

# REDEVELOPMENT OF BANGLADESH FOLK ART AND CRAFTS MUSEUM COMPLEX

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**Sonargaon, Narayanganj**

By

Mohammad Ridwanul Bari

12208020

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## **Abstract**

Bangladesh has seen its socio-economic and cultural life determined by its deltaic landscape created by the major rivers and their innumerable tributaries. It has also influenced its arts and crafts throughout time. Folk art and crafts reflect traditional/native art forms of diverse communities. The history of arts and crafts of Bangladesh is centuries old though it is fading away for the lack of preservation, proper exposure and our negligence towards it. Folk arts and crafts had aristocratic patronage and a more sophisticated level of skills which craftsmen or artists inherited traditionally from generation to generation. But its identity has been lacking significantly in the past few years due to its less economic return whereas the people associated with it are mostly from the rural parts of our country.

The proposal of this project arises from the need of above mentioned circumstances. This project intends to create an environment where these arts and crafts of centuries old are well-preserved and reflect the tradition of our country and encouragement towards the people who has lost their way into it.

**Keyword:** *folk, decorative, preservation, exposure, negligence, reflect*

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## **CHAPTER 1: INTRODUCTION**

1.1 Background of the Project

1.2 Project Brief

1.3 Project Introduction

1.4 Aims & Objectives of the Project

1.5 Given Programs

## CHAPTER 1: INTRODUCTION

### 1.1 Background of the Project

Bangladesh, within the larger context of its history of transformation and fragmentation, art and culture has native values and different perspective. It follows historical events, which have created traditions, brought changes to imagined ones, or denied them as well as re-evaluating what they signify. The notion of tradition has played an important role in art, sometimes it has been the catalyst that has brought about a reversal of ideas of identity. Bangladesh has a rich tradition of art and craft. Folk arts and crafts are predominantly functional or utilitarian visual arts and crafts created by hand (or with limited mechanical facilities) for use by the maker or a small circumscribed group and containing an element of retention—the prolonged survival of tradition. Folk art is the creative expression of the human struggle toward civilization within a particular environment through the production of useful but aesthetic buildings and objects. Folk art starts from daily experiences and traditions of common people. Usually made by “untrained” artists, there are not “arts” and “crafts” with folk art, so there is often more freedom of expression. The folk artists are resourceful and use objects they find, as well as the items around them, for their work. Often, folk arts and crafts are created by people who are not affluent and live in rural areas.

Every country has its own art heritage and identity. Everywhere, there is an effort to exhibit them through museums and share the ideas of art through them. Museums add a lot to it. People can see artist works, share their opinions. The environment has become richer to add public function with it such as learning space, libraries,

plaza, performance place, cafes, workshops spaces, etc. Fairs and festivals have continually played an important part in the life of this country. People get a great amount of joy, entertainment and color for life from them. Folk arts and crafts museum can offer a public gathering place to know more about our country's creative work.

## 1.2 Project Brief

**Project Title:** Re-development of Bangladesh Folk Arts & Crafts Museum Complex

**Location:** Mugrapara, Sonargaon, Narayanganj

**Site Area:** 14.3 Acres

**Project Type:** Cultural

**Client:** Bangladesh Folk Arts and Crafts Foundation (Ministry of Cultural Affairs)

## 1.3 Project Introduction

Sonargaon was a historic administrative, commercial and maritime centre in Bengal. It was abandoned as capital of Bengal in 1608 by the Mughal rulers when they shifted the capital to then Jahangirnagar, now Dhaka (Haque, 2016). Like Sonargaon, our folk arts and crafts has been hampered by the industrial revolution and urbanization. In 1975, to preserve and save our traditional arts and crafts, the Father of the Nation, Sheikh Mujibur Rahman and the great painter Zainul Abedin took an initiative of opening Bangladesh Folk Arts and Crafts Foundation who is responsible for Bangladesh Folk Arts and Crafts Museum. At first, the museum resided in an old building of Panam City and later, it was transferred to the historical 'Bara Sardar Bari' of the current museum complex. Another museum building was designed to accommodate increasing artifacts in 1996. The setting of Sonargaon

because of its cultural-historical background as well as its authentic rustic landscape with ponds, rivers, fields, hamlets and regional flora, is ideal for the establishment of a folk art museum. Two main criteria to be borne in mind while choosing the site are easy accessibility and the availability of a large piece of land with authentic landscape for rural complex.

The traditional arts and crafts of Bangladesh have been a focal point of interest for visitors from abroad for centuries. The rural-based infrastructure has made it a potential ground for the development of numerous craft items - stone and wood carving, ivory works, and pottery, weaving of muslin and jamdani textiles, metal work, jute & cane work, Nakshi kantha (embroidered quilt). These crafts are not only singularly beautiful, but also representative of the culture, tradition and customs of our country. Our country is also renowned for its cotton and silk fabrics (EPB, 1996).

Art and crafts is something that has the potential to make people mind free. Museum of Folk arts and Crafts would be such a platform where people would share their ideas and will certainly help to make the citizens think for the society in a broader perspective. In Bangladesh, there is a huge population who are devoted to creative works. People's arts and crafts are central to the study of any culture from historical perspectives. Handcrafted objects provide essential pointers to the socio-economic and cultural status, the spiritual and intellectual development and values of a society. So, this project will contribute rich significance locally overall nationally will give its citizen a breathing place. Museum of folk arts and crafts can help to revive aesthetic taste and the quality of contemporary crafts. The collection itself can become the reference library for the craftsmen. If they are interested and consciously involved in

the programs of the museum, they can recognize the superior quality of craftsmanship, design and materials and will strive to achieve this again today.

#### **1.4 Aims & Objectives of the Project**

The importance of a museum in the everyday art of a people cannot be underestimated. Only a museum can save these folk objects and serve as a source of reference for reviving and improving craftsmanship and design. This project intends to achieve the following aims and objectives:

- Museum of folk arts and crafts will collect the traditional monuments of Bangladesh folk art & crafts elements along with preservation and exhibition artistically and restore the present and future generation.
- This museum complex will maintain the regular exercise of folk art for the greater purpose of art, communicate and share the ideas of artists and viewers with rest of the folk world through various programs.
- The addition of learning spaces and archive will give more chance to involve general people.
- Studio and training facilities will inspire towards more creative works.
- It will also encourage the engagement of foreign artists.
- The plazas or the event space will gather people to know more about the arts and crafts. This space will give a platform for festivals and fairs.

## 1.5 Given Programs

- Permanent gallery
- Temporary gallery
- Multipurpose hall
- Documentation department
- Library/ archive
- Book shop/ Museum shop
- Cafeterias (200 people)
- Open theater/ Performance space
- Learning space
- Workshops
- Studios for artists
- Administration/offices
- Accommodation (20 artist)
- Auditorium (500 people)
- Research and publication

## **CHAPTER 2: LITERATURE REVIEW**

2.1 Understanding ‘FolkArt’

2.2 Folk Arts and Crafts of Bangladesh

2.3 Importance of Folk Arts and Crafts of Bangladesh

2.4 Vital for the Development of Village Economies

2.5 Current Status of Village Economy through Folk Art



## CHAPTER 2: LITERATURE REVIEW

### 2.1 Understanding 'Folk Art'

The American art world of 1920s described the term folk art' for the creations of those who are not formally trained. In the 1960s folklorists proposed a more specific alternative meaning like any other form of folk expressions; folk visual art is handed on informally within the community (Burrison, 2000).

*“Art, especially the traditional arts, continually demonstrate the vital principle that sameness and differences always go together. A Texan and a Missouri fiddler may play the same tune, but they will not sound the same.”*

- Bess Lomax Hawes, folklorists

*“In expression „folk art“ is not only the word „art“ that is difficult to understand: the word „folk“ is equally problematic.”*

- August Panyella, folklorists

Art is an important part of everyday life. It is not only the work of well-known artists in renowned art museums, but it is also the art of distinctive societies and subcultures. This is folk art—art that develops its styles, techniques, and subject matters within the culture and history of a social group (Bhat, 2014). Many things, some biological and some historical, define who we are—gender, age, ethnicity, region, religion, language, or occupation. Thousands of artistic expressions come out of our collective cultural roots in the form of rituals, objects, celebrations, dance, music, and stories passed on from elder to child, from artist to apprentice, and from neighbor to

neighbor. Some traditions are as ancient as storytelling, others as new as jump-rope rhymes and poetry slams. Folk art represents the traditions and practices of closely connected groups, preserving cultural and community identity through artistic expressions such as music, dance, art, and craft. Folk art must be traditional but not all traditional arts are folk arts. The role of individual artist is not very prominent in folk art which is communal – a result of what might be called cumulative originality rather than strictly individual creativity – a communal development still allowing for individual expression (Hasan, 1983).

## **2.2 Folk Art and Crafts of Bangladesh**

Art and Crafts rank among the oldest as regards aesthetics in the history of Bangladesh. Archeological proofs authenticating this certainty brought on light by the excavations In Mahasthangarh, Bogra, Mainamati, Comilla Also generally significantly since 2001 AD, starting with Wari-Bateshwar to Narsindhi district. The people of ancient Vanga (Bengal) dating to the earliest human settlements of approximately 500 BC were producing pottery, iron implements, wooden objects and a range of agricultural, ritual and domestic items (Banglapedia, 2014).

Bangladesh is a country of survivals. Century old traditions live side by side with modernism. The folk arts and crafts are intangible cultural heritage of Bangladesh. Folk Art and Crafts are evolving over time through the age-old folk practices. The distinction between what constitutes art and craft is often blurred. Thus floor and wall paintings or Nakshi kantha are included in folk art while the products of potters, carpenters and weavers, as well as articles made of bamboo, cane, shola, conch-shell, ivory, bell-metal are referred to as craft (Banglapedia, 2014).







## Sculpture

Figurative sculpture, as well as some sort of incised relief decoration can be seen in almost every society. The most common type of sculpture in folk arts and crafts is wood-carving. Other popular applications of plastic art included ‘papier-mâché’ often used in large scale of figures in carnivals.

## Painting

Bangladesh has an old tradition of narrating stories with the help of a picture-scroll. The most famous types of folk art paintings include various ancient Bangladeshi art forms. Bangladeshi folk art paintings usually deal with pictorial depictions of popular Hindu and Buddhist gods.



Figure 7: Folk paintings portraying myths (Source: Google)

### **2.3 Importance of Folk Art and Crafts of Bangladesh**

Most importantly in any traditional culture, folk arts or crafts signify such levels in an art language as folk poems and lore do in literature or folk songs and dances in the performing arts – levels which involve larger numbers of people in a society in creative expression, and, in the process, keep their sensibility counts high (Kumar, 2006). Folk art uses traditional motifs reflecting the land and its people. Different forms of folk art tend to repeat these common motifs. So a society in which folk arts are alive is a more colorful and creative society than one in which art activity is confined to a privileged few.

### **2.4 Role of Folk Art and Crafts in Village Economy**

The artisan sector (or traditional village industry) is a primary, small scale; village based manufacturing sector, which provides the essential manufactures, functions and services that cater to local communities and now by default, is increasing export markets (Kumar, 2006). It is thus a critical and essential element for the village economy and its self-sufficiency. Artisans contribute their knowledge of local materials and give form to human experience.

Culturally, the artisan sector has in the past seen its enlightenment and peak of sophistication, as for instance the Dhaka Muslin. This was acquired through generations of masterly craft practices, which have become hallmarks of quality and superiority in handmade items. A rediscovery of that excellence will not only give a thrust to village economies, but will contribute substantially towards the nation's progress (Kumar, 2006).

## 2.5 Current Status of Village Economy through Folk Art

Due to the industrialization process, there is also an influx of factory made modern/cheaper/export rejects/surplus into the system. Because of this, tens of thousands of these artisans and crafts people have lost or on the way of losing their livelihoods. In Chittagong, 70 odd families of potters were out of business as with the introduction of cheaper and more durable plastic products in the market their work had become redundant. Most of these potters have landed up selling their labor, collecting fuel wood from adjacent forests to be sold in nearby markets, making bidis, pulling rickshaws, or hawking. The same is the fate in other places, for handloom weavers, leather workers, metal workers, and so on. Power-loom made textiles, factory made shoes, Plastic and nylon nets, and other products, are causing a death knell to the industry. Most of the artisans are today struggling for survival. Many have given up and have moved away from their traditional occupations. Others cling on desperately not knowing what else to do or whom to turn to. Their skills evolved over thousands of years are being dissipated and blunted. Capital-intensive production processes and technologies are ever increasingly replacing human friendly processes (Kumar, 2006).

The same set of people who once were the backbone of the village/region/nation's economy, providing much of the products and services, have moved away (or are moving away) from their traditional occupations and are being reduced to sell their labor, or do things which do not take into account their expertise or skill levels. They also happen to be amongst the poorest of the poor (Kumar, 2006).



## **CHAPTER 3: SITE AND CONTEXT ANALYSIS**

3.1 Location of the Site

3.2 Site & Surroundings

3.3 Environmental Considerations

3.4 Site Photographs

3.5 S.W.O.T Analysis

## CHAPTER 3: SITE AND CONTEXT ANALYSIS

### 3.1 Location Of the Site

**Location:** Mugrapara, Sonargaon, Narayanganj

**Site Area:** 14.3 Acres (622908 sqft)

**Coordinates:** 23°39'3"N 90°36'7"E

Sonargaon is now a township about 17 miles to the south-east of Dhaka & 33 miles from Maynamoti. The land is surrounded by two important rivers, Meghna & Brahmaputra. The site is located at the side of Dhaka-Chittagong highway crossing over Mugrapara bus stand and is only 5 minutes of rickshaw ride from the stand.

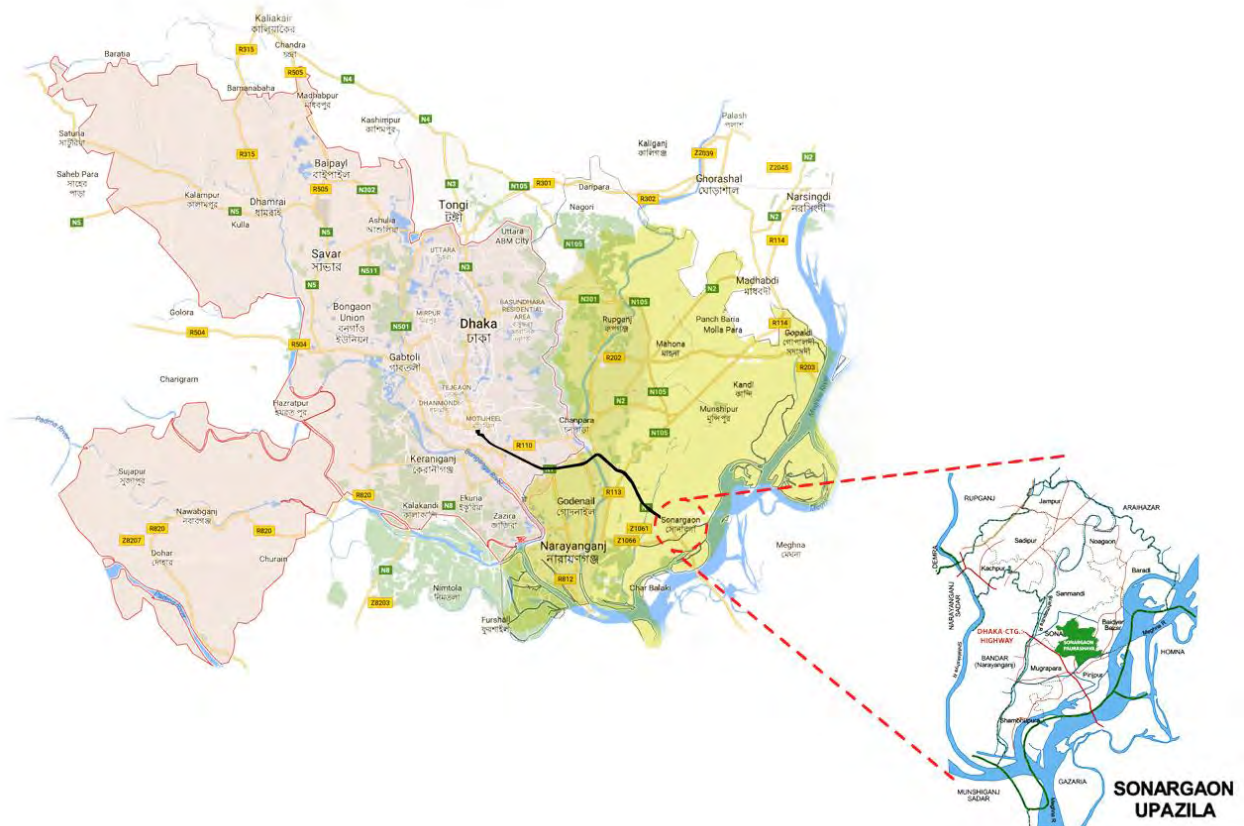
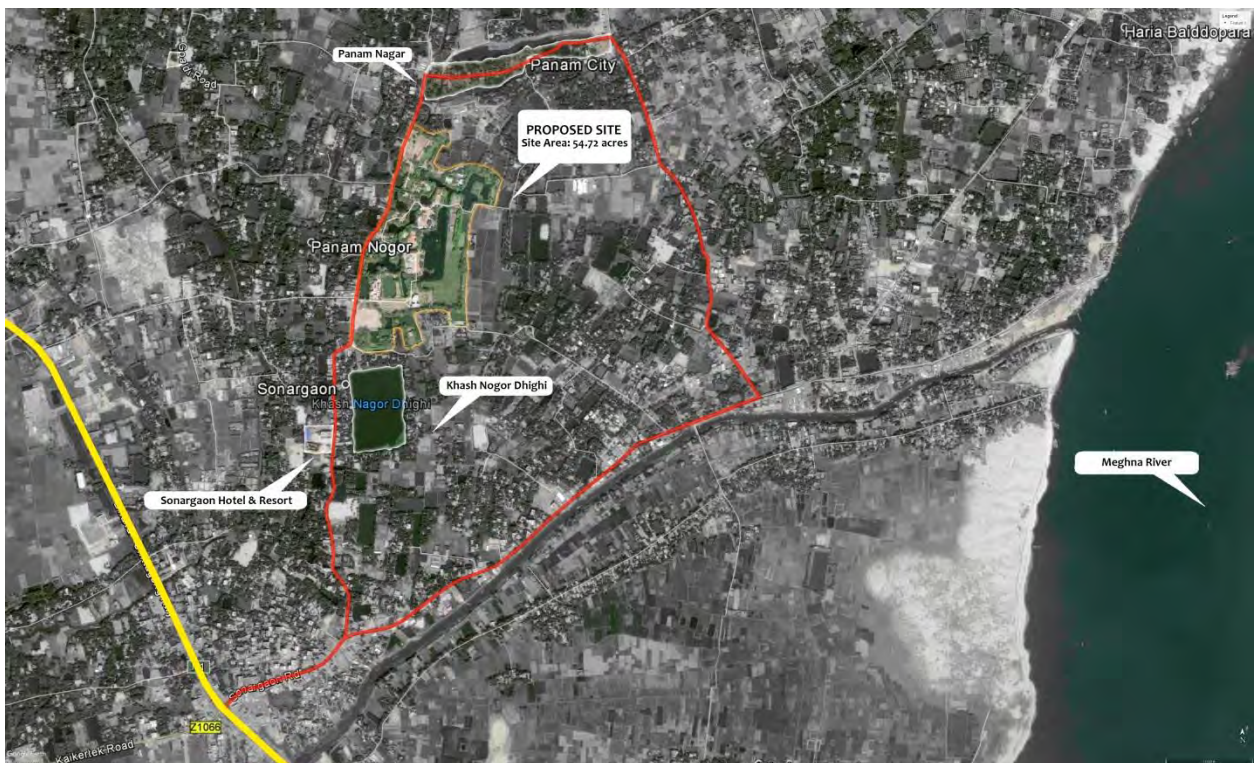


Figure 8: Location of Sonargaon upazilla in the context of Dhaka (Source: Author)

### 3.2 Site & Surroundings

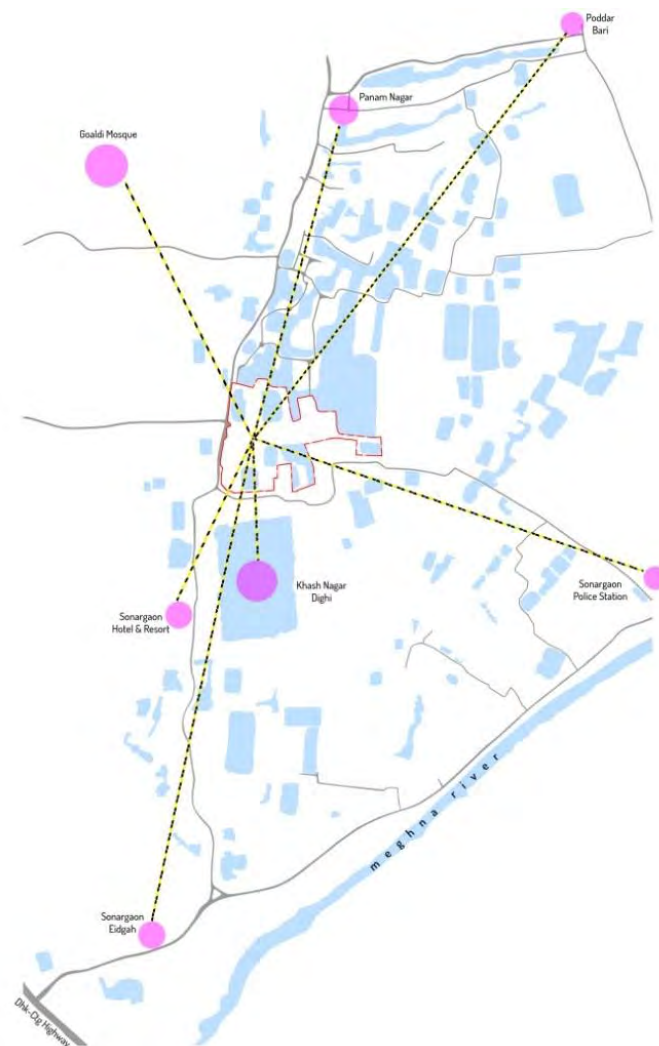
The whole museum complex is about 54 acres of which have been bought by the Bangladesh Government with a view to establishing Bangladesh Folk Arts and Crafts Museum. There are many picnic spots and other historical sites around the site within the periphery of Sonargaon district. The nearest heritage points are Panam Nagar and Khash Nagar Dighi. It is believed that Panam Nagar was the main administrative town of then capital Sonargaon and around the outskirts of Khash Nagar Dighi, there were as many of 1500 families of Muslin-weaver living and they used to dip the Muslin fabrics in water.



**Figure 9: Site surroundings with landmarks (Source: Author)**

### 3.2.1 Existing Site

The site was originally owned by local people and later in 1979; first the historic Bara Sardar Bari was bought from its owner by the Bangladesh Government in order to restore the then museum from Panam Nagar to here. Between 1979 and 1984, the total land of 54 acres was bought by the foundation and the museum complex was set up. The site is located right at the center of Sonargaon district; it is just a few minutes away from the newly opened Sonargaon Hotel & Resort. It is in the transitional point or in the thresh hold of urban concrete jungle and an actual jungle of green



**Figure 10: Connection with landmarks (Source: Author)**



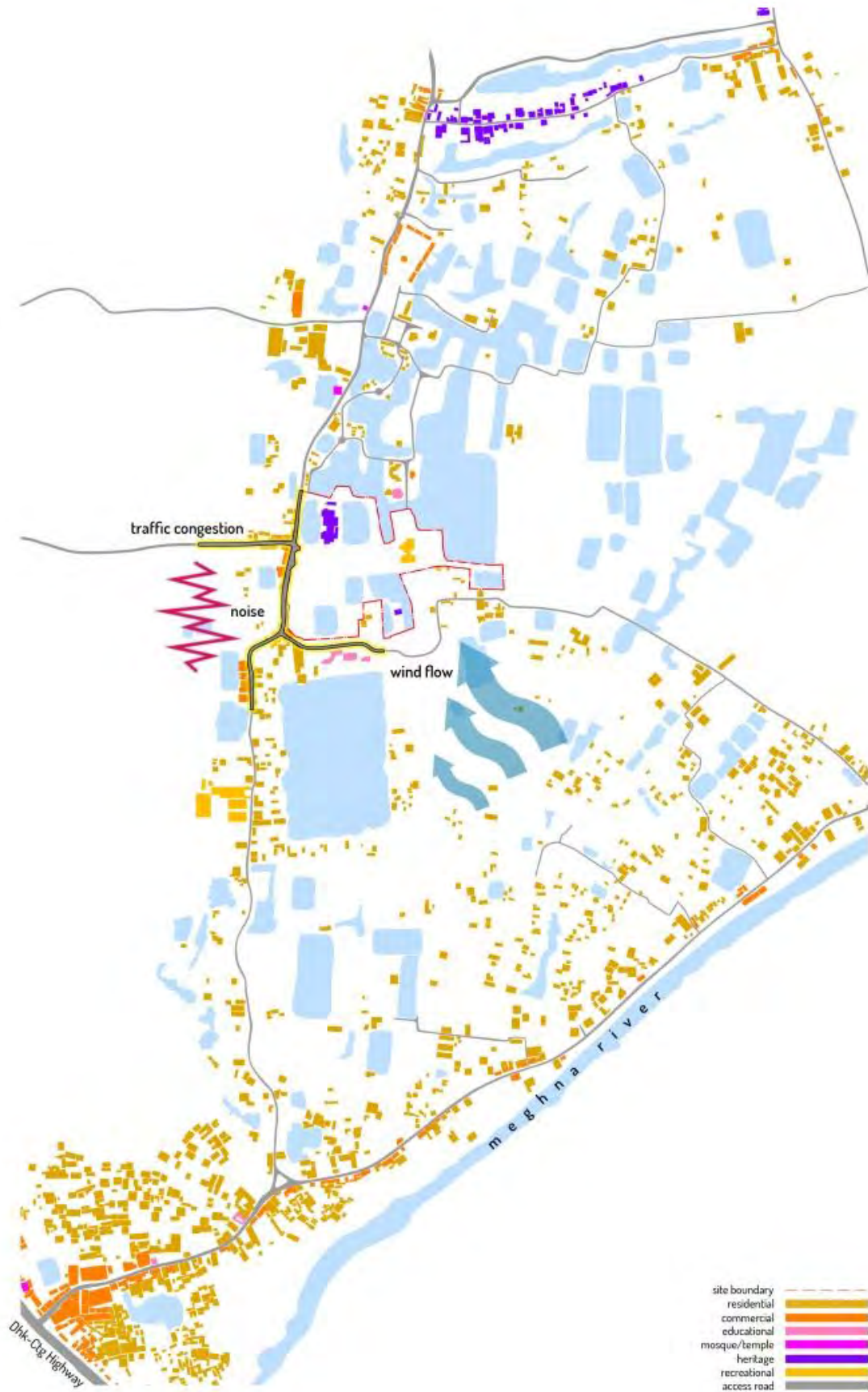


Figure 11: Building typology (Source: Author)

### 3.2.2 Adjacent Land Use

About a half mile from the museum to the north are the ruins of Panam. The two canals surrounding Panam one of which was artificial proves that it was once a well-protected city. Both of the canals run parallel to the central street on either side. The habitants here were mostly the Hindu traders. The existing archeological remains in Panam are not earlier than the British colonial period, still there is very little that can be known about this settlement from historical references.

From the museum to the south are the historic ‘Klash Nagar Dighi’; there were as many of 1500 families of Muslin-weaver living and they used to dip the Muslin fabrics in water. But now the glorious past is gone and there are rural settlements around the pond and they use it for their daily uses. Another interesting infrastructure, Sonargaon Hotel & resort are established recently to ensure tourists accommodation and relaxation.

On the eastern part of the site, a large chunk of agricultural lands are available and furthermore the setting of rural life. In front of the museum, on the western part; there are many restaurants, shops, food courts, hawkers which accompany many visitors or locals of different ages.



Figure 12: Existing detail site area plan (Source: Author)

### 3.2.3 Site Activities

There are two museums inside the premises of Sonargaon Folk Arts and Crafts Museum. The original museum was established by famous painter Zainul Abedin in 1975 on an old house called Bara Sardar Bari. The building is now being renovated to its original state and closed for display.

Shilpacharya Zainul Folk Arts and Crafts Museum was funded and established by the Government of Bangladesh, Ministry of Cultural Affairs in 1996. Artifacts related to the heritage of Bengal from 17<sup>th</sup> century onward are being displayed on this museum. You can see here things people used to use on their daily life back then.

Thousands of people pay visit to the museum every day. Among them, some people come to the complex for fishing in the artificial lake of it. Beside the third gate of the complex, crafts shops are placed in the natural setting of it. People also like to enjoy their boat riding in the lake. There were four designated picnic spots in the premises of the complex which were rentable but from last November (2016); these have been closed for rent. A library and an artisan village are also situated in the premises.

There is an area where the kids or mature people can have some local rides, for example Nagor Dola. This is the busiest place from the museum area according my observation.





Figure 13: Activities around the site (Source: Author)

### 3.2.4 Traffic Analysis

At the entrance of the complex, there is a heavy traffic gathering all the time during the day. Lightweight vehicles like rickshaw, tempu (three-wheel rechargeable motor

driven), bikes, and private cars are gathered at the drop-off. The road coming from the Mograpara bus-stand is usually used by these. Public buses use the road terminating just in front of the entrance gate coming from Dhk-ctg highway directly.



**Figure 14: Traffic movement around the site (Source: Author)**

### 3.3 Environmental Considerations

#### 3.3.1 Topography

The topography is flat mostly and no significant elevation variation.

#### 3.3.2 Climatic Considerations

The site receives **constant breeze** as the building height of southern side is not more than one storied mostly. It also receives ample amount of light from the all sides.

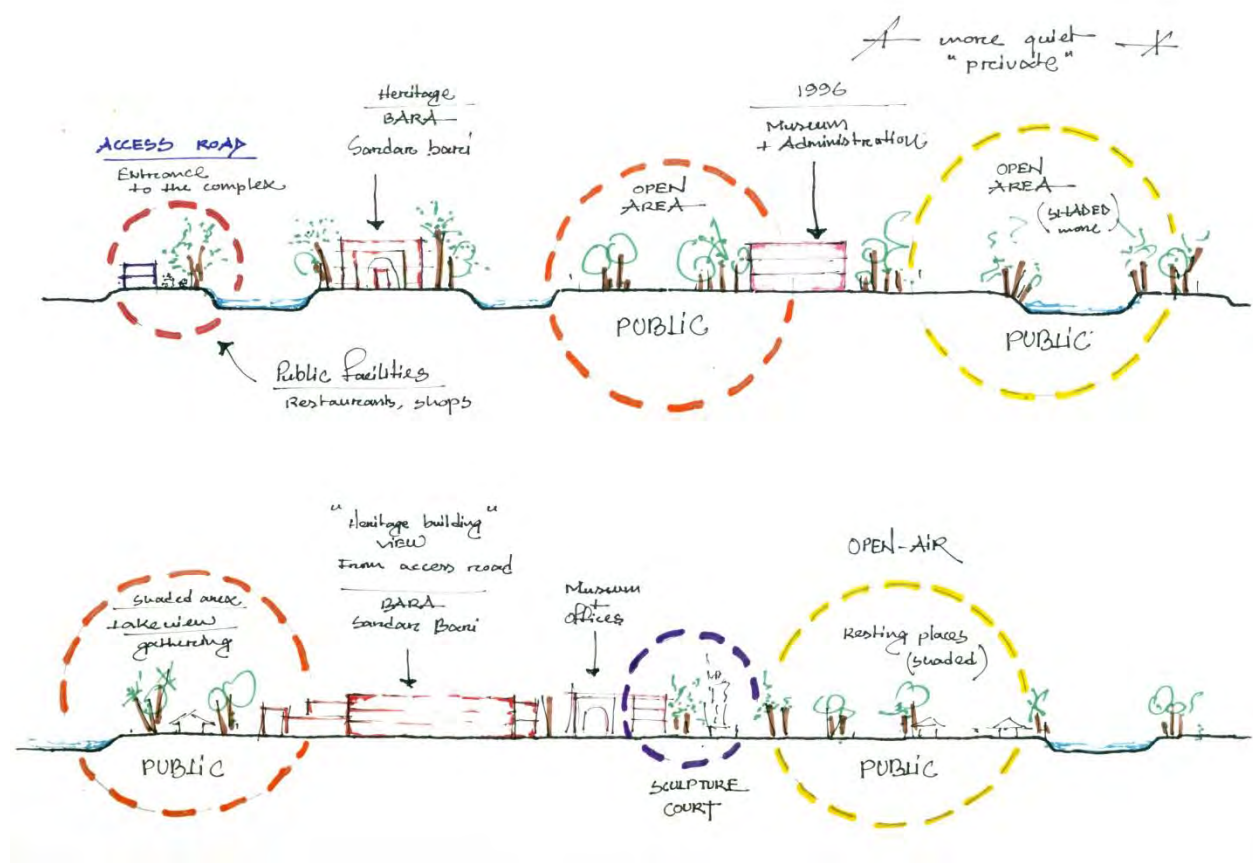


Figure 15: Longitudinal and transverse cross section through existing site (Source: Author)

### 3.3.3 Macro Climate

The site is located on a hot and humid climate. According to the graph, the temperature will be maximum at 38 deg C and lowest at 17 deg C, which is a lot hot too. All the sides are exposed to sun. As a result **deep shading is necessary to cool the wind blowing from the south.**

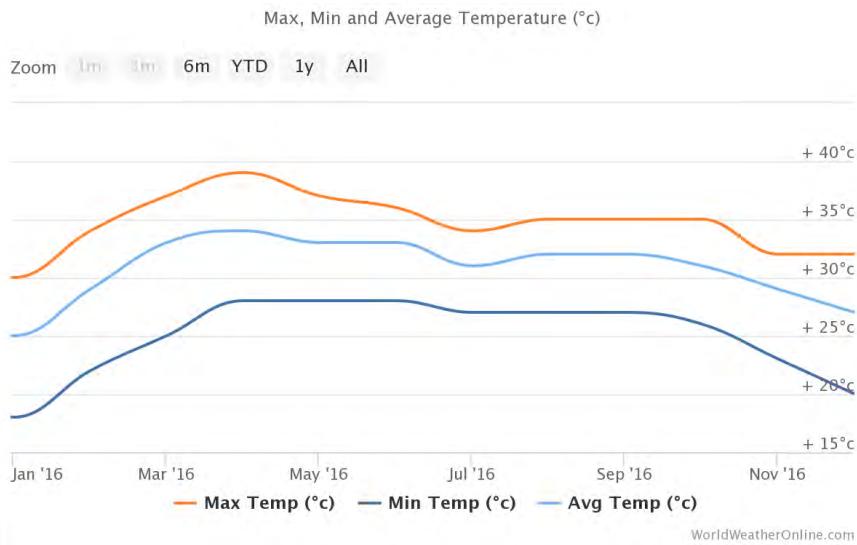


Figure 16: Average temperature chart (Source: World Weather Online)

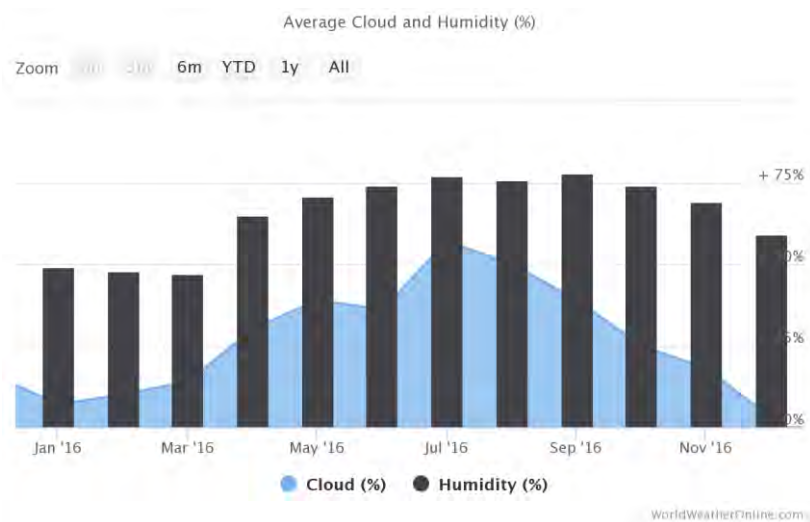


Figure 17: Average humidity chart (Source: World Weather Online)



### 3.4 Site Photographs



Figure 18: Landscaping in site (Source: Author)



Figure 19: Vacant land besides the museum building (Source: Author)



Figure 20: Backyards of Bara Sardar Bari (Source: Author)



Figure 21: Water-body (Source: Author)



Figure 22: Backyards of Heritage museum (Source: Author)



Figure 23: Entrance of the museum complex (Source: Author)

## **3.5 S.W.O.T Analysis**

### **3.5.1 Strengths**

- Cultural-historical background
- Diversity of site
- Accessibility to site
- Rural Character
- No high-rise buildings

### **3.5.2 Weaknesses**

- Dispersed functions
- Low maintenance
- Absence of proper waterscape
- No proper pedestal movements

### **3.5.3 Opportunities**

- Availability of land
- Village-like settlements of craftsmen
- Remnants of historic town
- Representation of contemporary crafts

### **3.5.4 Threats**

- No conservation of the artifacts/ architecture
- Unplanned land-filling
- Loss of foreign tourist attraction

## **CHAPTER 4: PROGRAM ANALYSIS**

4.1 Rationale of the Program

4.2 Program Derivation

4.3 Functional Flow and Programmatic Zoning

4.4 Programs with Required Area

4.5 Functional Development

4.6 Space and Physical Requirements for Museum Complex

## **CHAPTER 4: PROGRAM ANALYSIS**

### **4.1 Rationale of the Program**

The program has been selected to make the complex more public. The center houses all the functions which will help to create a folk dungeon. Temporary gallery spaces have been provided to exhibit works produced in the workshops. Individual art studios will facilitate the artist to work in silence. Artist studios will be rentable for weeks. Workshops can be arranged in the studios. People would be able to work in different types of specialized workshops and general workshops. Once in a week, artists studios will be opened for public to see their work. Archive will give an opportunity to acquire knowledge about art. Children space will encourage the young mind to involve more into creative work. People would be able to know about folk art through exhibition spaces. The museum will have two types of basic workshops, where artwork will be created and conserve.

### **4.2 Program Derivation**

The proposal already has certain programs given by the Governing body. After studying lots of folk art center's programs, addition and subtraction was done. Training center was added later. Rather than focusing on the museum to be introverting building, public facilities were given importance along the museum program. Book shops, art shops, library was added to make this place more alive.

### **4.3 Functional Flow and Programmatic Zoning**

The functional flow is based upon the zoning of the museum premises. The foreground functions are the public accessible ones and the background are the



service sector of the museum complex, sometimes occasionally accessible. Gallery spaces are kept upstairs.

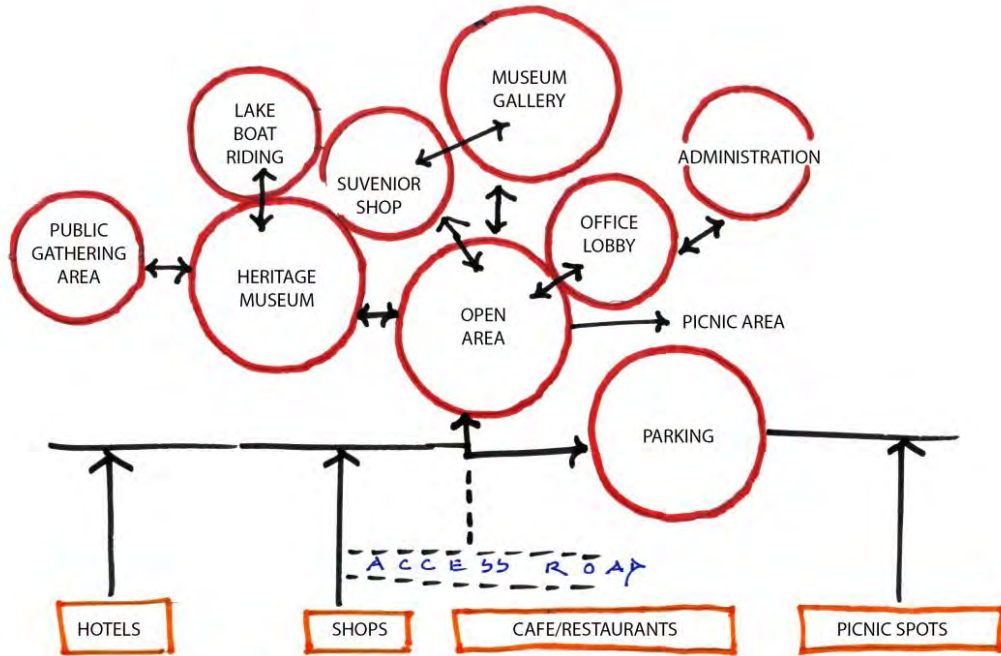


Figure 24: Existing functional flow (Source: Author)

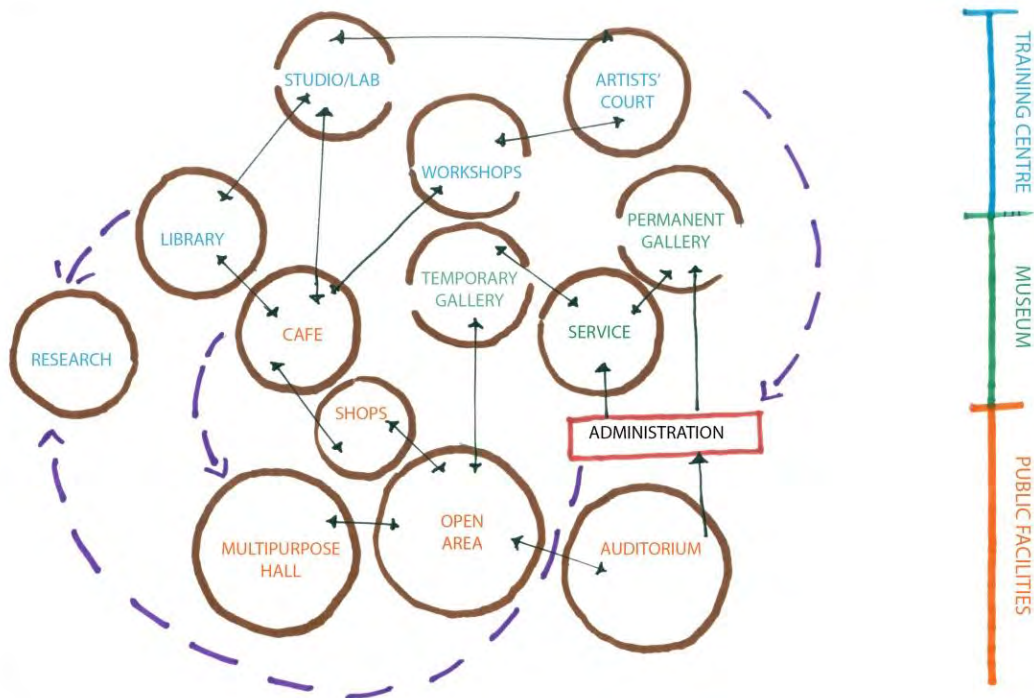


Figure 25: Proposed functional flow (Source: Author)

#### 4.4 Programs with Required Area

1. Administration	6700
2. Museum	69500
3. Training Center	3900
4. Research	3900
5. Workshops	6000
6. Studio/Class	33000
7. Auditorium	7400
8. Library	8000
9. Seminar/Multipurpose Hall	3300
10. Artists' accommodation	6200
11. Cafeteria	2800
12. Others	3500
<hr/>	
<b>Total program area</b>	<b>189300</b>
<b>Circulation (30%)</b>	<b>56800</b>
<b>Total built area</b>	<b>246100</b>

ADMIN	Quantity	Sqft.
<b>Entry</b>		
lobby	1	400
reception	1	100
toilet	5 men, 5 women	500
<b>Office</b>		
director's room	1	300
deputy director	1	300
executive engineer	1	200
assistant director	2	400
display officer	1	200
artisan instructor	1	200
collection officer	1	200
research office	3	360
preservation officer	2	120
sub-assistant engineer	1	120
registration officer	1	120
guide lecturer	2	160
accounts officer	1	80
personal assistant	1	80
conservation assistant	1	80
store keeper	1	80
lab assistant	1	80
technician	7	120
photographer	1	80
complex superintendent	6	300
conference room	100 person	1200
staff room	10 persons	800
toilet	1 men, 1 women	100
<b>Total</b>		<b>6680</b>
MUSEUM	Quantity	Sqft.
<b>Permanent Gallery</b>		
lobby	1	1000
space for exhibition	3	30000
storage	3	15000
toilet	5 men, 5 women	500
<b>Temporary Gallery</b>		
space for exhibition		2000
toilet	5 men, 5 women	500
<b>Total</b>		<b>49000</b>
RESEARCH	Quantity	Sqft.
lobby	1	300
conference room	25 persons	400
documentary room	1	400

researcher's room	1	300
conservation laboratory	5	1500
audio-visual room	3	300
store	1	200
toilet	5 men, 5 women	500
<b>Total</b>		<b>3900</b>

<b>WORKSHOPS</b>	<b>Quantity</b>	<b>Sqft.</b>
general workshop	2	2000
carfts workshop	2	4000

<b>STUDIO/LAB</b>	<b>Quantity</b>	<b>Sqft.</b>
common space	1	1000
toilet	5 men, 5 women	500
<b>Classroom</b>		
music classroom	2	2000
dance classroom	2	2000
drama classroom	2	2000
Green room	1	300
<b>Crafts Classroom</b>		
painting studio	30 persons	3000
display area	1	1000
pottery & cermaic studio	30 persons	3000
grinding & printing	1	500
storage	1	500
sculpture studio	30 persons	3000
storage	2	1000
wood-work studio	30 persons	3000
storage	1	500
handicrafts studio	30 persons	3000
display	1	500
storage	1	500
metal-work studio	30 persons	3000
storage	1	500
<b>Teacher's Room</b>		
head of the department	4	1000
teacher's room	40	800
<b>Total</b>		<b>32600</b>

<b>ARTISAN'S ACCOMODATION</b>	<b>Quantity</b>	<b>Sqft.</b>
lobby	1	200

single room	20	2000
<b>Total</b>		<b>2200</b>

AUDITORIUM	Quantity	Sqft.
lobby	1	500
toilet	5 men, 5 women	500
snacks bar	1	300
ticket counter	1	200
projection room	1	200
store	1	200
back-stage	1	500
hall	500 persons	5000
<b>Total</b>		<b>7400</b>

LIBRARY	Quantity	Sqft.
lobby	1	500
information desk	1	250
toilet	5 men, 5 women	500
reading space	400 persons	3200
storage	1	500
stack area	1	2000
librarian's room	2	500
staff area	1	500
<b>Total</b>		<b>7950</b>

SEMINAR/MUTLIPURPOSE HALL	Quantity	Sqft.
lobby	1	300
hall	500 persons	2500
toilet	5 men, 5 women	500
<b>Total</b>		<b>3300</b>

CAFETERIA	Quantity	Sqft.
food court		500
eating space	200 persons	1600
kitchen	1	250
serving area	1	100
store	1	200
toilet	5 men, 5 women	500
<b>Total</b>		<b>3150</b>

OTHERS	Quantity	Sqft.
shops	10	1500
mechanical room	1	150
electrical room	1	150
security room	1	150
<b>Total</b>		

## 4.5 Functional Development

The museum complex is mixed with three types of functions; the training center, museum and other facilities like seminar hall, movie hall. Children space, archives. So the function was developed by keeping these three zones. It might be slightly separated by small courts or plazas. All the functions are controlled and maintained by the administrative and service block. Sometimes these functions are interconnected.

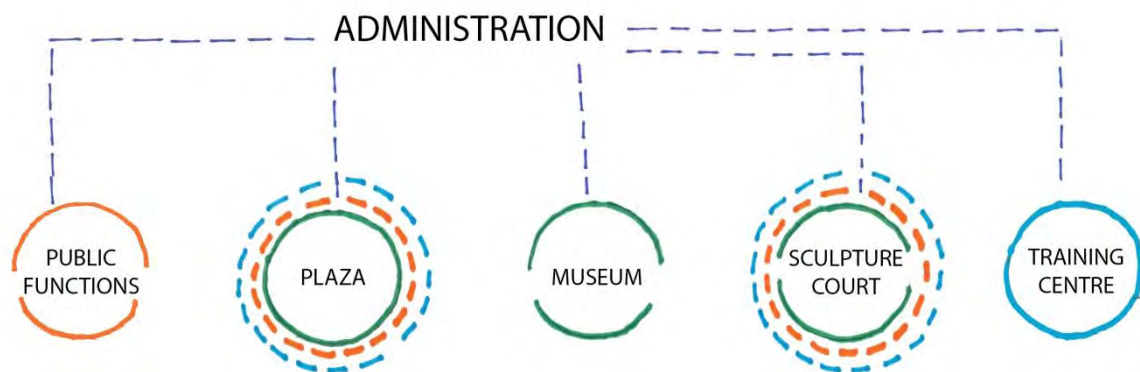


Figure 26: Functional development of the project (Source: Author)

## 4.6 Space and Physical Requirements for Museum Complex

The art center has some basic functional areas. It contains general workshop, wood, clay, metal workshop, audio-video lab, auditorium, and library and exhibit galleries.

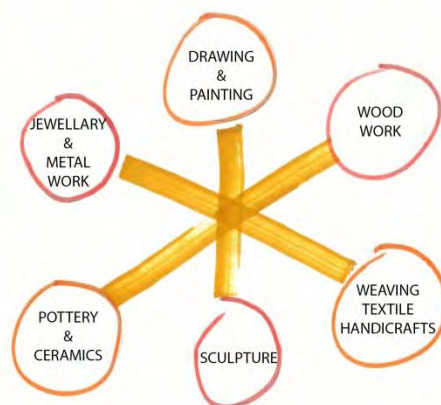


Figure 27: Training center (Source: Author)



### 4.6.1 Wood Workshop

This workshop requires space and equipment for a variety of general carpentry. Within the woodworking area, space must be provided for: receiving and storing lumber, using fixed power equipment, building projects both large and small, using hand tools, finishing, hand sanding, storing projects, noisy, dusty machines should be separated from the general work area. Finishing and drying needs a separate dust free space. Floor can be in concrete. Wooden floor offer a softer walking surface. Low windows are not desirable, but windows may be provided above door head height. All glazing should be wire glass or plastic.

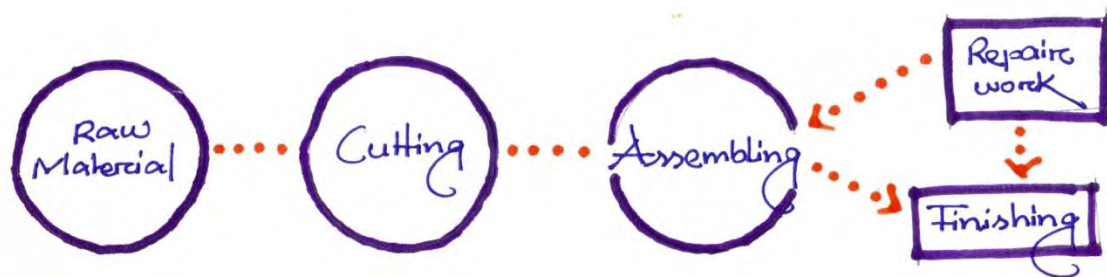


Figure 28: Process of wood workshop (Source: Time Saver Standards for Building Types)

### 4.6.2 Clay Workshop

This workshop needs space for clay preparation, forming, decorating, firing and glazing. The firing equipment generate a great amount of heat, should be separated from the general work area. Working in the clay can be dusty preferable if separated from the general workshop area.

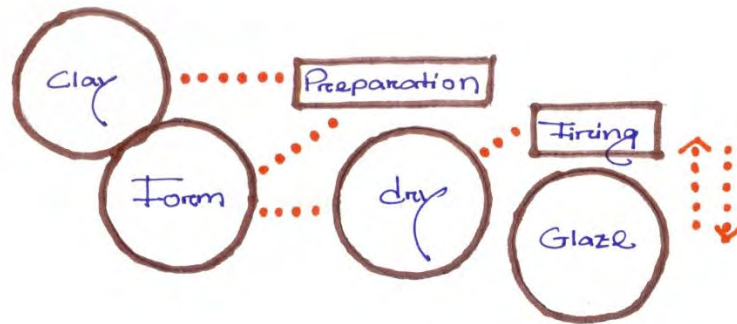


Figure 29: Process of clay workshop (Source: Time Saver Standards for Building Types)

### 4.6.3 Jewelry & Metal Workshop

This workshop needs space for construction with sheets, wires, soldering, welding and casting. Hand and power tools are used in the various processes. Welding and hot metal casting should be set aside in an alcove with a hardened concrete floor.

### 4.6.4 Auditorium

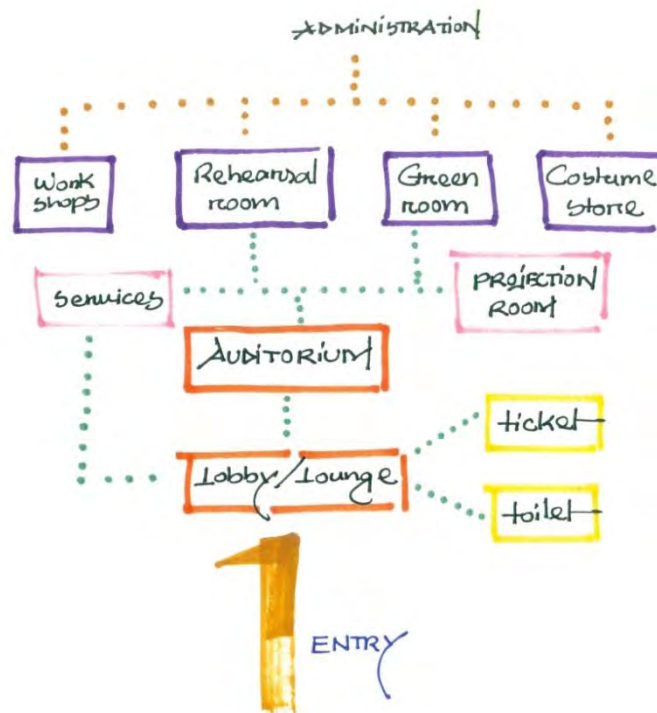


Figure 30: Auditorium layout (Source: Time Saver Standards for Building Types)



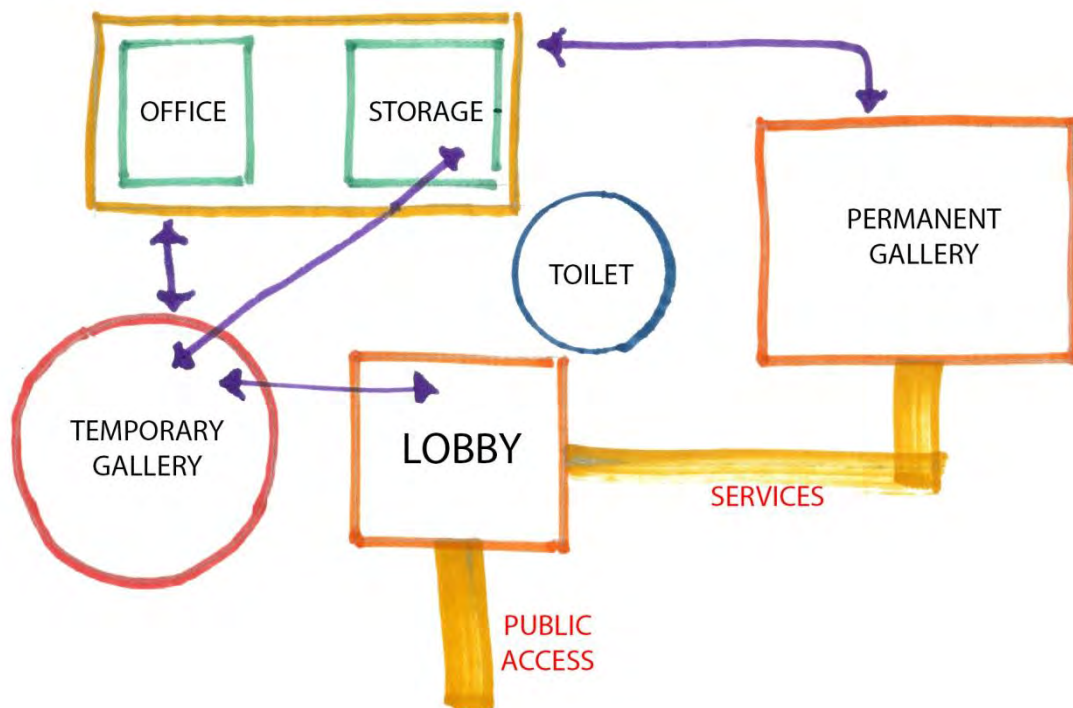
## 4.6.5 Library



Figure 31: Library layout (Source: Time Saver Standards for Building Types)

## 4.6.6 Museum Galleries

As it is an exhibition for folk art, the galleries should be comparatively flexible than any other gallery space. There should be enough space for art of any type and size. Light is an important issue in the galleries. Direct light could be harmful for painting. Diffused light is always preferable. In temporary galleries might get more light than the permanent galleries as exhibits will be constantly changing. The service process is very important. The public should not be interrupted by the service spine. The circulation should be clear to the public. The gallery height is generally higher than the usual function.



**Figure 32: Museum layout (Source: Time Saver Standards for Building Types)**

#### 4.6.7 Detailed Design and Environmental Issues

Workshop walls can be fabric covered or plaster-board clad hardboards. It is easily repaired and can be fixed directly to the wall. Sometimes porous materials help to control humidity by absorbing and releasing moisture. Floors should be comfortable, hard-wearing, light reflective, high capacity of taking loads. Along with the display there should be information panels. It can be screen system. Information technology can play an important part in museum. Micro galleries offering computerized image of art and information add a new dimension. Among the environmental issues controlling temperature, humidity, light, pollutants are the main. Passive design feature can be accommodated. Studios and galleries need ambient, accent and natural lighting depending on the functions.

## **CHAPTER 5: CASE STUDY**

5.1 Bharat Bhavan

5.2 Extension of Harvard Art Museum

## CHAPTER 5: CASE STUDIES

### 5.1 Bharat Bhavan

#### 5.1.1 Project Brief

**Project Title:** Bharat Bhavan

**Location:** Bhopal, India

**Architect:** Charles Correa



**Figure 33: Terrace gardens overlooking the city of Bhopal (Source: Archdaily)**

#### 5.1.2 Background of the Project

Designed by Indian famous Architect Charles Correa, this multi-arts center initial opened its doors in 1982. Still thirty years later, it continues to accommodate a range of cultural facilities and play host to multitude of arts events. The design of the complex is a product of Correa's mission to establish a modern architectural style specific to India and distinct from European Modernism. Drawing on the plentiful source material provided by the rich architectural heritage of his home country, at Bharat Bhavan Correa produced a building for the modern era which manages to also remain firmly rooted in the vernacular traditions of India's past (Bryant-Mole, 2016).

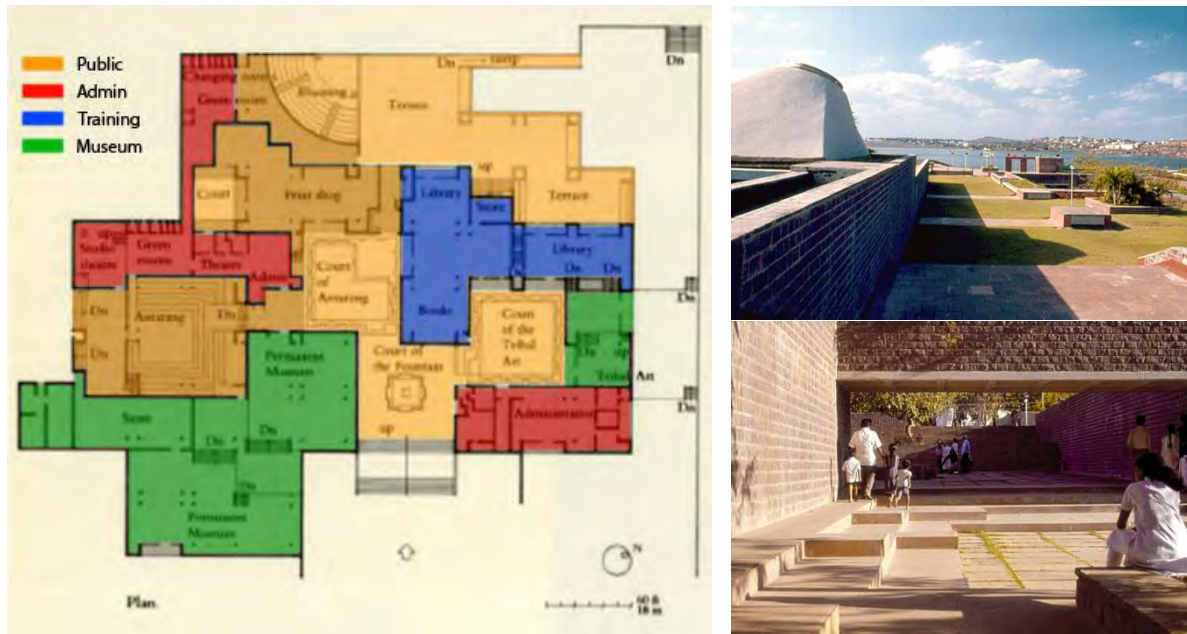


Figure 34: Functional Zoning Analysis (Source: Archdaily)

### 5.1.3 Planning and Design Considerations

European Modernism, and in particular that of Le Corbusier, had heavily influenced modern architecture in India for much of the 20th century. Correa was somewhat wary of this trend, and criticized Le Corbusier's Palace of the Assembly at Chandigarh for being poorly ventilated, insufficiently lit, and wholly unsuitable for India's hot and humid climate. Correa's architecture, conversely, is shaped by its environment, with climate control a primary concern in his design process. Indeed, this was often a necessity, as much of his early work consisted of projects for squatter housing, where inhabitants did not have the means to pay for air-conditioning and were forced to rely on the building itself to regulate temperature. Rather than importing the —sealed boxes” of European architecture, necessitated by the colder Western climate, instead Correa created —open-to-sky spaces.” He observed that —in a warm climate, the best place to be in the late evenings and in the early mornings is outdoors, under the open sky.” The sunken courtyards at Bharat Bhavan provide shade from the scorching midday sun, while the raised terraces offer



### 5.1.4 Circulation

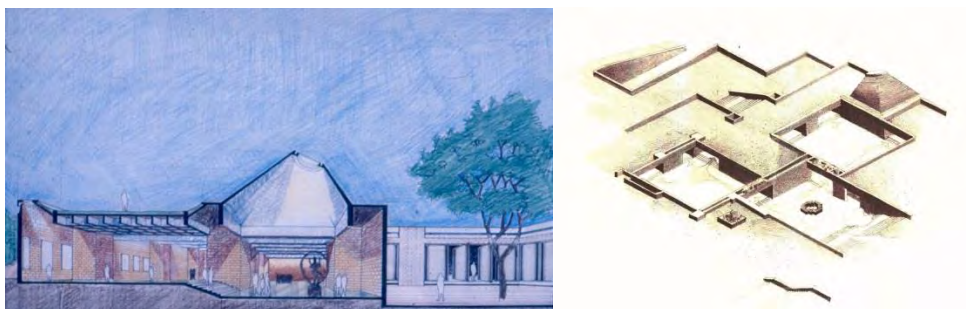
- Free flow circulation was provided to avoid accumulation at a certain point.
- No such pattern or way defined to keep people moving in a certain pattern.
- Open to sky courtyards were provided to keep also people involved in outer spaces of the building.
- Open air amphitheater was also made to utilize the natural view of adjacent lake.

### 5.1.5 Building Materials

- Red sand stone was used on the outer façade of the building.
- Flemish bond bring masonry.
- R.C.C shells were used in auditorium.

### 5.1.6 Landscaping

- Best part of the building.
- Roofs of all the buildings were covered to keep the building cooler.
- Adjacent lake was also incorporated with the building.



**Figure 36: Museum Section and Courtyard details (Source: Archdaily)**



## 5.2 Expansion of Harvard Art Museum

### 5.2.1 Project Brief

**Project Title:** Expansion of Harvard Art Museum

**Location:** Cambridge, USA

**Site Area:** 204000 sqft.

**Architect:** Renzo Piano



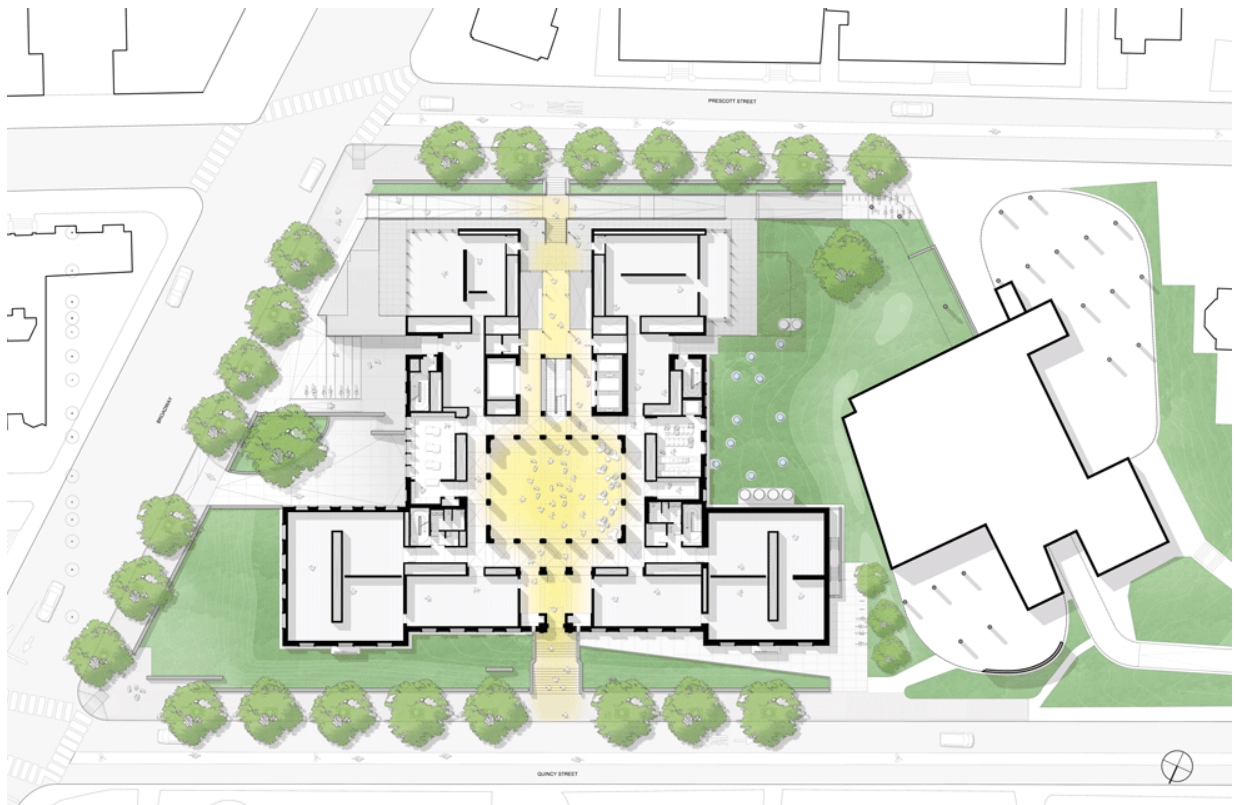
**Figure 37: Extension of the museum building (Source: Archdaily)**

### 5.2.2 Background of the Project

The renovation and expansion of Harvard Art Museums in Cambridge, Massachusetts, completed at the end of 2014, is the latest museum project by the Renzo Piano's Italian studio (RPBW). In Harvard Art Museums, Renzo Piano restores the existing building and completes it with a contemporary volume, joining the two with a glass roof.

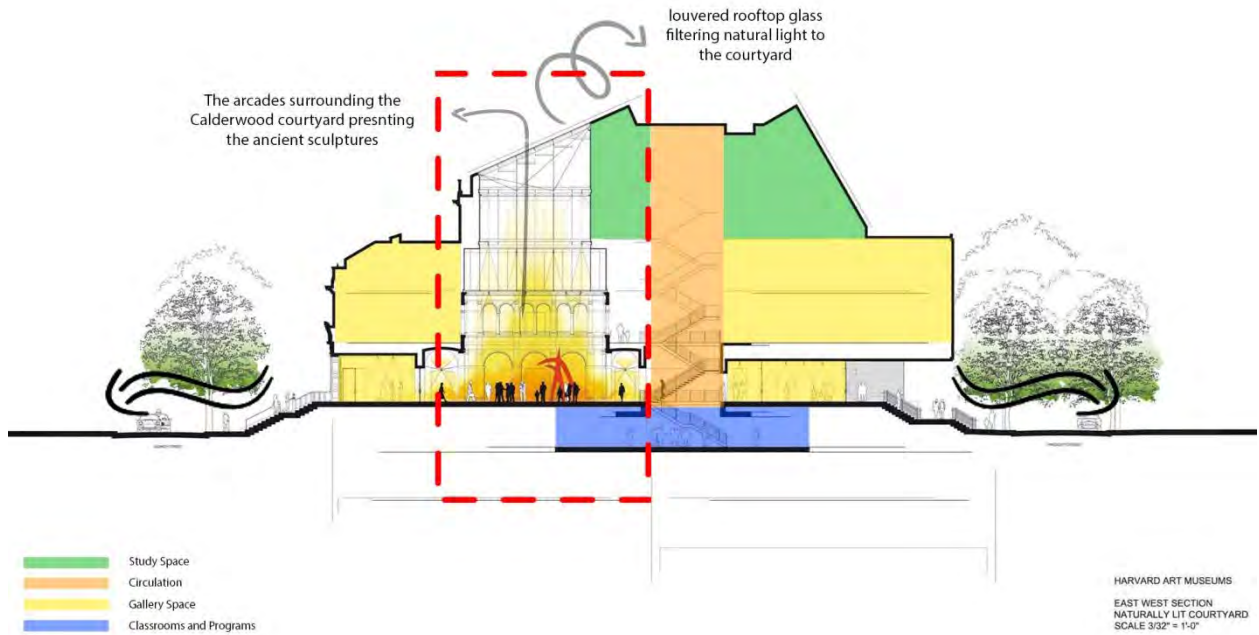


### 5.2.3 Planning and Design Considerations



**Figure 38: Calderwood Courtyard at the center of the plan (Source: Archdaily)**

The Harvard Art Museums are university museums, a place to collect and exhibit art, a great workshop to study, in direct contact with the artworks. The new Harvard Art Museums in a synthetic image, the ground floor is urban, serving the city by providing life; the second and third floors are for the art and the people who come to know it; the fourth and fifth contain more specialized spaces for the students like the Art Study Center and the conservation lab. It is a stratification, an overlap of spaces and services that proceeds upwards towards more specialized functions. The hidden base of the museums' machine is the storage, where the artworks are filed and protected from the effects of time; while spaces under the big glazed lantern, is open to the city and to the light (Archdaily, n.d).



**Figure 39: Functional analysis floor by floor (Source: Author)**

This concept begins with a new focus on Calderwood Courtyard, on the ground floor of the historic building: an architectural empty space extending the entire height of the building and connecting together all the museum services located on various different floors which overlook it. Glass is the material used to make the big new roof over the courtyard and the infill walls on the top two levels, rising above the existing floors: an expansion with a focus on transparency aimed at reducing the visual impact of the structure as it rises into the air, and also as a way of making the most of natural light on the upper levels and in the inner courtyard (Fearson, 2014).



**Figure 40: Conceptual sketches of architect (Source: Archdaily)**



## **CHAPTER 6: CONCEPTUAL AND DESIGN DEVELOPMENT**

6.1 Introduction

6.2 Concept Development

6.3 Development Phase

6.4 Master Plan Development

## **CHAPTER 6: CONCEPTUAL AND DESIGN DEVELOPMENT**

### **6.1 Introduction**

After studying numerous examples of museum and museum complex and the character of folk art and crafts, the conclusion that I drew was, the museum complex should be a space of flexible multi used spaces. Installation projects needed open spaces and semi-open spaces as well. Since my site is already on the premises of heritage buildings, an approach to the entry of the complex was needed to think of and how it would offer pedestrians the best view of the complex. Creating plaza with the heritage building emerged as one of the many approaches to do so and as well respecting the heritage building. Main idea was to merge the plaza into a square like piazza so that visitors can get a clear visual idea of the complex and its arrangements.

### **6.2 Conceptual Development**

While searching for inspiration, I was amazed to see the use of courtyards in our rural areas and how it has helped to develop a sense of spaces. Study shows that the folk art and crafts were inspired from the nature and men and women used to make these art and crafts in their courtyard or backyard while looking at the beauty of nature. The main activity zone in a homestead of rural area is the courtyard. As mentioned, Nakshi kantha or other crafts are often created on these courtyards by a group of rural women in their leisure time. The courtyard concept is also very evident in the design of the heritage building established on the premises of my site and even in the design of Panam Nagar Street, 5km away from my site. So my basic idea was to design courtyards weaving through spaces of functional arrangements.

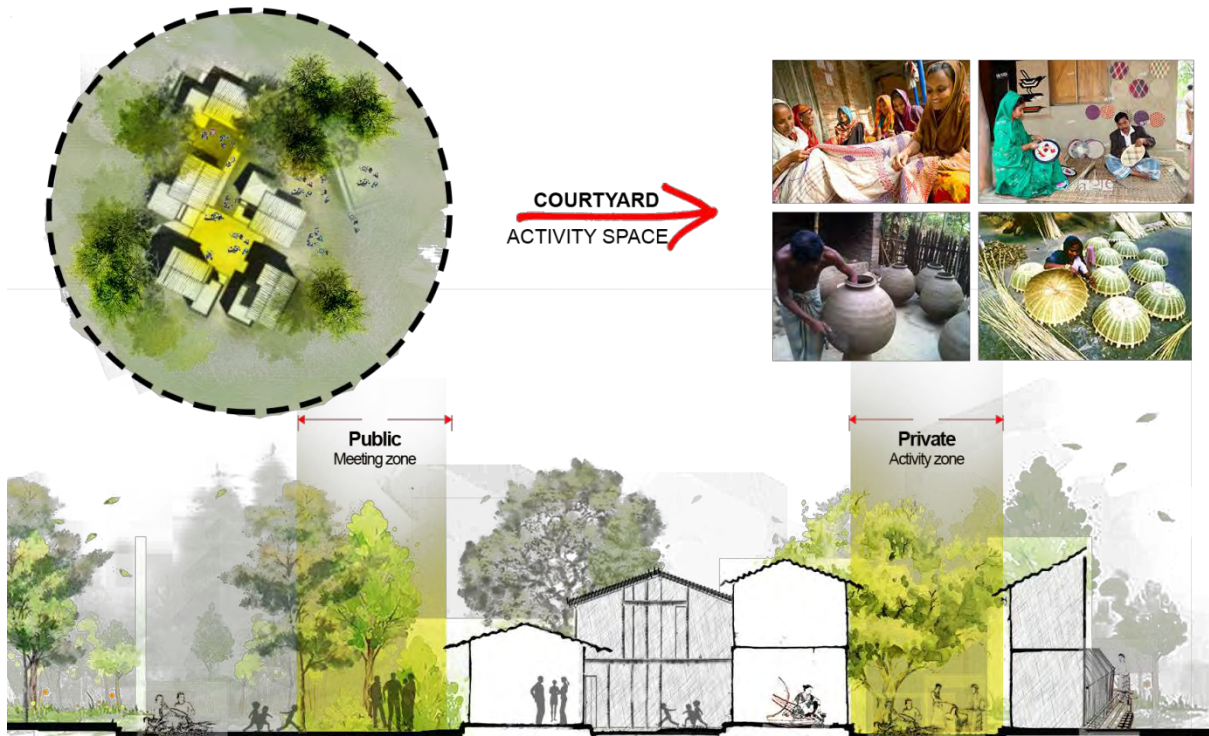


Figure 43: Inspiration of Courtyard Spaces

As my site is consist of three existing buildings, there were some considerations to make those buildings and their functions incorporated with the newly designed complex. Among those buildings, two of them are of intangible values that reflect our heritage. The designed complex is to be connected to these buildings in a way that reflects the idea of courtyard like squares connecting through spaces. The basic idea was to merge the existing landscape into the complex to blend in the surroundings.

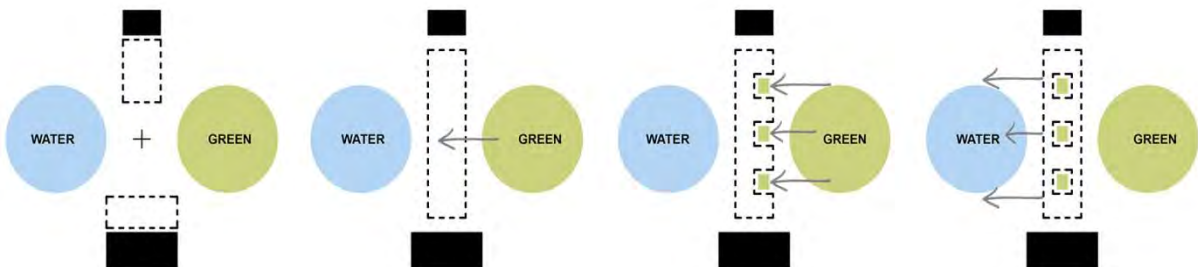
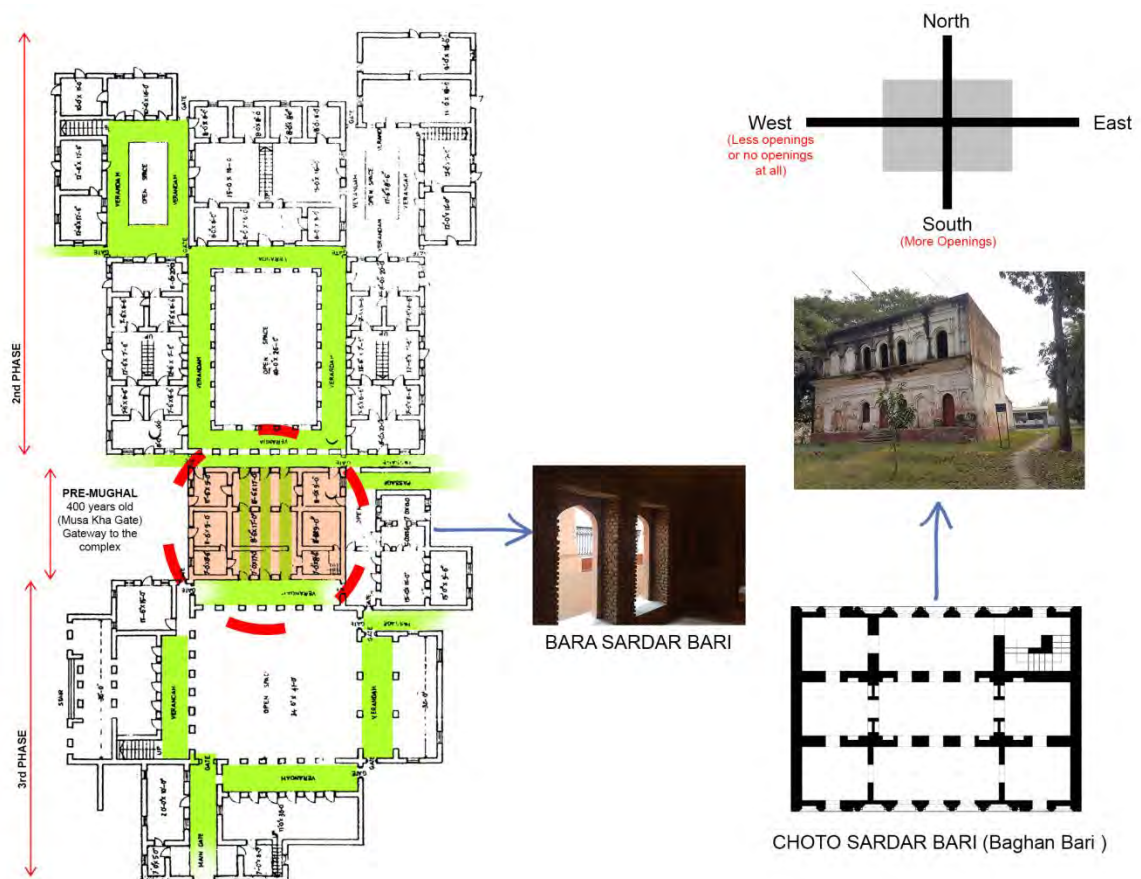


Figure 44: Idea formulation



### 6.3 Development Phase

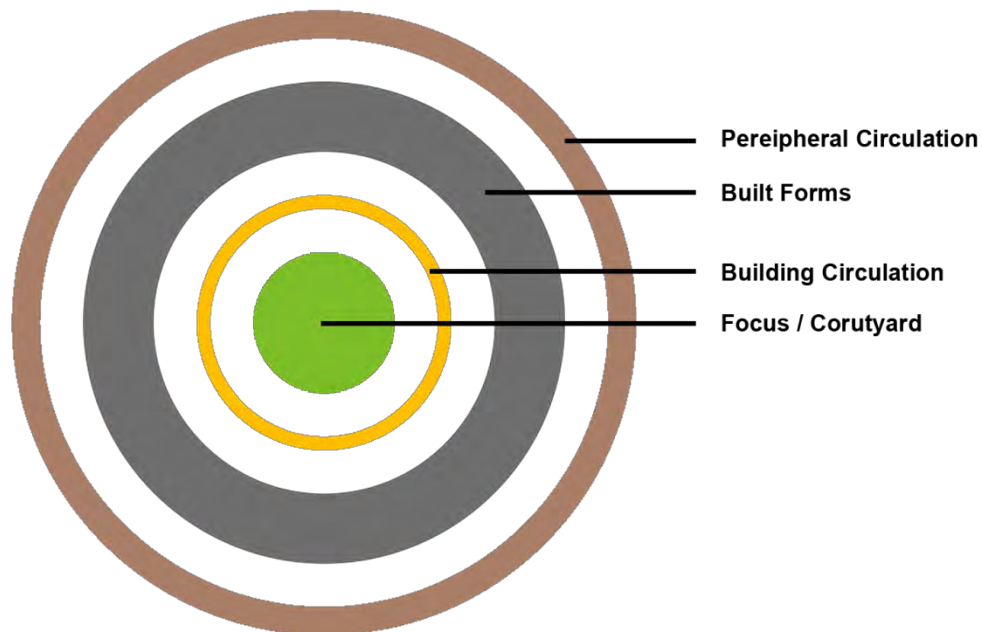
The entire complex has one axis along the east-west direction. After studying numerous heritage buildings and the existing heritage building on the premises, the access point of the functional areas are aligned along the north-south axis.



**Figure 45: Form orientation analysis**

Bara Sardar Bari is recently renovated to preserve it in its golden state. In 1902 the historic building complex was renovated by a merchant, who added a verandah to the back, created a front courtyard to match the back, and built a new entrance to the complex which was richly ornamented with Chinni Tikri or China mosaic. This red structure (marked in red circle above picture), that served as a gatehouse, is the oldest part of the complex and resembles the style of architecture developed during the reign of Baro Bhuyian in Bengal (1538-1612), when it was probably built.

While designing the buildings individually, the main focus is set on the courtyard like spaces connected through the building circulation and form itself. Peripheral circulation of the complex is also taken into consideration.



**Figure 46: Planning diagram**

Three zones are identified in the complex; public, semi-public and private. These zones are eventually turned into the square like piazza/courtyard of the complex. Functions are placed around these courtyards. As the site's main entrance is aligned with the east-west axis, another secondary entrance for the local community is necessary. This entrance is being created by the heritage building, Choto Sardar Bari, keeping its façade intact and turning the interior space into a double-height gateway to the complex, and thus creating a north-south axis.





Figure 47: Development Phase

## 6.4 Master Plan Development

The master plan is developed with two major concerns. Create public spaces surrounding the site, which will have a direct relation with the auditorium and exhibition gallery, cafeteria, seminar/workshops etc. That is why all these functions were kept on the ground floor. And uses of glass façade were also a step to create visual connections. Whereas there is also a space for fairs and festivals, at the back portion of the site, open to the nature. There are spaces for stalls. The space is near the water body to keep a feel of the village —pukur paar (hangout space concept).

New museum is placed just beside the existing heritage museum which is accessible from the entrance plaza named ‘Heritage Square’. The training centre and the school are placed just in front the new museum and behind the ‘Goto Sardar Bari’ so that local community people can access it directly from the secondary entrance. A sculptural garden is designed besides the main entrance to connect these two entrance with one-another and with the parking area. Just behind the administration building, formerly known as Jo

ynul Abedin Museum, an amphitheater is designed to gather around for any performance and a boating station is also in place for people wanting to explore the lake of the complex. At the end of the east-west axis, artists’ accommodation is placed secluding them from the public areas. The connections are made through the ‘etho-path’ like pathways. This landscape idea is inspired from the grid pattern of the existing agricultural fields around the site.



Figure 48: Master Plan Development

## **CHAPTER 7: FINAL DESIGN**

7.1 Designed Site & Master Plan

7.2 Floor Plans

7.3 Sections & Elevation

7.4 Perspective Views

7.5 Model Photographs



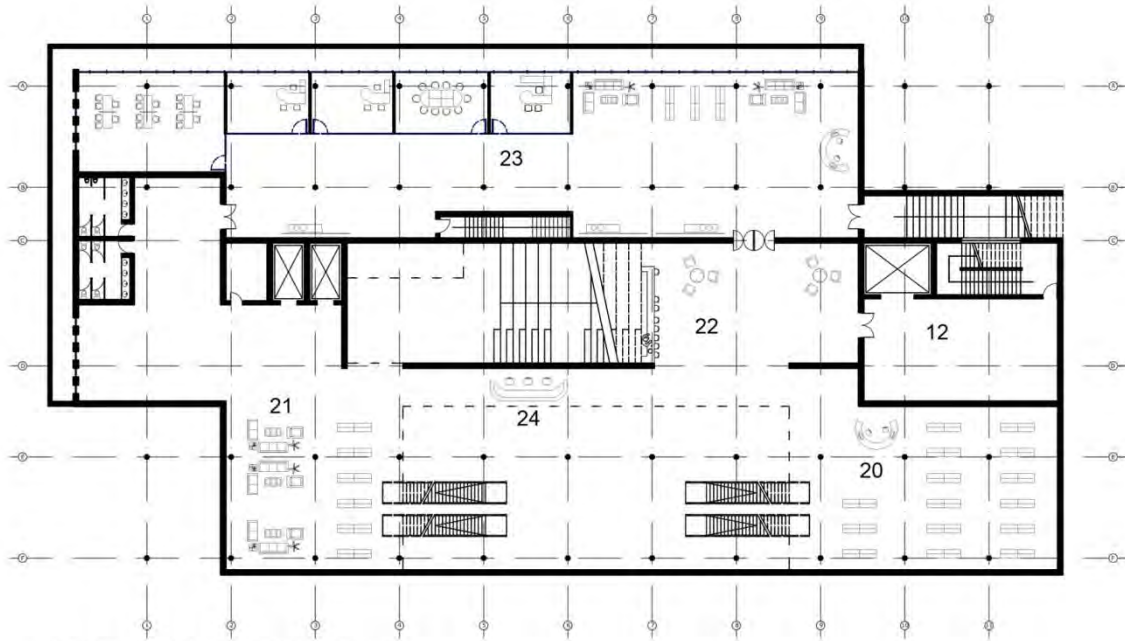
### 7.1 Designed Site & Master Plan



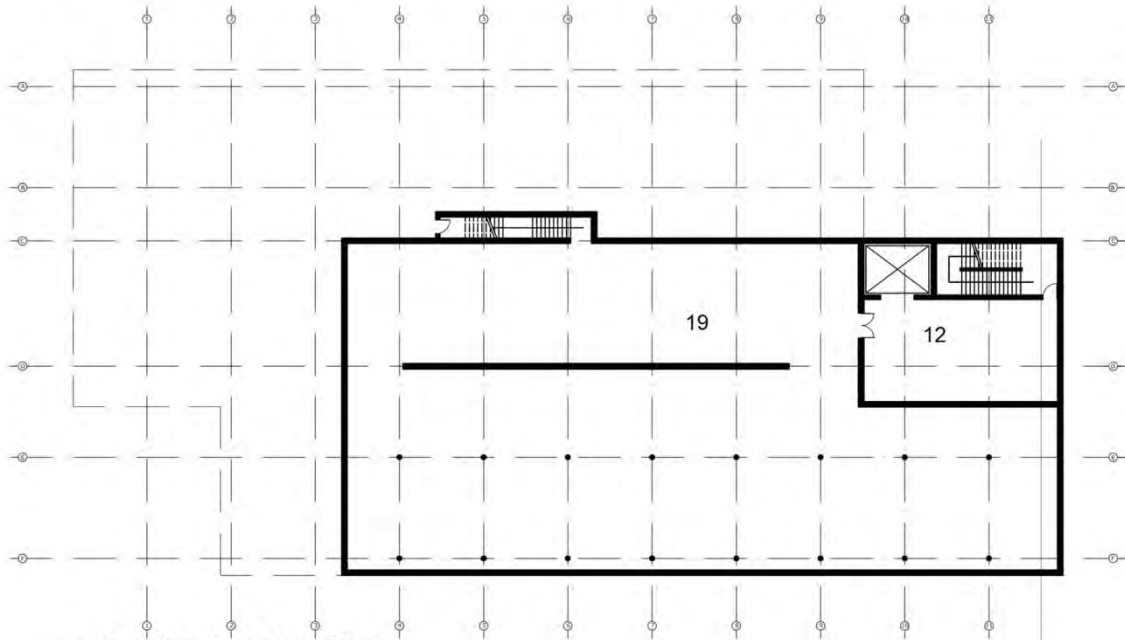
Figure 49: Ground Floor Plan

## 7.2 Floor Plans

### 7.2.1 Museum Building

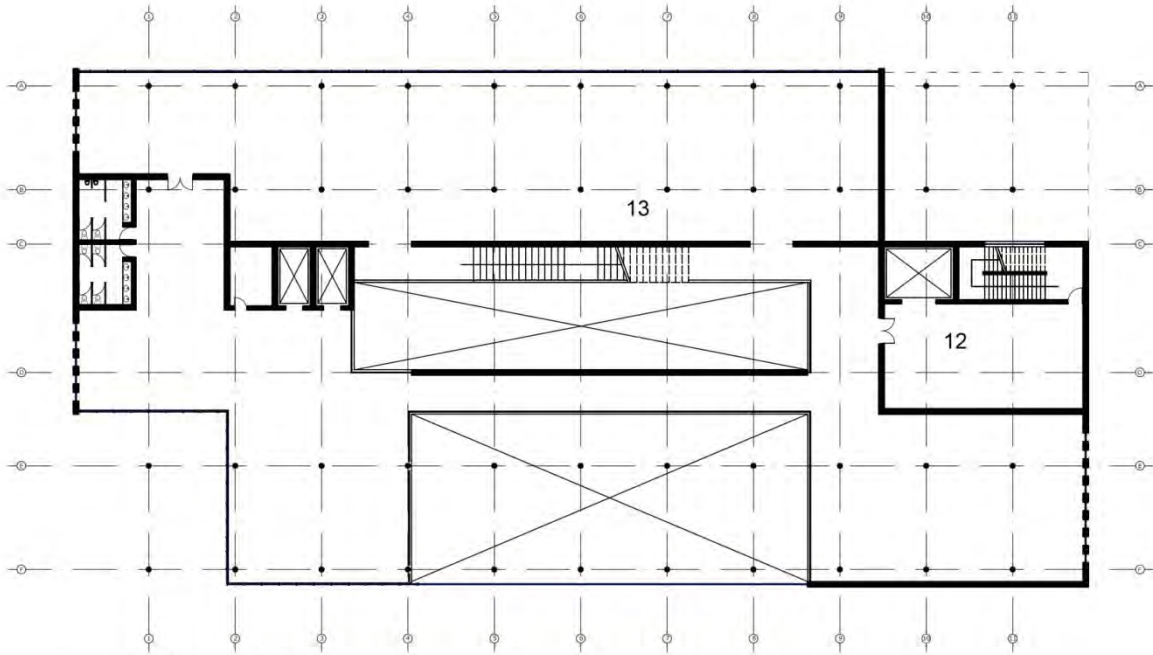


**BASEMENT-1 FLOOR PLAN**  
SCALE: 3/64"=1'-0"

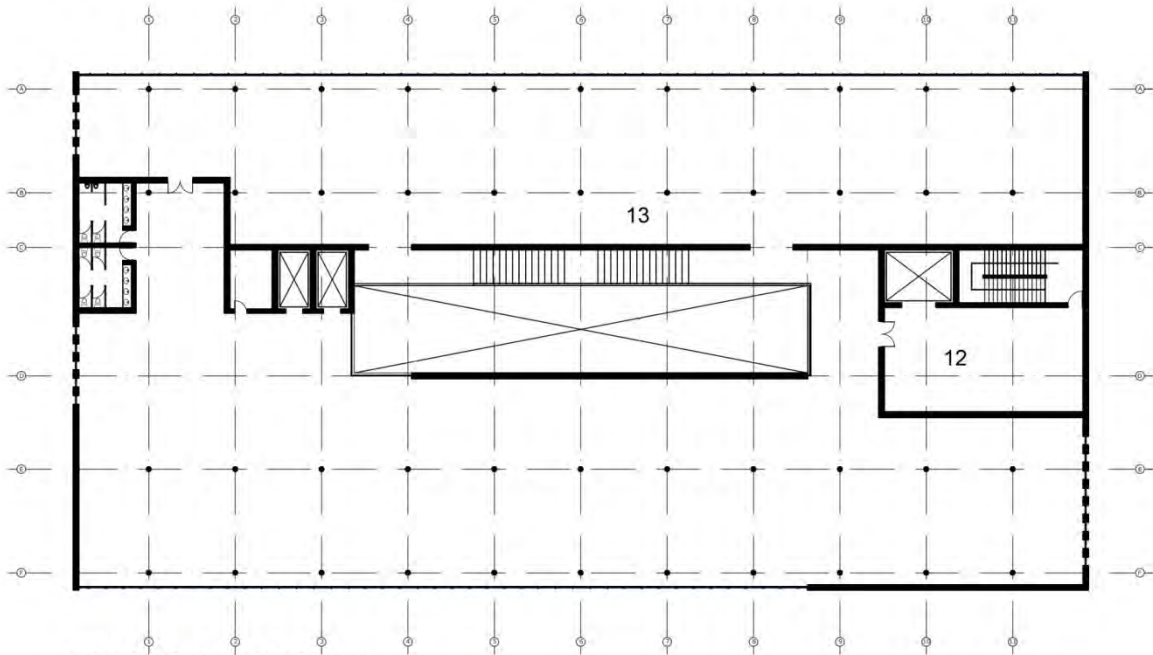


**BASEMENT-2 FLOOR PLAN**  
SCALE: 3/64"=1'-0"





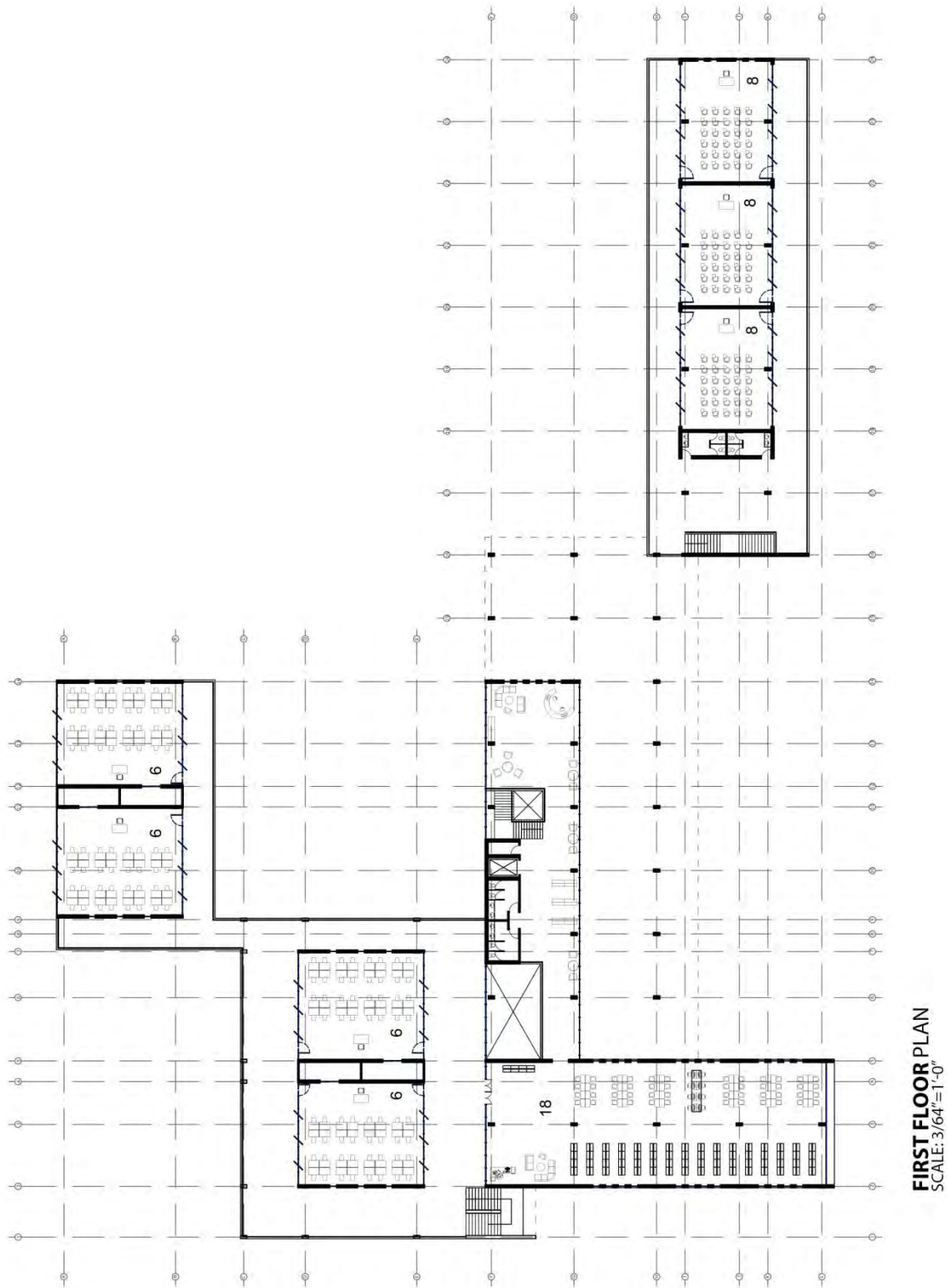
**FIRST FLOOR PLAN**  
SCALE: 3/64"=1'-0"



**SECOND FLOOR PLAN**  
SCALE: 3/64"=1'-0"

**Figure 50: Museum - Floor Plans**

### 7.2.2 Training Centre



**FIRST FLOOR PLAN**  
SCALE: 3/64"=1'-0"

**Figure 51: Training Centre - Floor Plan**



### 7.2.3 Artist's Accommodation

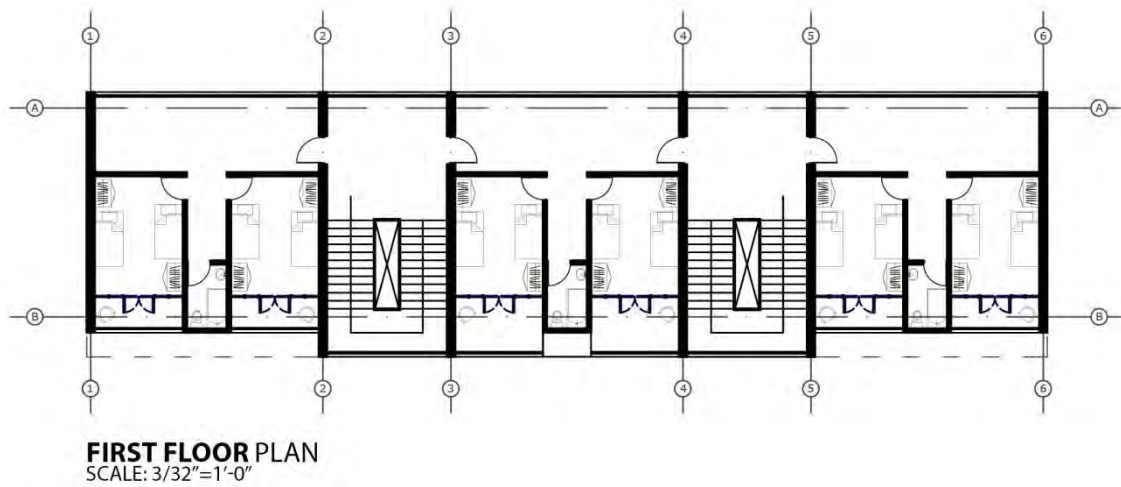
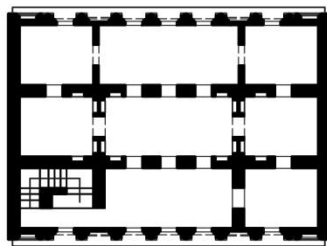
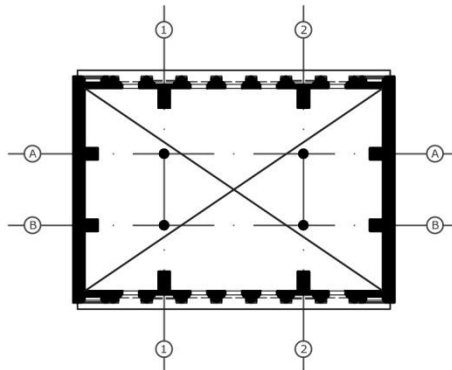


Figure 52: Accommodation - First Floor Plan

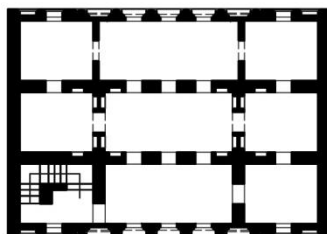
### 7.2.4 Choto Sardar Bari



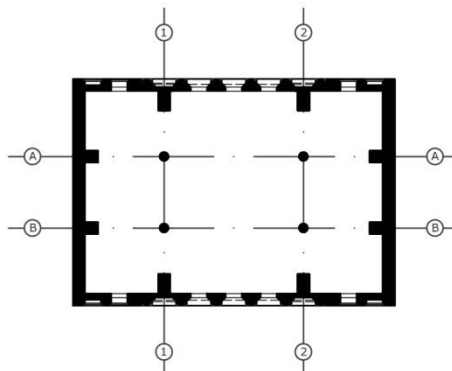
**GROUND FLOOR PLAN (EXISTING)**  
SCALE: 3/32"=1'-0"



**GROUND FLOOR PLAN (PROPOSED)**  
SCALE: 3/32"=1'-0"



**FIRST FLOOR PLAN (EXISTING)**  
SCALE: 3/32"=1'-0"



**FIRST FLOOR PLAN (PROPOSED)**  
SCALE: 3/32"=1'-0"

Figure 53: Choto Sardar Bari - Floor Plans

## 7.3 Sections & Elevations



SOUTH ELEVATION



SECTION AA'  
SCALE: 1/8" = 1'-0"



WEST ELEVATION  
SCALE: 1/8" = 1'-0"



SECTION BB'  
SCALE: 1/8" = 1'-0"



## 7.4 Perspective Views



Figure 54: Aerial view of the complex



Figure 55: Heritage Point - Main Entrance



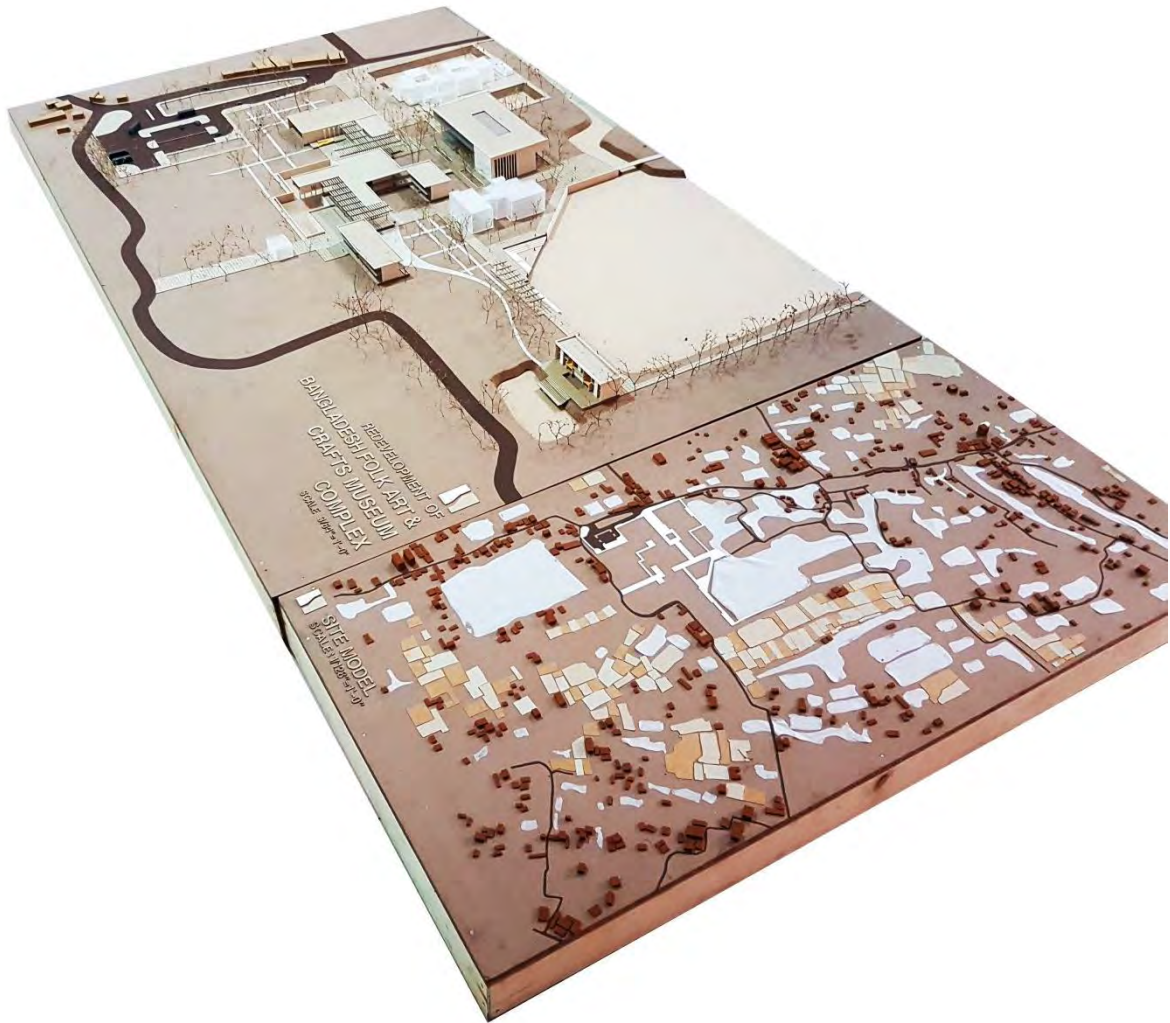


**Figure 56: Cultural Plaza - Secondary Entrance**

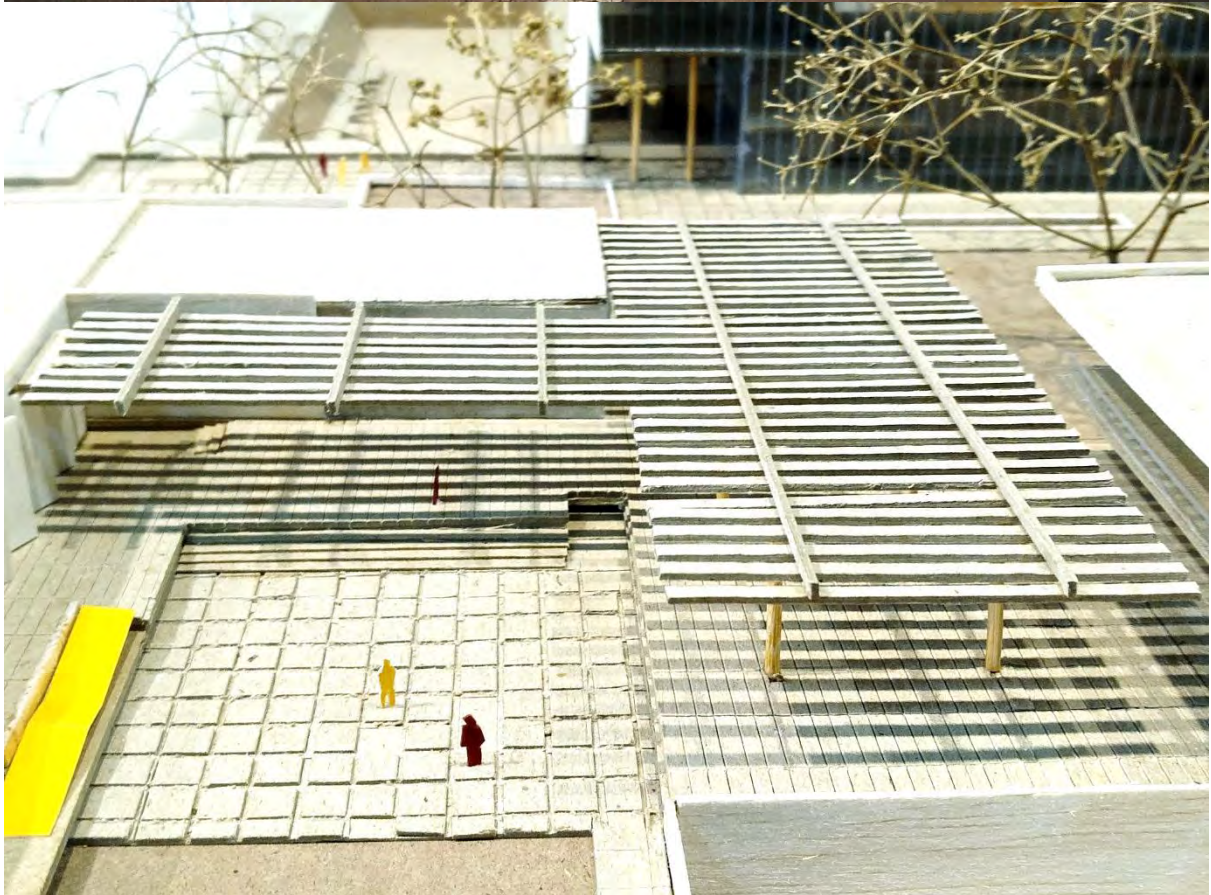


**Figure 57: Museum Lobby – Interior**

## 7.5 Model Photographs











## Conclusion

The stated above chapters include the process & journey of completion of this design. A complex having all activities regarding folk art and crafts, whether its museum & institution, can have a huge impact on Bangladesh & the rest of the world regarding the cultural heritage of our nation. The whole effort to complete the project & the learning acquired through the journey is dedicated to the folks of Bangladesh, who have amazing talents in them and they are taking the nation recognized internationally through those talents.



## References

Ahmed, Tofayel. (2016). *Bangladesher Lokoshilpa*. Dhaka, Compiled by Dr. Syed Mahmudul Hasan, Bangladesh Folk Art and Crafts Foundation.

Archdaily.com (2014). Retrieved from <http://www.archdaily.com/568736/harvard-art-museums-renovation-and-expansion-renzo-piano-payette>

Banglapedia (2014). Art & Crafts. Retrieved from <http://en.banglapedia.org/>

Banglapedia (2014). Folk Art & Crafts. Retrieved from <http://en.banglapedia.org/>

Bhat, Shurti. (2014, November 18). Exploring Folk art-craft from India with kids. Retrieved from <https://artsycraftsymom.com/exploring-folk-art-craft-from-india-with-kids/>

Bryant-Mole, Bart (2016, August 1). AD Classics: Bharat Bhavan. Retrieved from <http://www.archdaily.com/791942/ad-classics-bharat-bhavan-charles-correa>

Burrison, J.A. (2000). *Shaping Traditions: Folk Arts in a Changing South*. Athens, University of Georgia Press.

EPB (1996). *Handicrafts from Bangladesh*. Export Promotion bureau of Bangladesh, in cooperation with ITC/UNCTAD/GATT.

Fearson, Amy (2014, November 18). Renzo Piano reconfigures Harvard Art Museums around a grand courtyard atrium. Retrieved from <https://www.dezeen.com/2014/11/18/renzo-piano-harvard-art-museums-boston-renovation-expansion-courtyard-atrium/>

Haque, A.K.M Muzzammil. (2016). *Historic Sonargaon*. Dhaka, Bangladesh Folk Art and Crafts Foundation.

Kumar, T. (2006). Concept Note: For Nijera/CARE Bangladesh. Retrieved from <https://www.linkedin.com/pulse/prospect-craft-cottage-village-industries-bangladesh-huda>