater to all the programs.



Figure 34: Land use zoning of the context (DBA)

4.4.5 Noise and Odors

Site is in a populated area, thus

- There is traffic noise due to major road
- Human noise due to public areas
- Brick Kilns nearby

These factors call for a buffer to be designed around the site. Natural buffer is preferred according to the concept and programs of the site that will also aid in the thermal and ventilation needs of the site.



Figure 35: Noise and odor sources in the context (DBA)

4.4.6 Site Views



Figure 36,37: Views of the site



Figure 38,39: Views from the site

4.5 SWOT

4.5.1 Strengths



Figure 40: Strength analysis of the site (DBA)

- a) Lying directly on a major busy road, site has a very strong visual connection with the passersby and being on Metro commute makes the connection even stronger. This factor will result in greater user influx to the site.
- b) There is a diverse user group coming to the context on daily basis in terms of class, profession and age groups. This factor makes the site accessible to all user groups resulting in a stronger communal space.
- c) The site is accessible for different users and facilities.
- d) Considering the climate of Multan, the site lies in a developing zone but there is dense vegetation present around the site which will help in generating a thermally comfortable space for the users and visitors.
 - <image>

4.5.2 Weaknesses

Figure 41: Weakness analysis of the site (DBA)

- a) One important factor of the city itself is lack of communal platforms. This can be turned into an opportunity for the site to introduce a space for the interaction between different users which will also help to boost the culture and build a stronger community.
- b) The site has a very diverse user group but all the groups are very scattered. There is no sense of directionality and zoning.
- c) There are multiple encroachments on the site including beggars and vendors

4.5.3 Opportunities



Figure 42: Analysis of the opportunities on the site

The at the front and back side of the site can help to create a green corridor through the site. The village will act as a permeable entity on the site which will boost the vegetation on the site. A green path can be introduced on the site connection different programs functioning in the

context of site. This path can also serve as a link between the pedestrian and the communal nodes introduced on the site.

4.5.4 Threats



Figure 43: Threat analysis on the site

The site lies directly along the main road, which makes traffic noise to be a big threat for the site. The vehicles coming to the site might also cause traffic problems. Moreover, the smoke from traffic, brick kilns and industrial activities is also a threat. Adding trees with more foliage would act as a buffer against noise and they will also help to keep the ambiance clean.

4.6 Conclusion

The site decides the connection of the thesis with the context. It will help in analyzing design approaches and how will the community benefit from the programs. It will also help in analyzing the effect of the programs on the site and the effect of the context on the programs.

The next chapters will discuss in detail the design interventions and decisions taken to fulfill the thesis intent.

Chapter 5

Design Process

As discussed in the previous chapters, the thesis deals with creating a platform for the preservation, promotion, and innovation of local handicrafts of Multan. The in-depth analysis of literature and the current problems faced by the local community as well as their needs, helped in selecting the targeted user group for the thesis. The primary users will be the local artisans and designers/students, whereas retail and exhibition will cater to the public which classifies as the secondary user. The targeted user group and programs helped in selecting a site located on the education avenue, Bahadur pur Multan. The site is in a developing area, with commercial and recreational activities being promoted in the surroundings.

5.1 Introduction

The main objective of the thesis is to provide a platform to the living knowledge of the city, so they can practice the traditional art, exhibit their skills, connect with local community, and collaborate with designers to bring innovation. This chapter deals with the design process carried out in order to translate the conceptual development discussed in the previous chapters.

5.2 Design Translation and Spatial Connections

Following the conceptual development of the thesis, programs, users, and the site different strategies have been adapted following the local architectural language.

5.2.1 Spatial Zoning

The spaces follow a modular arrangement in such a way that the public zone face the front end of the site, and the semi-public and private zone are placed on its back respectively. The public zone includes admin block and vocational training block, so they can be accessed from the driveway. The workshops for artisans are arranged on the back, which can be accessed through pedestrian pathway only. And the private zone, which is the residence, is located on the back end, which has a separate vehicular and pedestrian access.

Spatial connections would be creating following the concept of a village and eliminating the gap between locals and artisans. To bring in front the living treasure of our community, the concept of live museum is introduced. In the live museum, the workshop would lie on the path of users so they can have direct connections with the visitors. Also, the workshops would have a direct visual connection from the entrance as well from the metro route which will also help in promoting the handicrafts.



Figure 44: Spatial zoning of the site showcasing the conceptual connections (DBA)



Figure 45: Design development (DBA)

Artisan's village is a platform primarily for the local artisan community of the city, who has been facing the problems of space and exposure since years. The community mostly belongs to villages or Kachhi Abadi. Taking example of Multan itself, dating back to old times these communities used to reside close to each other to share materials and sources. There have been some famous streets and mohallas in the old city of Multan such as Mohalla Kamangaran, Choori wali gali, Qaleen baaf ki gali, Degan wali Gali etc.

Following the local work pattern, the spaces are organized around arteries connecting the main entrance pathway to different programs.



Figure 46: Conceptual massing of the programs showcasing the streets (DBA)

5.2.3 Courtyards and Chaupal

Between the modular arrangement of different programs on the site, open spaces are provided in the form of internal and external courtyards, and chaupals. The courtyards serve the purpose of connection, communication and open working spaces. Whereas the chaupals are provided in the artisan's working block, where these serve as an outdoor extension of their workspace and as a communal space for the artisans.

These courtyards and chaupals are added to reflect the village culture to provide the artisans with an environment in their natural setting. These courtyards and chaupal, combined with green spaces and shady trees also help in creating a healthy working environment for the artisans.



Figure 47: Showcasing the concept of Chaupal


Figure 48: Conceptual massing showcasing courtyards

5.2.4 Materiality and Elements

The materiality of the spaces also follows the contextual and local language and requirements. Traditional brick walls, arches, verandas, and courtyards are used to make the built space more localized and fit in the context. The streets are also made up of bricks rather asphalt or any contemporary material to ensure the essence of a village. The open streets would be covered with temporary structures, which will be either thatched roofs or fabric, to ensure comfort of user.



Figure 49: Selection of local materials

5.3 Conclusion

In conclusion, the spatial arrangement and design strategies follow will result in a platform which will ensure a comfortable working environment for the primary users, which will also help in bring our community together at a communal and recreational spot. The design will also respect and reflect the contextual and local architectural language.

Chapter 6

Design Outcome

6.1 Introduction

Working upon all the initial research, user requirements, programs and site, this chapter concludes the final design of the Artisan's Village. As discussed earlier, the thesis deals with the promotion of local culture. And the strategies used for its promotion have been divided into different programs which were then organized on the chosen site for the outcome.

6.2 Design Description

The outcome of the thesis is a platform, where the spatial organization is following the requirements of the users, programs, and the site. The programs have been divided into several modules, which are arranged around a streetscape following the language of a local village and contextual spaces. The final design helped in creating a strong visual and physical connection between the locals and artisans. The journey through the streets passes through the phases of excitement, recreation, knowledge and learning. The public zones are placed at the front creating a welcoming entrance for the users. Direct linkage to the artisans also creates visual linkages between the passerby and the artisans. Also, according to the programmatical requirements, the spread of spaces is horizontal rather vertical. Being on a flat land, some levels have been introduced to differentiate different zones.

"Creating a public platform to revive the culture of Multan through the preservation and enhancement of local handicraft."

Preservation: Following the thesis statement, the outcome comprises of individual modular workshops for the artisans as well as a combined storage and machine room for them. This solves the issues of space and tools which the artisans are currently facing, Moreover, there is also a room for the expansion of this platform, as the workshops are designed as a module which can be repeated according to the requirements.

Upgradation: A vocational center with the facility of experimental studios is provided, which will help in the promotion of knowledge as well as the collaboration between the artisans, students and designer to bring innovation to our local handicrafts.

Promotion: The vocational center serves the purpose of promoting the knowledge to younger generation. The exhibition areas and public communal spaces will give exposure to the artisans to promote and exhibit our traditional art to bigger levels.

6.2.3 Elements of intervention

The unique elements of intervention include the vocational center for the training of younger generation as well as for the collaboration between designers and artisans to bring innovation to our traditional handicrafts. The workshops are arranged around a central courtyard which will also act as a outdoor extension of indoor workshops, as well as a connection between different workshops. This will also serve the purpose of visual connection between different processes going on. The vocational center has visual connection with the other programs being carried out on the site such as the café space, amphitheater, and artisan's workshops.

Lastly, the most important element of the design is the artisan workshop. A module has been designed which can be slightly changed according to the spatial and programmatical requirement of different handicrafts. The modules are repeated according to the requirements and are connected through chaupals which will serve as an outdoor extension of work and a communal spot. The workshops for the same handicrafts are raised on one platform to distinguish from the others.

Bringing together all the programs and elements, the outcome of the design gives a platform based on street culture of villages, with important nodes created in between the spaces.

6.3 Conclusion

The final design provides a platform to the local artisan's community, where they can reside and work in their natural environment, The artisans will be provided with space and machines which is the biggest problem being faced by them today. The artisans will be working from the front side where they will get the exposure and opportunities to exhibit their work to a larger community directly without any middlemen, The artisans will get a platform to exhibit and promote their work to younger generation which is willing to take this art along. The vocational center will serve as a platform where the locals willing to learn these traditional skills will directly connect with the living knowledge of our art.

Moreover, the artisans will get to collaborate with the designers, where both will learn from each other to bring innovation to our traditional arts to further promote it to national and international levels.

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