THE HIGH COMMISSION OF BANGLADESH, ABUJA

Symbolic Expression of Bangladeshi Traditional Architecture

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DECLARARATION

I declare that the work in the thesis entitled 'high commission of Bangladesh, Abuja; symbolic expression of Bangladeshi traditional architecture' has been performed by me in the department of architecture under the supervision of Arc. I. Haruna and Arc. A.S. Salisu.

The information derived from the literature has been duly acknowledged in the text and a list of references provided. No part of this thesis was previously presented for another degree or diploma at any university.

Khan, Habibah — December, 2007

Name of student — Signature — Date

CERTIFICATION

This thesis entitled HIGH COMMISSION OF BANGLADESH; ABUJA by Khan Habibah meets the regulation governing the award of the degree of Master of Science in architecture at the Ahmadu Bello University, Zaria and is approved for its contribution to knowledge and literary presentation.

(Name and signature)

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Member, supervisory committee	16/11/9 / Date
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DEDICATION

This thesis is dedicated to Almighty Allah (S.W.A) for giving me the strength and ability to finish this thesis successfully.

It also goes to my dearest parents Dr. (Sheikh) M. Muslim Khan and Mrs. F. Khatum for their untiring love, moral and financial support towards my success. Words cannot express my gratitude to you.

Also to my dearest brothers and sisters for their encouragement and moral support. I am grateful to you all.

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All thanks and appreciation is due to almighty Allah, in whose infinite mercy I was able to accomplish this programme successfully and for His Guidance. I ascribe all glory and honour to him.

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ABSTRACT

Every nation as an independent country needs an association or organization to represent her in the international arena so as to protect her interest and enhance her diplomatic relations to the host country and the world at large.

Therefore, this study is triggered by a need to have a high commission of Bangladesh in Nigeria so that she can represent her people and increase the international relations between the two countries.

As a broad approach, this study looks at vernacular architecture of Bangladesh, monumental buildings historical sites and goes ahead to study diplomacy, diplomatic architecture through book reviews and case studies of some existing embassies and high commissions. From these studies it makes an attempt at harmonizing Bangladeshi architecture that is traditional to the location into the proposed design such that it can be easily identified to the place and her people.

TABLE OF CONTENTS

Page Cover ii

Declaration iii

Certification.....iv

Dedication v

Acknowledgement vi

Abstract.....viii

Table of content.....ix

List of figures.....xx

List of plates.....xxii

CHAPTER ONE

GENERAL INTRODUCTION

1.0 Introduction.....1

1.1 Problem Statement.....3

1.2 Aims and Objectives.....3

1.3 Research Methodology.....4

1.4 Scope of the Research.....4

1.5 Limitation.....4

1.6 Motivation.....5

1.7 Justification.....5

CHAPTER TWO

INSIGHT INTO DIPLOMACY (literature review)

2.0 Diplomacy.....6

2.1 History of Diplomacy.....8

2.1.1 Early development.....8

2.1.2 Renaissance Diplomacy.....9

2.1.3 Diplomacy in the European State System.....10

2.1.4 *Diplomacy in the Modern World*.....11

2.1.5 The New Diplomacy.....11

2.1.6 Diplomacy from the Congress of Vienna.....13

2.2 Concept of Diplomatic Building.....14

2.3 Purpose of Diplomacy.....14

2.4 Basic Concepts in Diplomatic Relations.....15

2.4.1 Reprcsentative Character Theory.....15

2.4.2 Functional Necessity.....15

2.4.3 Concept of Extra Territoriality.....16

2.4.4 Inviolability.....16

2.4.6 Immunity.....17

2.4.7 Diplomatic Initiative.....18

2.4.8 Diplomatic Machinery.....18

2:5 Department Of Foreign Affairs.....19

2.5.1 Structure of Foreign Ministry.....19

2.5.2 Diplomatic Missions.....20

2.5.3 Activities of the Mission.....21

2.5.4 Diplomatic Negotiations.....22

2.5.5 Schedule of Operation in the Mission.....23

2.5.6 Security Section.....24

2.5.6 Laws Governing the Mission.....24

2.5.8 Space and social order of the foreign offices.....24

2.5.9 Architectural Evocation.....26

2.6.0.. Basic Considerations in the Design of Embassy.....27

CHAPTER THREE

INTRODUCING BANGLADESH

3.01 Introduction.....29

3.02 Linguistic Composition.....30

3.03 Language.....31

3.04 Ethnic Composition and Distribution.....32

3.05 Climatic Data.....33

3.06 Culture.....35

3.07 Settlement.....36

3.08 Rural architecture.....46

3.08 Homestead and House.....47

3.09 Building Materials.....52

3.10 Construction, Technology.....53

3.11 Archeological Sites and Monuments of Bangladesh.....54

3.12 Chittagong hill- tract Architecture.....59

3.13 Contemporary Architecture in Bangladesh.....63

CHAPTER FOUR

ARCHITECTURE AND SYMBOLISM

4.1 Architecture.....71

4.2 Evolution of Architecture.....71

4.3 Symbolism.....72

4.4 Symbolic Expression in Form.....72

4.5 Types of Symbolism.....74

4.5.1 Animal Symbolism.....74

4.5.2 Colour Symbolism.....75

4.5.3 Religious /cultural Symbolism.....79

4.5.4 Technological Symbolism.....80

4.5.5 Importance of architectural symbolism.....80

4.5.6 Symbolism of the planned foreign office.....80

4.5.7 Symbolism in Flag.....82

CHAPTER FIVE

CASE STUDIES

5.0 Case Studies.....84

5.1 Case Study One: the Sudanese embassy.....84

5.1.1 History.....84

5.1.2 Gate House.....85

5.1.3 Parking Area.....85

5.1.4 Fence.....85

5.1.5 Circulation.....86

5.1.6 Facilities.....86

5.1.7 Design Appraisals.....87

5.2 Case Study Two: the Ghanaian high commission.....88

5.2.1 History.....88

5.2.2 Gate House.....89

5.2.3 Parking Area.....89

5.2.4 Fence.....90

5.2.5 Facilities.....90

5.2.6 Security Network.....91

5.2.7 Design Appraisals.....91

5.3 Case Study Three: the Indian high commission, Abuja.....92

5.3.1 History.....92

5.3.2 Gate House.....93

5.3.3 Parking Area.....94

5.3.4 Fence.....94

5.3.5 Facilities.....94

5.3.6 Security Network.....95

5.3.7 Design Appraisals.....95

5.4 Case Study Four: The Bangladeshi embassy, Washington D.C.....96

5.4.1 History.....96

5.4.2 Gate House.....96

5.4.3 Parking Area.....96

5.4.4 Fence.....96

5.4.5 Facilities.....97

5.4.6 Security Network.....97

5.4.7 Design appraisals.....97

5.5 Case Study Five: The France embassy, Abuja.....98

5.5.1 History.....98

5.5.2 Gate House.....99

5.5.3 Fence.....99

5.5.4 Facilities.....99

5.5.5 Design Appraisal.....100

5.6 Case Study Six: High Court Of Justice, Dhaka.....101

5.6.1 History.....101

5.6.2 Security.....101

5.6.3 Design appraisal.....102

5.7 Case Study Seven: Ahsan Manzil, Dhaka.....103

5.7.1 History.....103

5.7.2 Security.....103

5.7.3 Design appraisal.....103

5.8 Summary of Findings.....105

CHAPTER SIX

SITE AND IT'S ENVIRON

6.1 Federal Capital Territories F.C.T.....106

6.1.1 Historical development.....106

6.1.2 Location.....106

6.1.3 Abuja Master Plan.....107

6.1.4 Population.....108

6.2 Abuja Land Use and Development Guides.....109

6.3 Town Planning Regulation in Abuja.....110

6.4 Site Location.....113

6.5 Climatic Data.....114

6.6 Geological Data.....119

6.7 Site Analysis.....121

6.8 Site Concept.....123

CHAPTER SEVEN

DEVELOPMENT OF DESIGN BRIEF

7.1 Introduction.....129

7.2 Design Brief.....129

7.3 Schedule of Accommodation.....130

7.3.1 Embassy Building (Ground Floor).....130

7.3.2 First floor plan.....131

7.3.3 Second floor plan.....132

7.3.4 Third floor plan.....133

7.4 Ambassador's residence.....134

7.4.1 Ground floor plan.....134

7.4.2 First floor plan.....135

7.5 Guest House.....136

7.5.1 Ground floor plan.....136

7.6 Concept Development.....137

7.7 The Design Report.....137

7.8 Form and Space.....139

7.9 Construction Material.....138

7.10 Services.....139

7.11 Conclusion.....139

APPENDICES.....141

APPENDIX 1- PROPOSED HIGH COMMISSION DRAWINGS.....141

REFERENCES.....146

LIST OF FIGURES

Fig. 3.1 map of Bangladesh. Pg. 29

Fig. 3.2 annual total rainfall of Bangladesh by station (mm). Pg. 34

Fig. 3.3 monthly average relative humidity of Bangladesh (%). Pg. 35

Fig. 3.4 construction method of hill tract people. Pg. 54

Fig. 3.5 how the bamboo columns are being tied for construction. Pg. 56

Fig. 3.6 ground floor plan of parliament building. Pg. 59

Fig. 3.7 national emblem. Pg. 62

Fig. 4.1 dove, symbol of peace. Pg. 69

Fig. 5.1 floor plan of Sudanese embassy. Pg.81

Fig. 5.2 site plan of Ghanaian high commission, Abuja, Nigeria. Pg. 86

Fig. 5.3 site plan of Indian high commission, Abuja, Nigeria. Pg. 89

Fig. 5.4 site plan of Bangladesh embassy, Washington DC. USA. Pg. 92

Fig 5.5 site plan of France embassy, Abuja, Nigeria. Pg. 94

Fig. 5.6 site plan of high court of justice, Dhaka, Bangladesh. Pg. 96

Fig. 5.7 floor plans of Ahsan Manzil, Dhaka, Bangladesh. Pg. 98

Fig. 6.1 phases of Abuja. Pg. 102

Fig. 6.2 Abuja land use map. Pg. 103

Fig. 6.3 site location map, Abuja. Pg. 106

Fig. 6.4 monthly temperature, Abuja. Pg. 108

Fig. 6.5 monthly humidity, Abuja. pg. 109

Fig. 6.6 monthly rainfall, Abuja. Pg. 110

Fig. 6.7 monthly sunshine, Abuja. Pg. 111

Fig. 6.8 seasonal wind diagram, Nigeria. Pg. 112

Fig. 6.9 site analysis. Pg. 116

LIST OF PLATES

Plate I	Onion Dome. Pg 37
Plate II	Chepta Dome. Pg. 37
Plate III	Lomba Dome. Pg. 38
Plate IV	Gul Dome. Pg. 38
Plate V	Ulta pala. Pg. 39
Plate VI	Gul arch. Pg. 39
Plate VII	Cusped arch. Pg. 40
Plate VIII	Cusped arch. Pg. 40
Plate IX	Ornate bracket. Pg. 41
Plate X	Senga motif. Pg. 41
Plate XI	Cidro motif. Pg. 42
Plate XII	Chhatris turret. Pg. 42
Plate XIII	Diwan-i-khas turret. Pg. 43
Plate XIV	Kilisan turret. Pg. 43
Plate XV	Rectangular pond. Pg. 44
Plate XVI	Rectangular pond. Pg. 44

Plate XVII	lake. Pg. 45
Plate XVIII	A typical homestead. Pg. 4 7
Plate XIX	Indiginous rural house. Pg. 51
Plate XX	Mahastangarh using circular fence. Pg. 55
Plate XXI	lalbagh forte.
Plate XXII	Shait Gumbad Mosque. Pg. 63
Plate XXIII	National Library. Pg. 63
Plate XXIV	National Parliament. Pg. 64
Plate XXV	Star mosque. Pg. 65
Plate XXVI	Botanical garden. Pg. 66
Plate XXVII	National independence monument. Pg. 67
Plate XXVIII	Dhaka medical school. Pg. 68
Plate XXIX	Bari hotel. Pg. 69
Plate XXX	Sudanese embassy. Pg. 69
Plate XXXI	Gate of Sudanese embassy. Pg. 85
Plate XXXII	Fence of Sudanese embassy. Pg. 86
Plate XXXIII	Approach elevation of Ghanaian High commission. Pg. 89

Plate XXXIV	Gate house of Ghanian high commission. Pg. 89
Plate XXXV	Fence of Ghanian high commission. Pg. 90
Plate XXXVI	Indian high commission. Pg. 93
Plate XXXVII	Gate house of Indian high commission. Pg. 93
Plate XXXVIII	Parking Area. Pg. 94
Plate XXXIX	Bangladesh Embassy, Washington D.C. Pg. 96
Plate XL	Front elevation of France embassy, Abuja. Pg. 99
Plate XLI	High court of justice, Dhaka. Pg. 101
Plate XLII	Ahsan Manzil Museum, Dhaka. Pg. 103
Plate XLIII	Ahsan manzil museum, Dhaka, use of dome. Pg. 123
Plate XLIV	Gul dome, Dhaka. Pg. 124
Plate XLV	Conference centre, Dhaka. Pg. 125
Plate XLVI	Conference centre,Dhaka; use of turrets. Pg. 125
Plate XLVII	Star mosque, Dhaka; use of Arch. Pg. 125
Plate XLVIII	Lalbagh Forte, use of water body. Pg. 126
Plate XLIV	Ahsan manzil museum, Dhaka; use of decorative Motif. Pg. 127
Plate L	Gombus mosque, use of water body. Pg. 128

CHAPTER ONE

GENERAL INTRODUCTION

1.0 Introduction

According to Wikipedia (2006), Diplomacy is the art and practice of conducting negotiations between representatives or groups or nations. It usually refers to international diplomacy; the conduct of international relations through the intercession of professional diplomats with regard to issues of peace making, culture, economy, trade and war.

According to Funk and Wagnalls (2006), one who is involved in diplomacy is called a diplomat. His duties are synthesized in the classic formula "inform, represent and negotiate". International treaties are usually negotiated by diplomats prior to endorsement by national politicians. Thus, the diplomat besides the matter entrusted to him is responsible for synthesizing sectoral interests from the overall perspective of his country's international relations

However the collective term for a group of diplomats from a single country is a diplomatic mission. A permanent diplomatic mission is usually known as an embassy and the head of the mission is known as an ambassador. Missions between common wealth countries are known as high commission and their head are high commissioners; both ambassadors and high commissioners have the same post i.e. have the most senior diplomatic rank and serve the same function. The collective body of all diplomats resident in a particular country is called a diplomatic corp. This diplomatic mission is

headed by highly respectable personnel such as the ambassador/ high commissioner, minister, minister -counselor, counselor, first, second and third secretaries, attaché, consul and vice consul. These personnel activities are guided by international law and laws of the host state.

International law is the body of law that regulates the activities of entities possessing international personality; traditionally that means conduct of international organizations and to a certain degree that also of multinational corporations and individuals (Wikipedia 2006). According to the president of the international court of justice (Rosalyn Higgins 2000) in his speech, "international law is a normative system harnessed to the achievement of common values- values that speak to us all, whether we are rich or poor, black or white, of any religion or none, or come from countries that are industrialized or developing".

Under international law, diplomatic mission enjoys an extraterritorial status, although, remaining part of the host country's territory they are exempted from local law and in almost all respect treated as being part of the territory of the home country. They are only required to pay taxes equal to their respective countries guidelines (new encyclopedia 2006)

Therefore Bangladesh being a third world country like Nigeria does not have a high commission as a building complex of her own in Nigeria but instead she's being represented by another country. It is in view of this that a diplomatic building thus, a high commission is proposed by the government of Bangladesh which will not only serve the

citizen of Bangladesh but would also provide a functional building that will enhance the diplomatic relations between the two countries and also showcase the identity of Bangladesh through its architecture in Nigeria, thereby creating a foundation for friendship and security.

1.1 Problem Statement

This thesis is an attempt to design a high commission for Bangladesh that is typical of Bangladesh architecture in Abuja. In designing the building, there is a need therefore to study the various elements of Bangladeshi traditional architecture.

Thus, it's from this study that a symbolic expression of Bangladeshi traditional architecture with a sense of individuality would be adopted into a diplomatic design that would maintain its safety as well as security especially in this period where embassies live in a world of nightmare due to terrorist's attacks.

1.2 Aims and Objectives

- **Aims**

To create a complex that would have a symbolic expression of Bangladeshi traditional architecture and to ensure security in the design of the high commission.

- **Objectives**

1. To propose a high commission of Bangladesh that will enhance diplomatic relations between the two countries through exposition of cultural similarities and diversity in architecture.
2. The building will be functional enough to serve diplomatic mission incorporated with security in the design.

KASHIM IBRA

3. The building will reflect Bangladeshi architecture so as to establish a bond between the building and the people it's representing.

1.3 Research Methodology

The methods adopted for sourcing information for this theses work are classified thus;

Primary sources: physical documentary study of existing high commissions and embassies i.e. through case studies.

Secondary sources: study of published and unpublished sources which include books, journals, magazines, newspapers e.t.c.

1.4 Scope of the Research

There are different types of diplomatic missions, such as consulate, chargé d'affaires, Embassy or High commission. This research will strictly put emphasis on high commission and the high commissioners residence.

The high commission will perform the various functions of diplomatic relations between the two countries and uphold the interest of her country in abroad and defend national interest.

The architects' major concern would be on how to express Bangladeshi traditional architecture to suit diplomatic building simultaneously maintaining an open-welcome impression architecturally integrated with security.

1.5 Limitation

The limitation faced during the course of this research work is:

Due to security reasons there is no any standard for designing diplomatic buildings and the staffs working in the high commission or embassy are diplomatic in their speeches and actions.

1.6 Motivation

This thesis is motivated to express a symbolic traditional architecture of Bangladesh through the design of a high commission in Abuja.

1.7 Justification

As at now, Bangladesh has no diplomatic mission in Nigeria. Its interests are being looked after by the Pakistani high commission. This fact has made it necessary for the country to have diplomatic mission in Nigeria especially now with the growing importance of Nigeria in the west African region in particular and the international scene in general. The proposed high commission will not only serve Bangladeshis in Nigeria, but also most of those in the West African sub-region to enhance diplomatic relations between the two countries. Thus, a high commission of Bangladesh is proposed to serve the various diplomatic roles.

CHAPTER TWO

INSIGHT TO DIPLOMACY (literature review)

2.0 Diplomacy

According to Wikipedia (2006), "diplomacy is the established method of international discourse or the art of managing international relation chiefly through negotiation". Historically, it meant the conduct of official relations between sovereign states, usually bilaterally. In the 20th century, however, diplomacy expanded to cover summit meetings and other international conferences, public and parliamentary diplomacy by non- governmental organization and the work of international civil servants. (Retrieved from www.en.wikipedia.org/wiki/Diplomacy)

The term diplomacy, drive via French from the ancient Greek "diploma" meaning the folded documents conferred a privilege often a permit to travel and the term came to denote document whereby princes granted such favors. Later it is applied to all solemn documents issued by chancelleries especially those containing agreements between sovereigns.

According to Tracy M. (1998), Diplomacy can also be defined as the means of conducting negotiation between nations. Some scholars today apply the term to the strategies and tactics nations use when they negotiate. In this sense diplomacy involves formulating the policies that nations follow to influence other nations when diplomacy fails during a major crises, war often occurs. Traditionally, however, diplomacy refers to formal practice that most nations follow of sending representatives to live in other countries. Diplomats work to gain political or economic advantages for their country and to promote international cooperation.

Diplomats supposed to be very observant and sound in judgment, as well as posses' courage and self control. They are expected to be trained in such a way that, in addition to have the knowledge of foreign languages they have the knowledge of history, know how to make decision in foreign countries, and they ought to master the technique of responding to unforeseen circumstances.

Diplomatic relations exist between states who are involved, to varying degrees, in interstate inter nations. Among them diplomacy could be used as an instrument for reducing misunderstanding and for ensured harmony where discord existed, it could also be used as weapon for creating confusion, disagreement and their precipitate crisis.

In general, diplomacy is carried out between states through their agents, may be ambassador or ministers. Sometimes it may be permanent representatives or even heads of governments, other times diplomatic relations are carried out through third parties.

2.1 History of Diplomacy

The ability to practice diplomacy is one of the defining elements of a state, and diplomacy has been practiced since the first city-states were formed millennia ago. For the majority of human history diplomats were sent only for specific negotiations, and would return immediately after their mission concluded. Diplomats were usually relatives of the ruling family or of very high rank in order to give them legitimacy when they sought to negotiate with the other state. (Retrieved from Wikipedia. June 2006).

2.1.1 *Early Development*

In William A. (1993), the first civilization to develop an orderly system of diplomacy was ancient Greece. Ambassadors and special missions were sent from city to city to deliver messages and warnings, to transfer gift, and to plead the cases of their own people before the rules of other city – states. These diplomatic missions however were occasional and sporadic.

With the decline of Greece and the rise of the Roman Empire, the Greek system of diplomacy disappeared. As Rome expanded, its diplomacy served the purposes of conquest and annexation. The Romans were not inclined to coexist with other states on the basis of mutual interests, Rome issued commands, and it did not negotiate.

For almost a thousand years after the fall of Rome, Europeans thought of themselves not as members of separate nations but rather as members of smaller groups vaguely bound to some feudal overload. Although localities had relations from time to time, no record exists of any formal diplomatic practices during the middle ages.

2.1.2 *Renaissance Diplomacy*

According to S.J.M. Stanley J (2006). Modern diplomacy had its origin during the Italian renaissance. Early in the 15th century a group of city-states developed in Italy, but none could dominate the rest, and all feared conquest by the others. The rules of most of the city-states gained their positions through force and cunning. Because they could not count on the loyalty of their subjects, these rules hoped to maintain allegiance by seeking foreign conquest and the treasure. They sought opportunities to increase their power and expand their domain and were always concerned about the

balance of power on the Italian peninsula. Although renaissance diplomacy was especially vicious and amoral, the Italian city – states developed a number of institutions and practices that still exist:

- they introduced a system of permanent ambassadors who represents the interests of their states by observing, reporting and negotiating;
- each states created a foreign office that evaluated the written reports of the ambassadors, sent instructions, helped to formulate policies and kept vast records;
- together they developed an elaborate systems of protocol, privileges and immunities for diplomats;
- The concept of extraterritoriality was established. Under this principle, an embassy in any state stood on the soil of its own homeland and anyone or anything within the embassy compound was subject only to the laws of its own country.

2.1.3 *Diplomacy in the European State System*

From S.J.M., Stanley J. (2006). The rise of nation states in the 17th century Europe led to the development of the concepts of national interests and the balance of power. The former concept meant the diplomatic objectives of nations should be based on state interests and not on personal ambition, rivalries, sentiments, religious doctrine or prejudice. For example, gaining access to raw materials was in the national interests. The balance of power theory was based on a general interest in maintaining the state system by seeking equilibrium of power among the most powerful nations. That diplomacy could be used to pursue both sets of interests was soon apparent. Increasingly, the presence of the major powers became a staple in international politics.

Although small countries might disappear, as Poland did when it was partitioned in the 18th century, the great powers sought to manage their relations without threatening one another's survival. At the same time, European diplomats were becoming increasingly professional and learned. The seamier side of diplomacy the bribing, lying and deceiving - was gradually replaced by a code of expected and acceptable conduct.

The European system of diplomacy suffered its first shock when napoleon attempted to conquer Europe in the early 19th century. After napoleons defeat, the European system was "restored", and no major wars occurred for the next one hundred years.

2.1.4 *Diplomacy in the Modern World*

From S.J.M., Stanley J. Michalak J. (2006). Modern diplomacy started about the 17th century. From this period diplomacy started undergoing series of revolutionary processes differing from the period of the Greeks antiquity and the era of the Italian states.

Also from Funk and Wagnalls (2006), in the 16th band 17th century, envoys still remained personal emissaries of one ruler or another as absolute monarch played a vital role in the development of permanent missions. In 1626 however when cardinal Ritchie, instituted the first modern foreign ministry in France, diplomacy took a different light. With the creation of the ministry to centralize policy and ensure that envoys perused raison d'etat or national interest. He rejected the view that the policy should be based on dynastic sentiments or rulers wishes.

The first great international congress of modern history took place in 1648 which was called the treaty of west phalia, this treaty confirmed the principles of balance of power in Europe. This treaty was recognized as the most important judicial instrument of the time, but the problem created by the west phalia was that all sovereign were equal, hence the order of procedure at the various courts nurtured serious problems and even resulted in some diplomatic blunder.

2.1.5 *The New Diplomacy*

In 1914, the countries of Europe were thrust into another violent confrontation. The average of world war one brought the European system of diplomacy into disrepute. U.S president, Woodrow Wilson was the chief critic of the European diplomatic system and the proponent of a new type of open diplomacy and collective security. Wilson's primary targets were the theory and practices of the balance of power, the pursuit of national interests, secret agreements and treaties, and professional diplomats. (Funk and Wagnalls, 2006).

In place of the old system Wilson offered a 'new diplomacy' in his fourteen points. Open covenants would be drafted in international conferences with great and small countries participating on an equal basis. Peace would be maintained by making national boundaries. All members of the international community would pledge to fight for these boundaries against any nation that use force to change them. Countries would pursue community interest of national interests and submit their disputes with each other to international arbitration for peaceful resolution.

Many *Wilson's* ideas were incorporated into the 1919 treaty of Versailles at the League of Nations. After the U.S rejected the league and returned to the policy of isolationism, however, the European states reverted to the balance of power system and the pursuit of national interest through professional diplomacy.

During world war two, the U. S. president, Franklin O. Roosevelt, again sought to establish a new type of diplomacy, but he and the British prime minister, Winston Churchill, built the postwar international order on the basis of agreements with the soviet leader, Joseph Stalin, that conformed more to the old European system than to the new ideas embodied in the Atlantic charter and the united nations. Although the United Nations remains a symbol of what a new diplomatic system might be, international politics serve the end of world war two has adhered closely to the European model and has, in part, returned to some of worst aspects of renaissance diplomacy. Retrieved from The New Encyclopedia, diplomacy.

2.1.6 *Diplomacy from the Congress of Vienna*

From the available history, enough evidences exists for one to conclude that, diplomacy from earlier civilization up till the 15th century was very quarrelsome, boisterous and provocative. This was an era of radical transition from the traditional secrete diplomacy of the feudal monarchs to the open democratic diplomacy.

Diplomacy from the congress of Vienna in 1815 opened a new chapter to the development of diplomacy especially in the maintenance of balance of power and organizing of periodic United Nations to discuss itching international issues. Another diplomatic land mark was in the congress of ax-la Chappell 1818 when the problem of

precedence which had been a big diplomatic set back was finally resolved. Four classes of diplomatic representatives were established.

The first consisted of ambassador's papal nuncios and legates, who represented the person the person of their heads of states and government and were accredited to, and entitled to personal access to the head of state of the host country. The ambassador was called 'extra ordinary' because he represented the head of state; he was 'plenipotentiary' because he had full power to negotiate. The second category included minister plenipotentiary and envoy extraordinary, whom neither represented the person of the of state, but each was accredited to the head of the host country, without the right of personal access, the third category was the minister resident who was accredited to the head of host state but lacked the qualities of extra ordinary or plenipotentiary'. The fourth category, charge d'affires was accredited only to the foreign minister. The second and third categories were combined in 1963 Vienna convention on diplomatic relations.

In modern practice here exist three classes of envoys:

1. ambassadors
2. Ministers and envoys extra ordinary.
3. Charge d'affires.

(Retrieved from http://en.wikipedia.org/wiki/congress_of_vienna" June 2006).

2.2 Concept of Diplomatic Building

Funk and Wagnalls (2006),continue to argue that it is in this work it's to refer to the premises within which diplomatic issues and businesses is conducted and which houses the ambassador and his other staffs representing their country in a foreign country.

The diplomatic building and diplomatic agents are supposed to be secured and free from any forms of danger and attack as the reviewing states is expected to do all in its power to secure them from seen and unforeseen dangers.

Retrieved from http://en.wikipedia.org/wiki/diplomatic_building" (June 2006).

2.3 Purpose of Diplomacy

The necessity of diplomacy, the purposes for which it is meant, its mechanics and means, all made it a political act. Diplomacy often get expressed or reflected in negotiation. These negotiations among nations, serve specific purposes. Duchock divide them into four categories as follows:

1. resolving a conflict of interests peacefully,
2. preventing a clear and immediate danger of violent solution or risk of yielding rival pleasure,
3. Establishing an atmosphere, frame work, system or permanent organization for the peaceful solution of potential future conflicts.

2.4 Basic Concepts in Diplomatic Relations

A diplomatic agent generally enjoys certain privileges or immunities that guarantee his independence, property, recognizes his dignity and that of the country he represents. Theorists gradually evolved concepts on which to anchor diplomatic

privileges, although they have varied over the years but the following have gained wide spread acceptance.

2.4.1 *Representative Character Theory*

This concept anchors the privileges and immunities on the idea that the diplomatic mission personifies the sending state. The preamble to the Vienna convention on diplomatic relations recognizes the diplomatic mission as representing states.

2.4.2 *Functional Necessity*

While taking into cognizance the representative theory, the internal law commission declared that it is guided by the functional necessity theory which is to the effect that, the purpose of privileges and immunities is to ensure the efficient performance of the functions of the diplomatic mission.

The functional theory assumes that the diplomatic mission should be free from local interference in the receiving state so that it can carry out its duties effectively.

It is clear that the fundamental element underlying both the functional necessity and the character representation theory is the principle of reciprocity, since states understood that it is advantageous to respect the privileges accorded a foreign mission as this will guarantee a similar treatment for their own envoys.

2.4.3 *Concept of Extra Territoriality*

This concept of extra territoriality was unknown in ancient times. It is therefore a more recent development than the nations of functional necessity or the representational character. The extraterritoriality theory is to the effect that the diplomatic mission (embassy) and residence are actually in the territory of the sending

state and not the host state. The concept has been open to series of controversies as critics feel it is obviously not possible but the degree of protection provided for the embassy promises should be very great and not be violated. For this reason, rules and regulations were formulated in 1861 during the Vienna convention in order to grant foreign envoy special privileges and immunities that will guarantee their protection while they are in foreign lands.

2.4.4 *Inviolability*

Funk & Wagnalls (2006) defines inviolability as a means that the receiving state may not use any means of coercion to enforce its will or its law. The agents of the receiving state are forbidden from entering the premises of the embassy or the private residences of the diplomatic agents except with express permission from the head of mission. The receiving state is under a special duty to protect the premises of the mission against any intrusion or damages and prevent any disturbances of peace or impairment of its dignity.

Article 24 of the preamble to the Vienna convention states that the embassy property including archives and documents of the mission are inviolable at any time wherever they may be. Even when two countries are at war the host the host country has no rights whatsoever to violate the embassy of the sending country. A caretaker embassy assumes responsibility for the vacated embassy as Switzerland did for United States embassies in Tokyo and Berlin in 1941.

2.4.5 *Immunity*

From S.J.M., Stanley J. Michalak J. (2006). The functions of a diplomatic mission important and enormous as they are generally exercised in the territory of the receiving state.

The receiving state must ensure that the diplomatic mission in its territory benefit from the "content of license". Based on the preamble to the Vienna convention on diplomatic relations 1961, Sub-articles 3 requires that the premises of the embassy, furnishing and other property their on and the means of transport of the mission shall be immured from search or requisition. Article 3 exempts the sending state and the head of mission from all national, regional or municipal dues and taxes in respect of the premises of the mission whether owned or leased.

With reference to the concepts of diplomatic relations discussed. It should be noted that the privileges accorded foreign missions have been specifically formulated to enable them Carry out their duties efficiently and meet up with their desired goals without difficulty. However, other concepts add up to ensure the success of any mission.

2.4.6 *Diplomatic Initiative.*

From S.J.M., Stanley J. Michalak J. (2006). A diplomatic initiative is one of such concept it is the ability to apply tact or skills to the conduct of international relations. A good diplomatic initiative will help into achieve these goals and interests without rancor.

States usually pursue their diverse interests within the frame work of their foreign policy.

Foreign policy generally prescribes goals, strategies towards the accomplishment of national interests. It is normally initiated by the head of state, a cabinet or nongovernmental collective leadership or the foreign minister who presides over the foreign ministry.

2.4.7 *Diplomatic Machinery*

From S.J.M., Stanley J. Michalak J. (2006). The conduct of relations with other countries has three requirements:

1. an establishment in the home country to formulate policy and instruct personnel sent abroad;
2. an establishment abroad from which contracts are made in the foreign country;
3. Personnel to make the system work.

Over the centuries, these three requisites for diplomacy became increasingly professional and bureaucratic. By the 17th and 18th centuries, domestic foreign affairs establishments were fairly well developed. In the 19th century, corps of diplomats increasingly was chosen by competitive examinations. Although ambassadors were selected on a political basis, they found highly professional staff waiting for them at their embassies abroad, and they dealt with other skilled staff when they reported to their home offices.

2.5 Department Of Foreign Affairs

S.J.M., Stanley J. Michalak J. (2006) says: Government agencies that deal with foreign affairs in the home country are referred to as the ministry or department of

foreign or external affairs. It is headed by a minister or secretary of state as in the United States. In democracies the foreign secretary is always a political appointee who is selected by the nation's leader.

Drawing on the expertise within the department and its establishment abroad the secretary advice the head of state on matters of foreign policy, helps formulate and coordinate policy and administers the agency over which he or she presides.

At times the foreign secretary is also directly involved in negotiation with other nations.

2.5.1 *Structure of Foreign Ministry*

From S.J.M., Stanley J. Michalak J. (2006). Departments of foreign affairs generally are divided into geographic and functional divisions. The former consists of bureaus for major geographic areas that are then broken down into smaller divisions and ultimately into country desks. Desk officers are career diplomats who specialize in various aspects of the country to which they are assigned.

Instructions to and reports from embassies abroad are handled first by country desks.

The functional divisions deal with problems or issues that do not appropriately fall under the domain of any one country; trade of international organization, human rights, public information, passports and visas.

Departments of foreign affairs also have an administrative section that is in charge of running the agency. This section deals with internal matters such as budget allocations, personnel recruitment and management training and logistics.

In an age of interdependence and total diplomacy the foreign affairs department must coordinate their activities with foreign activities of other government agencies.

2.5.2 *Diplomatic Missions*

From S.J.M., Stanley J. Michalak J. (2006). Organizations that are established abroad to deal with matters concerning the interest of their country as well as issues that affect the well being of other countries are regarded as diplomatic missions.

In earlier times from the period of antiquity to the 15th century this mission were organized for only a particular purpose, thus they were not planed in advance but arose when there was need to address certain issues abroad and were terminated at the end of the exercise.

They were temporary and therefore regarded as ad-hoc. However, from the middle of the 15th century these missions became permanent organizations and usually established at the capitals of the countries of accreditation. From then on series of diplomatic building which included embassies or high commission, consulates and legates here gained a firm ground throughout the world.

2.5.3 *Activities of the Mission*

Funk and Wagnalls (2006), The activities of a diplomatic mission are extremely varied. They range from such serious tasks as negotiating issues of great political significance and reporting and commenting on important events in the foreign country to meeting with foreign students, arranging itineraries of exhibits about life in the home country, and issuing visas.

In addition to their diplomatic and political chores, missions are also in charge of the consular work of the home government. Consular operations are concerned with the economic and commercial relations between nations. Originally, diplomatic and

consular chores were kept strictly separate because early theorists felt that national interests should not be "tainted" by private commercial matters. Thus, two separate services—diplomatic and consular—usually existed. Today all major countries have combined these two services, and a single corps of professional civil servants serves in both areas.

Consular work involves a variety of activities. Consuls issue birth, death, and marriage certificates to citizens residing or traveling in the foreign country. Consular officers also regulate shipping, aid their country's citizens when they travel on business or as tourists, and report on economic and business conditions abroad. Activities are often carried out in consulates located in major trading and commercial cities as well as in the capital city.

2.5.4 Diplomatic Negotiations

Although negotiations have traditionally been left to professional diplomats, very important negotiations are increasingly being undertaken by specially selected envoys or foreign ministers and by heads of state. Recent examples of this trend were the "shuttle diplomacy" of the U.S. secretary of state Henry Kissinger in the Middle East and President Jimmy Carter's personal involvement in negotiating a peace treaty between the Egyptian president Anwar al-Sadat and the Israeli Prime Minister Menachem Begin. Resident diplomats, however, still do almost all the day-to-day negotiating and interacting with leaders of other states. (www.encyclopedia/diplomatic_mission June, 2006)

The problem of deciding what practices and tactics are most effective in negotiating is difficult. The German-American political scientist Hans J. Morgenthau (1904–80) in his book Politics among Nations (1948) perhaps best summed up the ideal of modern diplomacy:

(1) Diplomacy must be divested of its crusading spirit;

(2) The objectives of foreign policy must be defined in terms of the national interest and must be supported with adequate power;

(3) Diplomacy must look at the situation from the point of view of other nations;

(4) Nations must be willing to compromise on all issues that are not vital to them;

(5) The armed forces are the instrument of foreign policy, not its master; and

(6) The government is the leader of public opinion, not its slave.

(www.encyclopedia/diplomatic_mission June, 2006)

2.5.5 *Schedule of Operation in the Mission*

According to Funk & Wagnalls (2006): First and foremost the embassy is normally divided into three main sections. The diplomatic sections, with the high commissioner, head of chancery and charge d'affires, the various attaches and security section.

The various attaches that are common in most embassies include the consular, economic, political, cultural, finance, education, information and the military.

The three sections do not function independently each of the attaches is responsible for gathering and spreading of information that are related to their fields. This information are prepared in form of documents and passed to the ambassador's office for approval where his signature and stamp is required.

The documents are then forwarded to the respective ministries or departments in the home country and finally to the ministry for foreign affairs so that experts in these

areas usually in persons of deputy under secretaries, assistant secretaries, bureau heads, division chiefs, special assistance and advisers prepare ''position papers'' for the foreign minister to use when advising the head of state. Before these people can prepare such papers an immense amount of information and intelligence received each day has to be analyzed, evaluated and organized in such a manner that it can be properly stored and readily made available when needed. A report is sent back to the diplomatic section of the embassy directing the ambassador to initiate the negotiation procedures in the areas of interests

2.5.6 *Security Section*

This section is concerned with the security measures that need to be taken in order to ensure the safety of the embassy documents as well as the entire premises.

There are services units for communication which aid in carrying out security works efficiently, communication system includes:

1. Ciphers and coding and decoding of cables.
2. Arrangements for long distance telephone lines to the foreign ministry at home.
3. Installation of 'scramblers' to make interception meaningless.
4. Dark room for developing confidential photographs.
5. Movement of mail and couriers for handling very confidential papers.

For this purpose a diplomatic pouch is used, it is an official mail bag transmitted through the regular post or by special courier to and from an embassy abroad.

To ensure the secrecy of diplomatic dispatches the pouch is protected by international law and is not subject to costumes inspection. Diplomatic courier carry special passport defining their status as official dispatch bearers.

The embassy operations are carried out in such a way that the ambassador is the final presiding officer over any matter and his approval is required before any documents is sent out of the embassy.

2.5.7 *Laws Governing the Mission*

Funk & Wagnalls (2006) says: for effective performance of the functions specified the missions are guided by the laws of their state, by international laws and laws of the host state. The Vienna convention provides the following laws in diplomatic relations.

1. The receiving state shall accord full facilities for the performance of the function of the mission.
2. The national flag of the sending state may be flown and its coat of arm displayed on the building occupied by the mission, at the embassy residence, means of transportation when used on official businesses.
3. The receiving state shall permit and protect freedom of communication on the part of the mission for all official purposes.
4. The receiving state shall assist the mission of the sending state in obtaining suitable accommodation.
5. The receiving state shall ensure freedom of movement and travel in its territory to all members of the mission.
6. The sending states shall respect and abide by the laws of the receiving state.

2.5.8 *Space and social order of the foreign offices*

In buildings like an embassy or high commission, where security is of maximum importance, the building is zoned thus;

- Public access area: this is an area designated for protection solely through security measures. This area is provided for screening of visitors and employees before admittance into the embassy/high commission.
- General work area: this area is designed for personnel in which sensitive but unclassified information may be handled, stored, discussed or processed. Examples of these areas could be the consular section, commercial section, agricultural section, administrative section and customs.
- Controlled access area: this is the only area within the building where classified information or materials may be handled or processed. Its occupied by the visiting country only.
- Restricted area: those areas of the building in which classified information may be handled or stored. Examples of these areas are the executive section, political section, economic section and other similar sections. Here persons are under continuous escorts or surveillance.
- Core area: those areas within the controlled access area requiring the highest levels of protection where intelligence, cryptographic, security and other sensitive information may be handled stored or discussed.

Allocation of spaces have strong symbolic interpretation, as they not only determine the overall building volume but also the hierarchical arrangement of various offices within the building, the shape or placement of these spaces helps to give an information about the nature or intensity of activities or the hierarchical order of the users of such spaces.

The individual mind is a sensitive organism that readily reflects a wide range of perception and beliefs even when they are logically incompatible (Othman R.S 1999). Spaces therefore, take different social situations; the space itself does not convey the

meaning as if it were a simple code. It serves rather as an objection of whatever shared meaning people need to reinforce in one another.

In an embassy, the Ambassador being the head of the mission is the most senior ranking officers and thus allocated the largest space, the deputy chief of mission who is the second ranking officer occupies an office similar in size to that of the ambassador, followed by other diplomats, secretaries to the lowest ranking officials. The offices earlier mentioned could be allocated and placed based on the amount of activities taking place.

2.5.9 *Architectural Evocation*

Space contribute to social integration, but do so by strengthening particular meaning of specific spaces considering some kind spaces that are specially potent as social and political symbols. It is the monumentality of great public buildings that most conspicuously distinguishes them from the rest of the environment. The scale of the structure reminds aliens that they are subject to remote authorities they only know or understand, and the same monumentality carries a reciprocal meaning for the functionaries who enter these buildings regularly (William A. 1973). Such spaces legitimize the authority and importance of its occupants in exactly the same way that they highlight the vulnerability of the aliens. The expressive meaning of spaces therefore perpetuates order.

An ambassador meeting with his aides in a large and expensively decorated posh office reminds him and the public to whom the meeting is reported of his status and authority as the head of the organization just as it exalts the status of his aides and defines the mass public as non participants who may never enter the office. Even the

cleaner who mops the office floor gain some status from the setting. On the other hand the prisoner in a solitary confinement or a mathematician in an austere office may occupy somewhat similar aspects but the setting constricts the dignity and autonomy of one as potently as it helps establish the dignity of the other.

2.6.0 Basic Considerations in the Design of Embassy

i) Size of the mission

Adequate provision of space that will accommodate all the functions that is required to run the embassy should be provided in order to ensure smooth operations without inconveniences.

ii) Proper zoning of functions

This will involve the arrangement of public spaces for convenient service to the public and also the arrangement of sensitive areas remote from the public.

The two zones should be properly demarcated from one another since they are not related.

iii) Circulation

A good spatial arrangement of various infrastructures on the embassy premises will ensure easy circulation and will in turn facilitate the speedy execution of diplomatic duties.

iv) Building expansion

There should be provision for building expansion either vertically, horizontally or both.

v) Physical security

All the necessary measure to ensure the safety of the embassy should be given due consideration; exterior lighting, easy control of entrance, and visual control of stairways and elevators.

The site should be examined to ensure that it provides the recommended security set back from property lines.

The issue of security should be born in mind right from the onset of the design but should not pose as a constraint in sampling various design options.

CHAPTER THREE

INTRODUCING BANGLADESH

3.1 Introduction



Fig. 3.1 map of Bangladesh
Source: www.wikipedia/bangladesh_map

Bangladesh, officially the People's Republic of Bangladesh, is a country in South_Asia. It is bordered by India on three sides and Myanmar to the southeast; the Bay_of_Bengal forms the southern coastline. Together with the Indian state of West_Bengal, it comprises the ethno-linguistic region of Bengal. The name *Bangladesh* means "Country of Bengal"

Bangladesh is located approximately between 20 N latitude and 88E and 93E longitudes. The landscape is basically a flat delta plain formed by the confluence of two mighty rivers, the Brahmaputra and the Ganges. It is also crisscrossed by numerous other rivers and rivulets. (Retrieved from www.banglapedia.com 2006)

According to Wikipedia encyclopedia 2006, Most parts of Bangladesh are less than 10 meters above sea level, and it is believed that about 10% of the land would be flooded if the sea level were to rise by 1 meter. The highest point in Bangladesh is in Mowdok range at 1,052 m in the Chittagong Hill Tracts to the southeast of the country. Chittagong and the Chittagong Hill Tracts in the Southeast, hills and hillocks dot the districts of Sylhet in the Northeast and, Green-top tea gardens in the slopes of the low hills of the Northeastern Sylhet provide a relief to the monotony of a mostly flat country.

A major part of the coastline comprises a marshy jungle known as the Sundarbans, one of the largest mangrove forests in the world and home to diverse flora and fauna, including the Royal Bengal Tiger.

3.2 Linguistic Composition

Bengali, the language spoken in Bangladesh, belongs to the Indo-Aryan group of languages and is related to Sanskrit. Like Pali, however, and various other forms of Prakrit in ancient India, Bengali originated beyond the influence of the Brahman society of the Aryans. The Pala rulers of Bengal (8th to 12th century), who were Buddhists and whose religious language was Pali, did not inhibit the emergence of a colloquial tongue known as Gaudiya Prakrit. This colloquial tongue was the language from which Bengali was derived. (Encyclopedia Britannica, 2006)

In Iajuddin A. (2005) article, Bangladesh is ethnically homogeneous, with Bengalis comprising 98% of the population. The remainders are mostly Bihari migrants and indigenous tribal groups. The most populous of the tribes are the Chakmas. The region

has been a source for ethnic tension since the inception of Bangladesh. (Retrieved from Encyclopedia Britannica _language, 2006)

Apart from these tribes, the rest of the people are Bengalis—an ethnic as well as a linguistic group. The Bengalis, however, are not homogeneous in origin. In general, the people of the coastal areas, with who the Muslim merchants of the Middle East were in close touch, show physical features that seem to be the result of the admixture of local people with those of Turkish and Semitic origin. (Retrieved from www.banglapedia.com September, 2006).

3 Language

In Iajuddin A. (2005) article, The main language, as in West_Bengal, is Bangla (Bengali), an Indo-Aryan_language of Sanskrit origin and has its own script. Bangla is the official language of Bangladesh, though English is also understood and spoken. It is also often used for official purposes and in higher education.

More than 85 percent of the population follows the religion of Islam, which was made the state religion by a 1988 constitutional amendment. The arrival of a handful of Muslims in Bengal at the beginning of the 13th century and the rapid expansion of their rule permanently changed the character and culture of the area.

Two major religions practiced in Bangladesh are Islam (83% CIA_World_Fact_Book est. 1998, 88% US State Department est. 2005) and Hinduism (16% CIA World Fact Book est. 1998, 11% US State Dept. 2005). Ethnic Biharis are predominantly Shia Muslims. Other religious groups include Buddhists, Christians, and Animists. (Retrieved from www.betelco.com/bd/bdsearch ,February, 2007)

3.4 Ethnic Composition and Distribution

According to Kazi k. A. (1989), Bangladesh is a melting pot of races. With the coming of the Muslims in the 8th century AD, new elements were introduced; persons of Arab, Persian, and Turkish origin moved in large numbers to the subcontinent. By the beginning of the 13th century they had entered what is now Bangladesh. The contention that Bengali Muslims are all descended from lower-caste Hindus who were converted to Islam is incorrect; a substantial proportion are descendants of the Muslims who reached the subcontinent from elsewhere.

According to Mukhtadir A. (1989), Most of the tribal peoples of Bangladesh inhabit the Chittagong Hill Tracts in the southeast, the least densely settled area of the country. They are predominantly Buddhist, and some of the tribes are related to the peoples of Myanmar. Approximately 12 ethno linguistic groups are of the Chittagong Hill Tracts, the four largest are the Chakma, the Marma (Magh or Mogh), the Tripura (Tipra), and the Mru. Since the mid-1970s ethnic tensions and periodic violence have marked the Chittagong Hill Tracts, where many tribal peoples object to the influx of Muslim Bengali settlers.

Apart from these tribes, the rest of the people are Bengalis—an ethnic as well as a linguistic group. The Bengalis, however, are not homogeneous in origin. In general, the people of the coastal areas, with who the Muslim merchants of the Middle East were in close touch, show physical features that seem to be the result of the admixture of local people with those of Turkish and Semitic origin

3.5 Climatic Data

The importance of climate in Architecture cannot be overstressed. The climate of the region is warm – humid. The mean maximum temperature during the summer and the monsoon months starting from march and continuing up to October varies between 29C and 32C. Winds are mostly from the north and northeast in winter, blowing at a rate of 1 to 2 miles per hour in northern and central areas and 2 to 4 miles per hour near the coast. During the period of the northwesters (March to May), wind speeds may rise to 30 or 40 miles per hour. (Nazimuddin A. 1989).

In the early summer (April and May) and late in the monsoon season (September to November), storms of very high intensity often occur; they may create winds with speeds of more than 100 miles per hour, piling up the waters of the Bay of Bengal to crests as high as 20 feet that crash with tremendous force onto the coastal areas and the offshore islands, inundating them and causing heavy losses of life and property. Since the early 18th century, when records were first kept, more than 1,000,000 people have been killed in such storms, 815,000 of them in three storms occurring in 1737, 1876, and 1970. Severe storms also occurred in May 1985 and April 1991. (Nazimuddin A. 1989).

Bangladesh receives heavy rainfall; except for some parts in the west, it generally exceeds 60 inches the rainy season begins with the advent of the monsoon period in June and lasts until October. As such their architecture was affected using very deep eaves. More than 70% of the annual rainfall (as much as 2000mm) is received during this period. In the winter months, from November to February, temperature may occasionally

fall below 7C or 8C but the mean minimum temperature remains in the region of 2C to 15C throughout the winter months.

The climate of hilly areas is again peculiar to the area and different from the rest of the country. Hilly Chittagong and hilly Rangamati in the Chittagong Hill Tracts is wetter than plain land Dhaka (fig. 3.1). Although the Monthly Average Maximum Temperature at the two levels do not vary much (Max 34.3 °C, Min 12.7 °C), figures for the Monthly Average Relative Humidity show a marked difference. (Fig. 3.2) (Bangladesh Bureau of Statistics, 2001) The possibility of landslides in hilly areas is an added dimension and should be reflected in its buildings, a condition that cannot be fulfilled if a plain land building is artificially imposed on its gradient. These differences will only validate how the Architecture of plain land and highland cannot be and should not be similar. Unfortunately in the case of Bangladesh, it has.

Gradient	Station	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Plain	Dhaka	1627	2153	2850	1169	2819	1540	1752	2044	1931	2312
Hilly	Chittagong	2584	2985	2698	2274	3360	2260	2445	2890	2687	3863
Hilly	Rangamati	2595	2681	3023	1728	3832	1611	2403	2891	2644	3216

Fig 3.2: Annual Total Rainfall by station. (Millimeters)

Gradient	Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Plain	Dhaka	77	68	64	75	78	81	87	86	85	82	78	77
Hilly	Chittagong	81	76	71	81	82	83	89	89	84	82	82	78
Hilly	Rangamati	82	75	70	77	81	84	80	88	86	85	86	82

Fig 3.3: Monthly Average Relative Humidity. (Percentage, %)

3.6 Culture

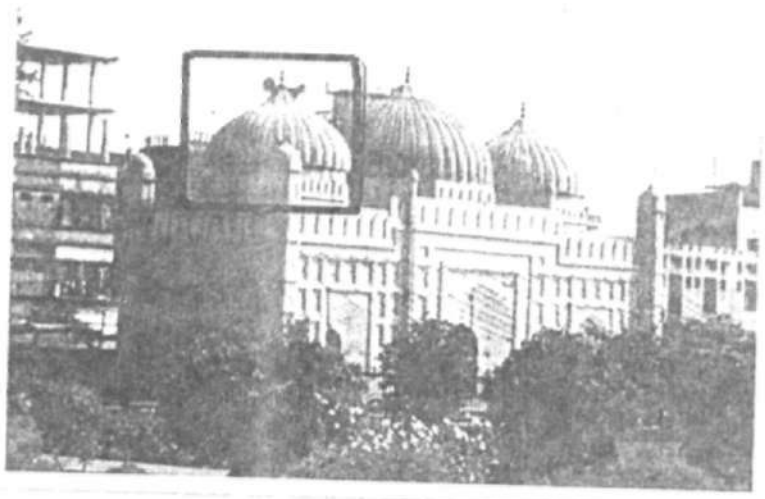
The culinary tradition of Bangladesh has close relations to Indian and Middle_Eastern cuisine as well as having many unique traits. Rice and fish are traditional favourites; leading to a common saying that "fish and rice make a Bengali" (*machhe bhate bangali*). Meat Consumption has increased with higher production in recent years. Bangladeshis make distinctive sweetmeats from milk products; some common ones are *Rôshogolla*, *Chômchôm* and *Kalojam*. The sari *(shaṛi)* is by far the most widely worn dress by Bangladeshi women. However, the salwar kameez *(shaloar kamiz)* is also quite popular, and in urban areas some women wear Western attire. Among men, European dressing has greater acceptance. Men also use the *kurta-paejama* combination, often on religious occasions. The lungi, a kind of long skirt, is widely worn by Bangladesh men. (Retrieved from www.bss.com march 2007)

3.7 Settlement

According to Mukhtadir A. (1989), Traditional architecture in Bangladesh is represented by the many mosques, mausoleums, forts, and gateways that have survived from the Mughal period. These, like Muslim architecture elsewhere in the subcontinent, are characterized by the pointed arch, the dome, and the minaret. The best-preserved example is the 77-dome mosque at Bagerhat in the south (www.bangladeshcom). The ruins of Lalbagh Fort at Dhaka also provide some idea of the old traditions. Although in style and conception traditional architecture belongs to the same school as medieval buildings in northern India, Bangladesh's distinctive contribution lay in the translation into brick and mortar of the sloping, four-sided thatched roof found in the countryside.

Some remains of pre-Muslim Buddhist architecture have been unearthed at Paharpur and Mahasthan in the north and at Maynamati in the south. They are said to date from the 8th century, and they exhibit the circular stupa pattern characteristic of ancient Buddhist monasteries.

Public buildings are usually constructed with domes, arches and minerat as shown below: but preferences have shifted in recent times to modern International style. Skyscrapers are, however, ruled out by the softness of Bangladesh's subsoil.



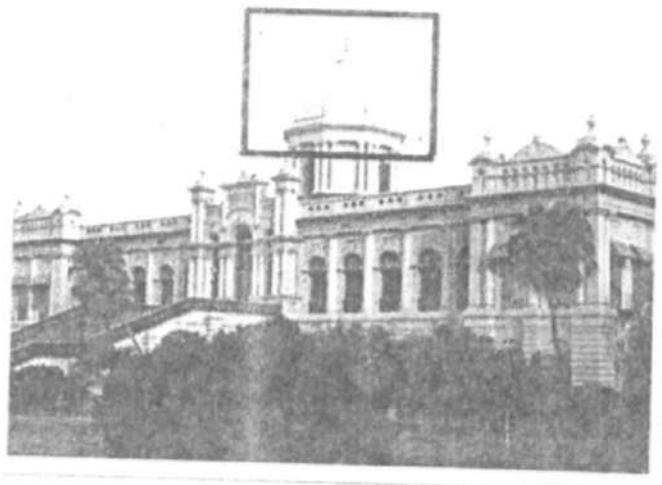
NAME: Lalbagh Fort
LOCATION:
Constructed under the supervision of Sha Ali jahan
NAME of DOME: onion dome

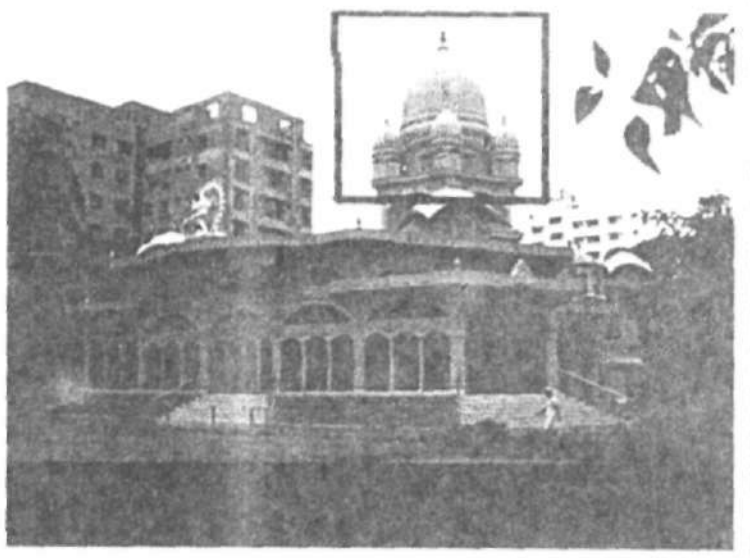
Plate I
Source: self

NAME: Ahsan Manzil Museum
LOCATION: Mohammadpur, Dhaka
DATE: 1888
Constructed under the supervision of Nawab khwaja A. Ghani
NAME of DOME: chepta dome

Plate II

Source:
www.bangladesh.com/blog/ahsan-manzil





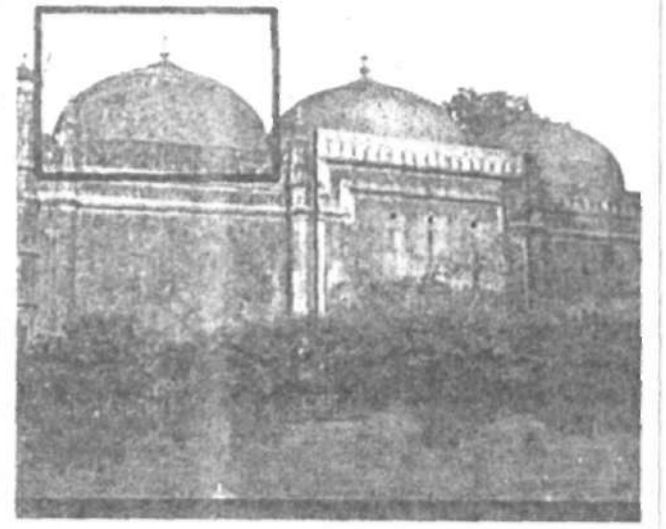
NAME: Conference centre
LOCATION: Dhaka
Architect: Naimul Hassan
Constructed in the year 1970
Name of dome: lomba dome

Plate III
Source: self

NAME: Kalwari palace
LOCATION: Burishal, South bangladesh
Architect: Gulam Bahadur
Year:1775
Name of Dome: gul dome

Plate IV

Source: tourists attraction of Bangladesh





NAME: Conference centre
LOCATION: Dhaka
Architect: Naimul Hassan
Constructed in the year 1970
Name of dome: ulta pala

Plate V
Source: self

ARCHES



NAME: Ahsan Manzil Museum
LOCATION: Mohammadpur Dhaka
DATE: 1888
Constructed under the supervision of Nawab khwaja Abdul Ghani
NAME of ARCH: gul arch

Plate VI
Source:www.bangladesh.com/blog/ahsan-manzil

NAME: Gombus Mosque
LOCATION:
DATE: 1899
Architect:
NAME of ARCH:
Cusped arch

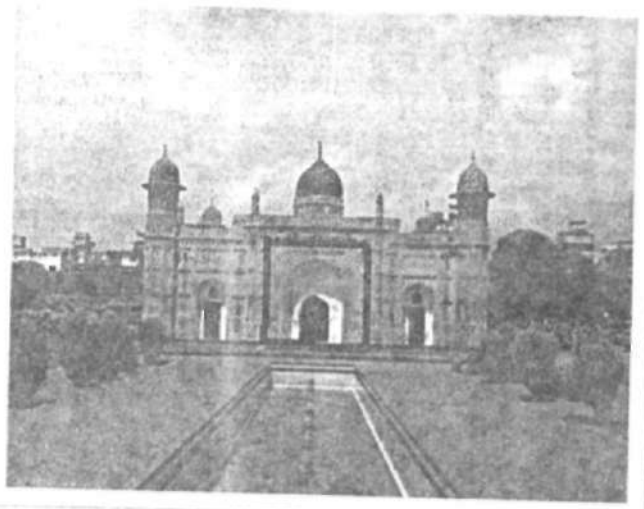


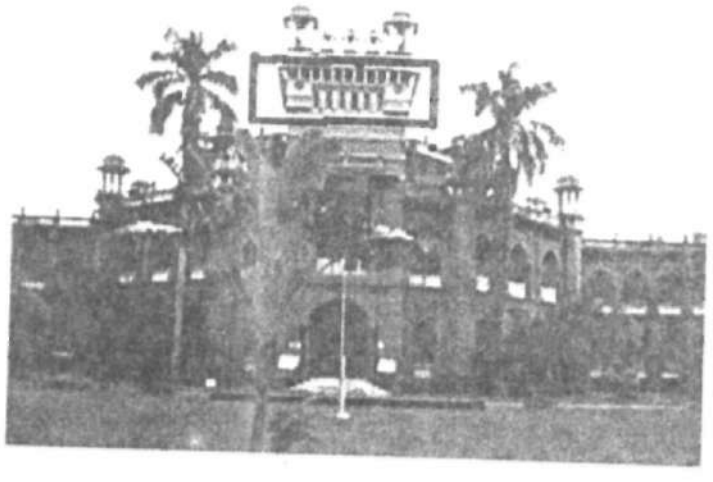
Plate VII

Source:www.bangladeshi traditional architecture.com



NAME: Faculty of science
LOCATION: Dhaka
Architect:
Date:1886
Name of Arch: cusped arch

Plate VIII
Source: www.bangladeshi traditional architecture.com



NAME: Faculty of Science, Dhaka
Architect:
Date:1886
Name of motif: ornate bracket

Plate IX
Source: www.bangladeshi traditional architecture.com

NAME: star mosque Architect:
Date:1886 Name of motif: senga

Plate: X

Source: www.bangladesh.com/blog/ahsan-manzil





NAME: Ahsan Manzil
Museum
DATE: 1888
Constructed under the supervision of Nawab khwaja Abdul Ghani
NAME of Motif: cidro

Plate XI
Source:www.bangladesh.com/blog/ahsan-manzil

TURRETS



NAME: Ahsan Manzil Museum
DATE: 1888
Constructed under the supervision of Nawab khwaja Abdul Ghani
NAME of turret: chhatris

Plate XII

Source:www.bangladesh.com/blog/ahsan-manzil

NAME: Faculty of science
Architect:
Date:1886
Name of turret: Diwan-i-khas

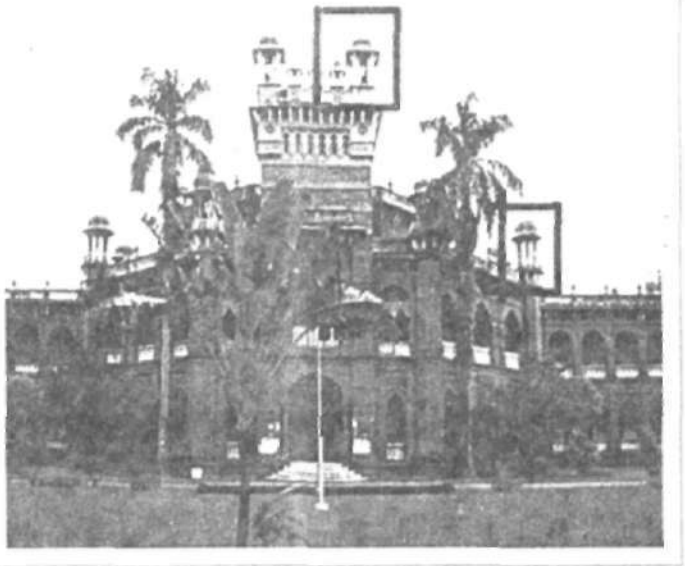
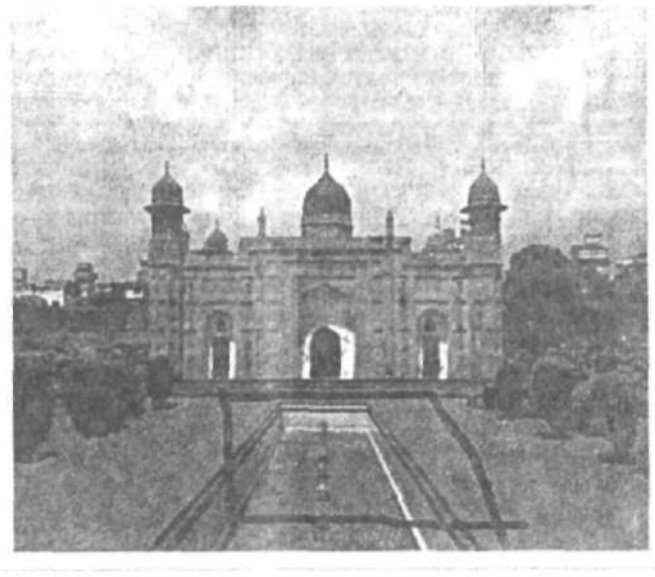


Plate XIII
Source: www.bangladeshi traditional architecture.com



NAME: Conference centre
Architect: Naimul Hassan
Constructed in the year 1970
Name of turret: kilisan

Plate XIV
Source: self



NAME: Gombus mosque
Location: BARISHAL
Date: 1899
ARCHITECT: Gulam Bahadur

Plate XV
Source: tourist attraction of Bangladesh

NAME: Lalbagh Fort
LOCATION: Dhaka
Constructed under the supervision of
Name of water body: rectangular pond

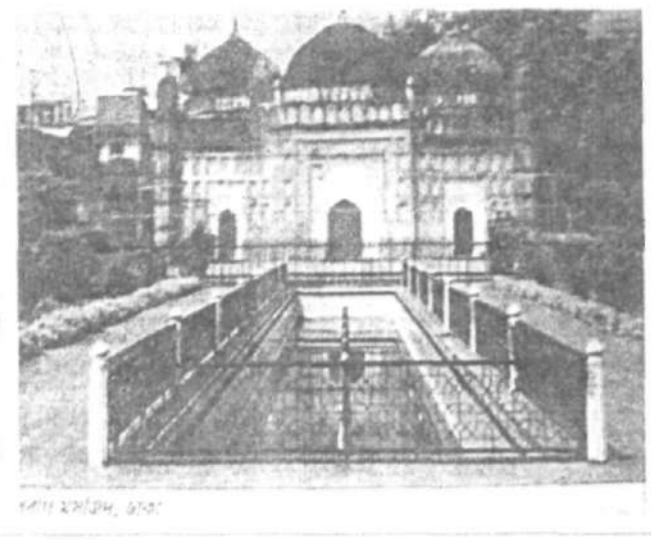
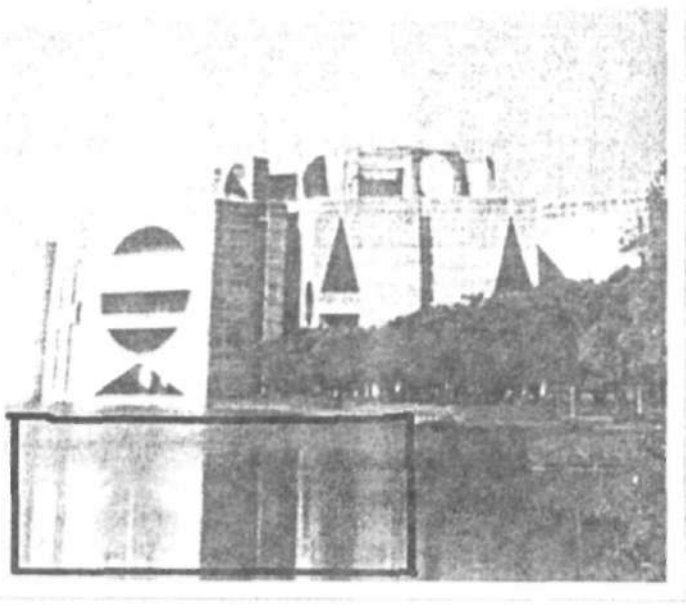


Plate XVI
Source: tourist attraction of Bangladesh



NAME: house of parliament
LOCATION: Dhaka
ARCHITECT: Louis Kahn
Constructed in the year 1901-1974
Name of water body: lake

Plate XVII
Source: Self

resources. This predominantly deltaic land has changed in shape and character over time. Because of increased human impact and intervention on the environment, settlement patterns are also subject to change. Nonetheless, there is continuity and some typical characteristics have evolved in response to local natural characteristics.

According to (Mukhtadir A. 1989). Broadly classified, there are two main types of settlement: amorphous and elongated-linear. The amorphous type, consisting of clustered or scattered settlements on high land, is often dispersed throughout the terrain. The elongated-linear type is built on high land along natural levees of rivers or water channels. However, even within and in proximity to linear settlements, there is dispersion which depends on the surrounding level of land.

There are many variations of this general pattern. For example, in hilly and also in some marshy areas there are settlements built on stilts. In parts of the hilly areas of Chittagong and the marshy areas of Sylhet, settlements are fully nucleated, although this is uncommon in most other rural areas. In some other areas, such as the Moribund Delta in the west and the Barind Tract in the north, nucleation is also evident to a lesser extent;

Homestead and House



3.8 Homestead and House



Plate XVIII: *a typical homestead; using the courtyard system and using thatch roof for the homestead.*
Source: www.banglapedia.com

The typical unit within settlements in predominantly agricultural rural communities is the homestead, consisting of a group of buildings belonging to an extended family. (Mukhtadir A. 1989). A typical feature is that of the arrangement of buildings around a rectangular or circular open courtyard. The introverted courtyard arrangement reflects the need to accommodate the local culture of seclusion of women (*purdah*) in this predominantly Muslim society. Circulation into buildings is through the courtyard and they face it and open into it while presenting a closed surface to the outside. In large homesteads, a separate building at the front of the homestead is built as a men's meeting house (*baithak ghar*). In Hindu and tribal communities, this gender-specific use of space is less common, although the pattern is not entirely dissimilar to that of the Muslims. The prevalence of the courtyard can be attributed to its being a regional typology and a multi-purpose space, relating well to local patterns of outdoor activity. In Hindu homesteads, symbols of religious ritual, such as the holy *tulsi* tree in a planter or an altar with

1. The family functions i.e. the functions pertaining to the family itself such as sleeping, cooking and eating.
2. The formal functions i.e. the functions pertaining to the family as it reacts with the larger community such as associating and receiving visitors.

According to banglapedia, June 2006, "Each homestead begins with a main dwelling unit and ancillary structures, such as kitchens, granaries and cowsheds. The main dwelling, which is the sleeping unit, is of primary importance". The ancillary structures tend to be semi-permanent and are constructed of perishable materials. As the family grows, these are moved to peripheral locations and more dwelling units are added around the courtyard. Thus, a rural homestead usually consists of several small buildings constructed consecutively. There are other features as well. A backyard pond is a characteristic of many large homesteads. Trees are planted along the outer boundary of the homestead site to provide shade and to serve as a source of fruit and timber.

According to Nizamuddin & Al-Manun (2005), each building within the homestead is generally rectangular in shape and customarily single-storied, though occasionally double-storied structures are seen. Dwellings usually consist of a single room, but may go up to three. Often in agricultural communities, the additional purpose of grain storage is combined with dwellings. Since much time is spent outdoors, the dwellings serve mainly as a shelter in rainy weather and for sleeping. The main dwelling unit, usually the first to be constructed, is generally orientated to face south to take advantage of the prevailing wind direction to relieve humidity. But the pattern of arrangement around the rectangular

courtyard necessitates compromise in the orientation of the other buildings added subsequently.

Buildings are constructed on a raised plinth, commonly made of compacted earth, and the floor is left bare. The raised earth plinth is ubiquitous throughout Bangladesh and is a characteristic feature of indigenous architecture. The plinth varies from a height of 15cms in higher areas to 120cms in low-lying areas. In hilly or waterlogged areas, instead of the earth plinth, the building is raised on bamboo or timber stilts; these materials also serve as posts in most houses. Walls in indigenous houses are generally of two types: the more common screen type is constructed of various types of organic material, often thin and porous to allow ventilation, while in some regions, earth walls are prevalent. To reduce glare as well as to prevent rainwater from entering the room, openings are usually minimal and small.

The roof is usually the most difficult to construct and most expensive part of a rural house. Pitched roofs are usual, and of the gable (*dochala*) or hipped (*chauchala*) varieties; the mono-pitched (*ekchala*) roof is less common, and often used only in ancillary buildings, as are curved bamboo canopy type mantles. Roof types vary, but one most common characteristic of the southern floodplains is the thatched roof with a ridge of curved bamboo poles. This intuitive pre-tensioning of the roof ensures that it does not sag due to weight.

Indigenous building materials are widely used in Bangladesh. Thatching materials in roofs vary according to regional availability. Non-traditional materials such as CI sheet, concrete pillars and brick are now increasingly being used and are fast replacing the use

of natural materials in rural areas. Most organic building materials in Bangladesh are diminishing in supply. Nonetheless, natural materials still continue to be used widely, and some of the principal ones are described below:

Bamboo is the most widely used natural building material. Most indigenous architecture in the plain lands and hilly areas employ bamboo as one of the primary building materials. However, this is a diminishing natural resource, and this fact means that there is now a constraint in using it as a building material. In general terms, bamboo is available in two varieties: thick-walled and thin-walled. Thick-walled bamboo is used for structural members such as posts, roof rafters and purlins. Thin-walled bamboo is split into laths and woven by hand into a variety of stiff mats and screens used as walls and sometimes as roof cladding, as well as wall screens, panels and partitions. These porous, screen-type walls permit necessary ventilation and thermal relief. Besides bamboo, a variety of other organic materials is also utilized, such as jute sticks, reeds, timber or palm leaves.

In some areas, walls are built with large earth blocks. Examples of wattle-and-daub also exist, though mostly in the deltaic plains. Here the common method is to plaster the lower portion of bamboo panel walls with mud for protection against floods, and to leave the upper portion un-plastered to allow ventilation. The combination of bamboo and earth has created a local vernacular architectural idiom. The availability of alluvial soils also allows the production of high-quality fired brick, which are used extensively in urban buildings.

upper portion un-plastered to allow ventilation. The combination of bamboo and earth has created a local vernacular architectural idiom. The availability of alluvial soils also allows the production of high-quality fired brick, which are used extensively in urban buildings.

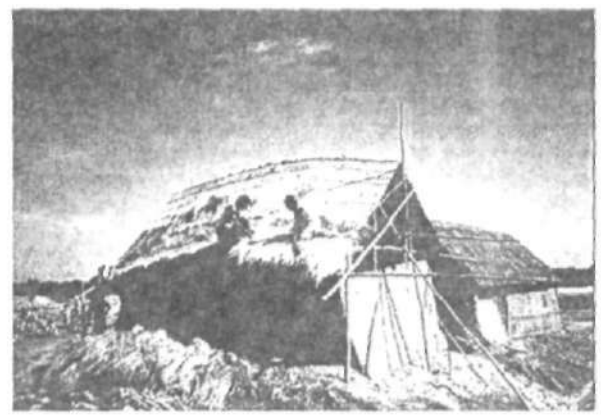


Plate XIX: Indigenous rural house; constructing a thatch roof.
Source: Panos Pictures/ N. Cooper and J. Hammond

A variety of thatches are utilized to cover the roof. The most common are wild grasses, palm leaves, and rice straw. The distinction between naturally grown fibrous materials and agricultural residues used for thatching is important. In the past, varieties of long grass and reeds were widely available and the wet terrain allowed abundant growth of these marshy and riverside fibrous materials. But increasing settlements and the need for more agricultural and grazing land have resulted in reduction of areas with natural vegetation, thereby reducing the supply of wild grass and reeds. According to Mukhtadir A. (1989). As an alternative, rice straw is used as a thatching material since it is an agricultural by-product and thus more widely available, rice being one of the main crops of Bangladesh. Although rice straw is less durable than other thatching materials, the

scarcity of natural fibrous materials has prompted its use. Its main use is as fodder and fuel, and in areas where there is a greater demand for such uses, it can be more expensive than other more durable, and less available, thatching materials. In some areas, clay roof tiles are used, but this practice is largely limited to the southwest area, which borders India. Such roofing is quite common in neighboring West Bengal in India. CI sheet is becoming common as roofing and also walling material, since if offers obvious advantages of durability compared to thatch. It is a status symbol and most rural households aspire to it.

3.9 Building Materials

Building materials play an important role in differentiating the architecture of the flat land from that of the hilly region. In Bangladesh most non-urban buildings are made in masonry. In the plains, masonry is generally made of burnt clay bricks and cement mortar. However, in hilly areas, stone masonry with mud mortar is more prevalent; but, in recent times, it is being replaced with cement mortar (Murty, 2003).

Roofing materials (mainly slate) have a major influence upon the overall townscape of Exeter and the character of its individual buildings. The hilly terrain allows views over buildings and creates roofs capes which would not otherwise be seen. The limited range of materials helps give unity and identity to the City and its constituent parts (Exeter City Council, 2003).

In Bangladesh indigenous building materials of flat land differs from that of hilly areas, and therefore the vernacular architecture of each. Although man-made materials are prevalent in both areas, the architecture at the two altitudes should be different, given that

they should be inspired by their respective locality. This is not evident in Bangladesh, as Buildings at both elevations are designed with the same vocabulary

3.10 Construction, Technology

Roof: (i) 'Voussoired or true Dome,

(ii) Drum for the dome,

(iii) Artistic types of domes.

Walls: (iv) Pointed Arch

(v) Many types of arches.

Decoration: (vi) Geometric design

(vii) Embedding of precious stones, ceramic etc. on walls.

Construction: (viii). Form work in construction,

(ix) Concealed rain-water pipe.

Technology: (x). Cooling of environment by using stone screen-wall,

(xi) Cooling and humidifying the environment by using flowing water.

Landscape: (xii) Gardening by using water stored in trough,

(xiii) Application of mirror-image in landscape.

Design: xiv) Ensuring security, sanctity and visual scale of buildings by placing

(xv) Modifying the visual scale of building by using water body,

(xvi) Application of visual illusion 'Trompe l'oeil' etc.

Domestic Architecture: In the pre-Muslim design the guest house (mostly for the alien guests) were arranged far away from the inner house. The Muslims maintained those. In addition, as inspiration from their religion, they secluded the women's living rooms

further inside. Design principles were developed in which families could live around a common courtyard and the women could move from the ladies' court of one house to another without being visually exposed.

3.11 Archeological Sites and Monuments of Bangladesh

In Nazimuddin A. (1989). Bangladesh is a country considerably rich in archaeological wealth. especially of the medieval period both during the Muslim and pre-Muslim rules, though most of it is still unexplored and unknown. In archaeological fieldwork and research this area was very much neglected for a long time for various reasons, not the least of which is difficult geography and climate and remoteness from the main centers of the subcontinent. With the independence of Bangladesh in 1971 the Government has undertaken a number of field projects.

These fresh explorations are likely to add substantially to our knowledge of the history and chronology of ancient Bangladesh and various aspects of her life and culture. The earlier history of Bangladesh reveals that Buddhism received royal patronage from some important ruling dynasties like the great Pala rulers, the Chandra's and the Deva Kings. Under their royal patronage numerous well-organized, self-contained monasteries sprang up all over the country. The major archaeological sites are described below.

i. Mahasthangarh

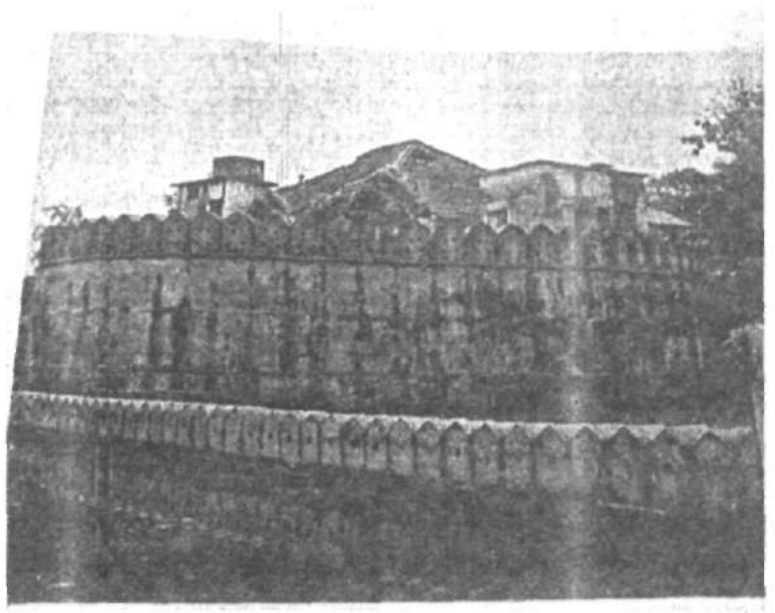


Plate XX: mahasthangarh, using a circular fence.
Source: Tourist attractions of Bangladesh.

According to Haque M. and Haque Z. (2006). Mahasthangarh, the oldest archaeological site of Bangladesh is on the western bank of river Karatoa 18 km, north of Bogra town beside Bogra-Rangpur Road. The spectacular site is an imposing landmark in the area having a fortified. oblong enclosure measuring 5000 ft. by 4500 ft. with an average height of 1 5 ft. from the surrounding paddy fields.This 8th century archaeological site is still held to be of great sanctity by the Hindus. Every year (mid-April) and once in every 12 years (December) thousands of Hindu devotees join the ceremony on the bank of river Karatoa. A visit to the Mahasthangarh site museum will open up for you wide variety of antiquities, ranging from terra-cotta objects to gold ornaments and coins recovered from the site.

ii. Lalbagh fort

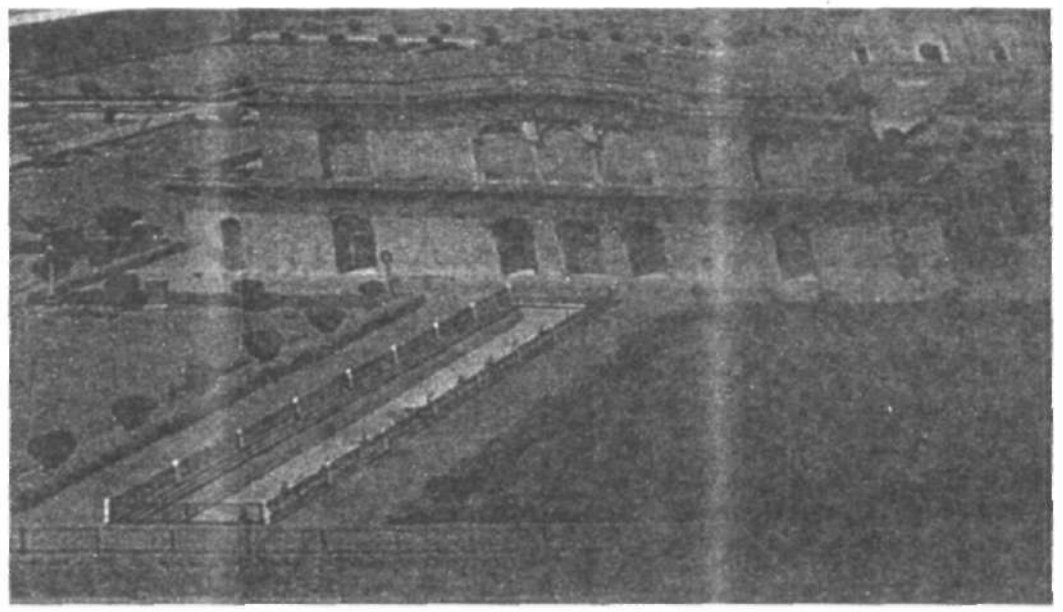


Plate XXI: lalbagh forte; having a long vista to appreciate the architecture and the surrounding.

Source: www.monumentsofbangladesh.com

The capital city Dhaka predominantly was a city of the Mughals. In hundred years of their vigorous rule successive Governors and princely Viceroys who ruled the province, adorned it with many noble monuments in the shape of magnificent palaces, mosques, tombs, fortifications and 'Katras' often surrounded with beautifully laid out gardens and pavilions. Among these, few have survived the ravages of time, aggressive tropical climate of the land and vandal hands of man. (Retrieved from *www.monumentsofbangladesh.com, September, 2006).*

But the finest specimen of this period is the Aurangabad Fort, commonly known as Lalbagh Fort. It occupies the south western part of the old city, overlooking the Buriganga on whose northern bank it stands as a silent sentinel of the old city. Rectangular in plan, it encloses an area of 1082' by 800' and in addition to its graceful lofty gateways on south-east and north-east corners and a subsidiary small unpretentious gateway on north, it also contains within its fortified perimeter a number of splendid monuments, surrounded by attractive garden. These are a small 3-domed mosque, the mausoleum of Bibi Pari the reputed daughter of Nawab Shaista Khan and the Hammam and Audience Hall of the Governor. The main purpose of this fort was to provide a defensive enclosure of the palatial edifices of the interior and as such was a type of palace- fortress rather than a siege fort.

iii. Shait-gumbad Mosque

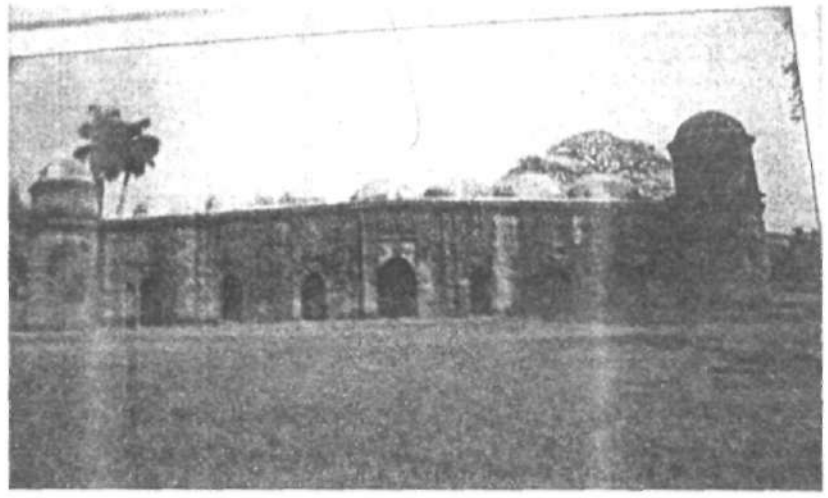


Plate XXII: Shait-Gumbad Mosque, Bagherhat; showing mosque architecture in Bangladesh.
Source:www.monumentsofbangladesh.com

In mid 15th century, a Muslim colony was founded in the inhospitable mangrove forest of the Sundarbans near the sea coast in the Bagherhat district by an obscure saint-General, named Ulugh Khan Jahan. He was the earliest torch bearer of Islam in the south who laid the nucleus of an affluent city during the reign of Sultan Nasiruddin Mahmud Shah (1442-59), then known as 'Khalifatabad' (present Bagherhat). Khan Jahan adorned his city with numerous mosques, tanks, roads and other public buildings, the spectacular ruins of which are focused around the most imposing and largest multi dome mosques in Bangladesh, known as the Shait-Gumbad Masjid (160'x 108'). The stately fabric of the monument, serene and imposing, stands on the eastern bank of an unusually vast sweet-water tank, clustered around by the heavy foliage of a low-lying countryside, characteristic of a seacoast landscape.

According to Nazimuddin A. (1989). The mosque is roofed over with 77 squat domes, Including 7 chauchala or four-sided pitched Bengali domes in the middle row. The vast prayer hall is provided with 11 arched doorways on east and 7 each on north and south for ventilation and light, it presents a dark and somber appearance inside. It is divided into 7 longitudinal aisles and 11 deep bays by a forest of slender stone columns from which springs rows of endless arches, supporting the domes. Six feet thick, slightly tapering walls and hollow and round, almost detached corner towers, resembling the bastions of a fortress, each capped by small rounded cupolas. Recall the Tughlaq architecture of Delhi. The general appearance of this noble monument with its stark simplicity but massive character reflects the strength and simplicity of the builder.

3.12 Chittagong hill- tract Architecture

According to Nizamuddin & Al-Manun (2005) Vernacular architecture as a direct expression of lifestyle and culture of a community is observed in many traditional settlements of South Asia and Southeast Asia. Architecture of the built form deals with the creation of spaces defined by uses concurrent with the life style of a society whereas space in a built form is encoded with meanings reflective of the 'culture' and 'tradition' of which it is a part. The majority of rural settlements of Bangladesh represent vernacular architecture of plain land dwellers, unique to the rural ways of life style of Bengali people. However, the hilly area of the Chittagong Hill Tracts (CHT), which lies in the Southeastern part of Bangladesh, portrays a completely different expression of rich vernacular architecture. The ethnic communities who have been living there since antiquity are the indigenous builders of these houses. Although the tribal houses of the CHT standout as dynamic contrast to the Bengali peasant houses which is built around courtyard, much similarity can be observed between these settlements and settlements of many traditional societies of Southeast Asia. Even under different geographic condition similarity in life style and values of some indigenous societies appear to share some common pattern of architecture.

It is not only the landscape of the CHT that is drastically different from the plains; the ethnic people of this region are strikingly different from Bengali people of the plains. Majority of the ethnic communities in the CHT practice *jhum* or slash or burn cultivation.

This method of cultivation is characterized by clearance of vegetation by cutting and burning, temporary cultivation of crops in the cleared area and abandonment of plot for regeneration of vegetation. Subsistence economy can be observed within the hill people; however, under forces of urbanization, a market economy is slowly infiltrating into the socioeconomic structure. These ethnic people are mostly of Mongoloid race. In featuresthey resemble Southeast Asian people. (Nizamuddin & Al-Manun 2005)

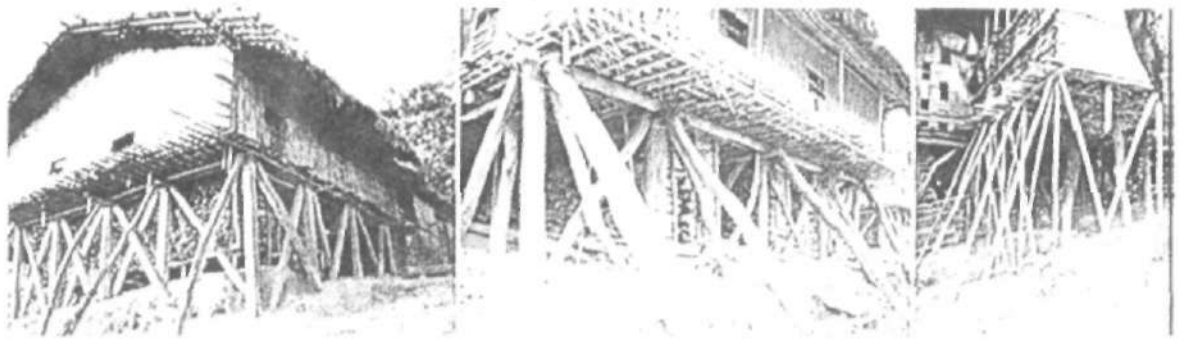


Fig. 3.4: *construction method of the hill tract people*
Source: the pedigree builders

The Pedigreed Builders

Their houses are built on stilts (see photograph no. 1, 2 & 3). It is basically a post and lintel structure with bamboo wall panels and a thatched roof. The bamboo wall panels are non-load-bearing, prefabricated elements. Bamboo and timber are used in construction of houses. Almost all parts of the house exhibit the use of bamboo in different ways. Floor and walls are made of bamboo. In writing by Lewis (1869) on use of bamboo in the CHT by the hill people, a vivid description is presented: The bamboo is literally the stuff of life. Schendel 1992, "He builds his house of bamboo"; he fertilizes his fields with its ashes; of its stem he makes vessels in which to carry water; with two bits of bamboo he

can produce fire; its young and succulent shoots provide a dainty dinner dish; and he weaves his sleeping mat of fine slips thereof".

Bamboo is a common building material in traditional construction of much of the Southeast Asia. Bamboo as construction material has certain advantages. In section, it is hollow inside and because of its hollowness it is lightweight and relatively strong at the same time. It can be sliced and flattened easily with simple tools. The thin bamboo strips can be woven to make screens and partitions.

According to Nizamuddin & Al-Manun (2005), Use of corrugated iron sheets and other imported construction materials can be seen in some hamlets under urban influences: an outcome of newly laid road links and NGO activities. However, in remotely located hamlets the houses exhibit organic materials used in the most indigenous ways. Absence of nails, wires, or metal clippings can be noted. In almost every construction, bamboo thongs are used to tie structural and nonstructural elements. This makes it possible to erect the structure speedily and moreover to dismantle different parts of the structure for reassembling in a new construction within a very short time. The floors are constructed in a most innovative way. The final floor rests on three to four layers of support consisting of splintered and whole bamboo grids, counting for a very durable rigid floor that can take tremendous load (see fig. 3.4 and fig. 3.5).The openings are remarkably different from Bengali rural houses. Lightweight sliding doors made from bamboo matting can be noted as the main door type in most hamlets under study. The window is limited to a minimum number). In most houses the small window openings are limited to two or three in the *kim-tom*.

It is absolutely necessary to protect oneself from the cold and wind and making the house apparently window less evolved as a natural response to climatic demand. The space below the raised floor is used for storing fire woods and as pig stay. However raising the house above the ground has benefits other than mere functional ones; Dawson elaborates on advantages of such stilt construction in traditional Indonesian houses: This has many advantages for life in a monsoon climate, raising the house to a height at which the cooling upper breezes can penetrate and away from the rain mud, and providing excellent under floor ventilation in the hot weather. Tall piles lift the inhabitants free from most of the malaria-carrying mosquitoes and in the more troubled times of past would have added to the security of the house. (Nizamuddin & Al-Manun 2005)

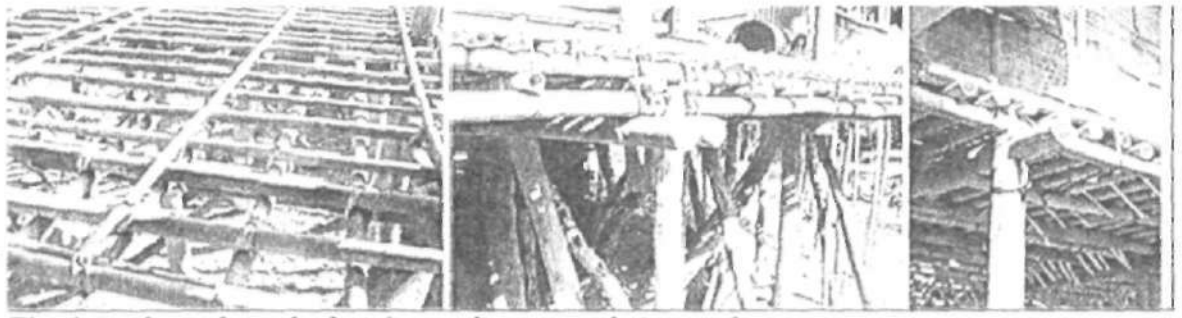


Fig. 3.5*: shows how the bamboo columns are being tied.*

Source: the pedigree builders

The main house, which they call *kim,* is a simple addition of two blocks, *kimma and kim-tom(*also called *cholak* in some localities*).* The two blocks are joined at one side, each under a different roof. The *kimma* and the *kim-tom* are visibly distinct from outside; the *kim-tom* shows a higher elevation as the roof is constructed higher than the roof of the *kimma.* A *char* (open verandah), elevated from the ground on stilts, is laid in front of the *kim-tom.* Access to the raised main platform of the house is by a notched tree ladder. The

houses are of identical design within a hamlet. Society is mainly egalitarian; houses and hamlets do not in generally display hierarchy and wealth. The pattern of construction is the same though the house size and materials used for construction can vary in special cases. In some *parts* isolated *kim has been found.*

A single roofed *kim* is concurrent with the identification of a family under a transitional stage of life, or facing resource constraints. From different case-studies, it can be affirmed that the whole identity of the Mru house is flexible and varied to suit the needs of the users even within a very simple, homogenous framework.

3.13 Contemporary Architecture in Bangladesh

i. *National Library, Dhaka, Bangladesh*

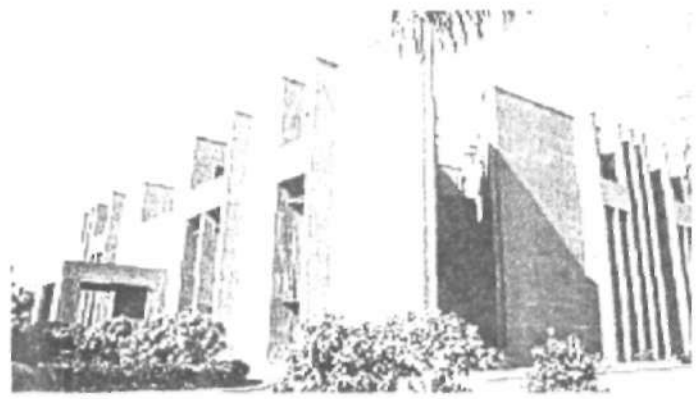


Plate XXIII: National Library, Dhaka; using bricks as a building construction material. Source: www.bangladesh.com

Here the central volume of the library, which houses the concrete stacks in which books are stored, is contained by concrete walls. Enveloping this core on three sides are unornamented structures of brick that are cut away at the corners. The cuts continue

toward the center of the building, allowing air to circulate and light to penetrate to the library's heart so as to moderate the hot, humid Bangladesh climate. Islam, like Kanvinde, has stripped the structure down to its unembellished essence; however, where Kanvinde boldly features the concrete of which his milk processing plant is made, Islam gives the concrete in his library a literally and figuratively supportive role.

ii. ***The National Parliament*** *(Sangsad Bhaban)*:



Plate XXIV: National parliament (sangsad bhaban), Dhaka; a building combined with geometrical shapes and courtyards.
Source: tourist's attraction of Bangladesh

It is the seat of the government located at the center of Dhaka city. It is an architectural wonder. It was designed by the famous American architect Louis Kahn. The complex include the parliament building, hostels for members of the parliament, ministers and secretaries, hospitality halls and community buildings all linked by roads and walkways surrounded by attractive gardens and lakes. The dominating circular and rectangular concrete masses impart a supreme monumentality. The mass of the building is lined with marble strips. The concept behind the design was purely on geometrical shape combined with courtyard system as seen below.

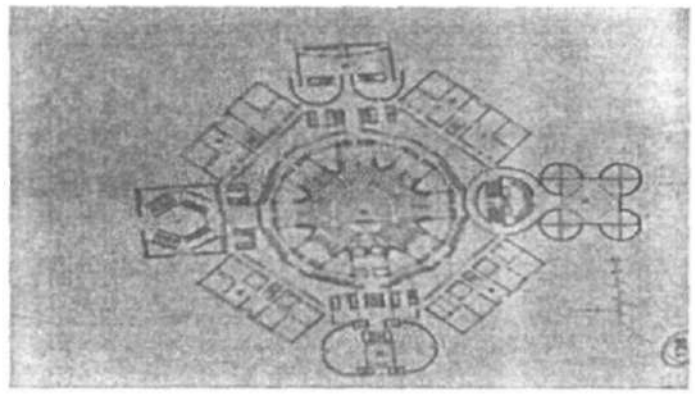


Fig. 3.6: Ground floor Plan of sangsad bhaban
Source: Louis Kahn

There is not a single column in the entire building. Hollow columns that are part of space enclosures have been adapted as structural supports. One of the important considerations in designing the building was protection from the sun and rain.

Architecturally the complex marks a distinct departure from the rest of the modern buildings in Dhaka. (Haque M. and Haque Z. 2006).

iii. *Star Mosque*



Plate XXV: star mosque; a twinkling star mosque.
Source: mosque architecture of Bangladesh

A very beautiful mosque of the city is situated at Dhaka on Abul Khairat Rd; just west of Armanitola Govt. High School. Architecturally faultless is a five-dome mosque with hundreds of big and small twinkling stars as surface decorations. The stars have been created by setting pieces of chinaware on white cement. Seen from the front and from far it looks as if shining above the surface of the earth. The inside of it is even more beautiful than the outside, lovely mosaic floor and excellent tiles with many floral patterns set on the walls, are all in complete harmony.

iv. Botanical Garden

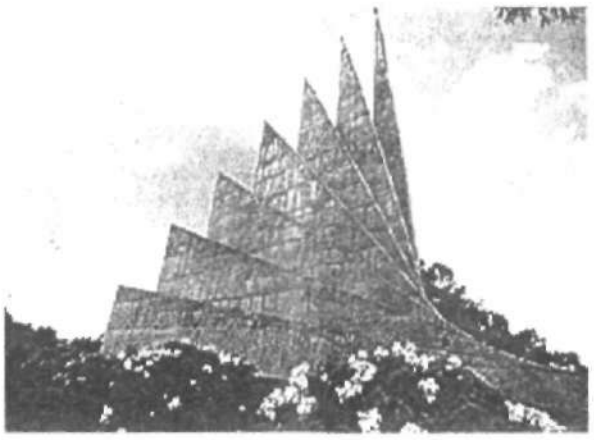


Plate XXVI: botanical garden; a garden beautifully landscaped with variety of trees and shrubs.
Source: www.bangladesh.com

Botanical Garden is also situated in Mirpur just besides the National Zoo, built on an area of 205 acres of land. Approximately 50,000 plants and trees are there of 1200 species. Main attraction of this garden is rose garden. Approximately 300 species of roses are there in this garden. It is open 7 days a week. If you go to this garden, it is advisable you visit National Zoo at a same time.

v. ***The National independence Monument***

Side view



approach view

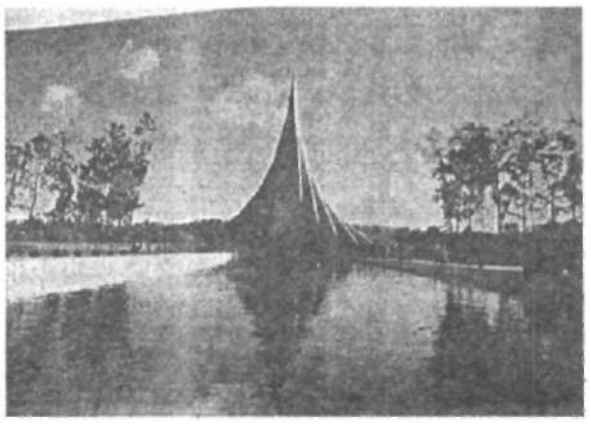


Plate XXVII: National independence monument; a minar of seven triangles symbolizing seven changes of national movement.
Source: author.

The National Monument is a reminder of those who sacrificed their lives for the independence. It is located at Savar near Dhaka. The tower tapers upwards on seven isosceles triangles signifying the seven stages of the national movement that led to the independence of the country. The tower (minar) is a tourist spot which is about 45m high; it has an artificial lake, a pool, and a picturesque garden that surrounds the monument. It also contains an open air stage, mosque, reception room, green house, twin helipads and a cafeteria.

vi. ***The National Emblem***



fig. 3.7: National Emblem
Source: www.bangladesh.com

The National Emblem of the People's Republic of Bangladesh is the national flower Shapla (water Lily) surrounded by two sheaves of rice, four stars and a bud with three tender leaves.

vii. ***Dhaka medical school***



Plate XXVIII: *Dhaka medical school; approach elevation*
Source:



Plate XXIX: *Bari hotel, use of columns as a symbolic expression in modern architecture*
Source:

In this design lots of columns have been used to appreciate the chtagong hill tract traditional architecture with a mix of modern architecture., primarily brick has been used for the construction.

CHAPTER FOUR

ARCHITECTURE AND SYMBOLISM

4.1 Architecture

Architecture is a visual art which finds expressions in buildings. Curts, (1987), has defined architecture as "a complex art embracing form and function symbol and social purpose, technique and belief". Architecture is seen here as an expression of mans adaptation to his environment and hence, a symbol of mans instinctive urges activities, dreams and inspirations.

4.2 Evolution of Architecture

In a new environment man always desires to feel at ease as much as possible. He is impelled to look for things familiar to him, either by visual recognition or by perception of qualities smaller to those remembered qualities of familiar phenomenon or objects. This was essentially how architecture came into being. Accumulation of experience from duelling in natural caves and the conscious observation of how other animals built their own abodes (nests, dens, holes e.t.c.) compelled man to evolve his own form of shelter which protected him from harsh climatic elements and wild animals. Architecture in the beginning was, therefore, influenced by needs, climate and technology. With time however, other factors began to influence architecture, among which include society and culture. These additional factors saw architecture, which had been borne out of the necessity for shelter, being transformed into a medium for symbolic expressions.

4.3 Symbolism

Symbolism is the systematic or creative use of arbitrary symbols as abstracted representations of concepts or objects and the distinct relationships in-between, as they define both context and the narrower definition of terms. In a specific context, "symbolism" is the applied use of any iconic representations that carry particular conventional meanings (Wikipedia encyclopaedia: 2005). Pioch, (2002) explains that symbolism (which developed from about 1905) can be used to describe any art that raises subjective feelings above objective observations.

Symbolism is the architect's tool for creating art, a means to communicate ideas, thoughts, or feelings. He adopts the use a variety of skills- wide variety of colours, sculpting, or illustration- and an assorted use of materials to make his stand recognised.

According to Wluttick, (1960), symbolism in architecture may be classified as; "symbolism which is inherent in the form or structure and that which is attached"

4.4 Symbolic Expression in Form

Symbolism, which is inherent in form or structure, is of two types; that which is impersonal and general in character, and the other which is personal in character. Symbolism which is impersonal and general in character as expressed in architectural forms of structure, is associated or related to symbols which has a common or basic meaning in a general context. While symbolism, that is personal in character, is related to the influence of the personality of the architect on his designs. This may be the cased even if the architect is primarily concerned with presenting the exact demands of his client. Two architects both technically compatriot will produce different designs for the same requirement (this is the result the personality character).

The search of harmony and forms is not as important as trying to achieve the highest expression intensity, both from the aesthetic point of view and according to idea and human critics.

The anthropological study of symbolism developed in the 1960s to investigate what symbols stand for and the processes by which meaning is attributed to them. It drew upon a number of other disciplines such as sociolinguistics, semiotics (the science of signs), and literary criticism. There have been several different strands of inquiry, with differences particularly marked between the British, American, and French schools. The common agreement between them, however, is the need to explain the universal presence of symbols in all societies and to explain their importance. In human history, symbols have been used to express ideas, communicate meanings, and convey emotion. Language may be said to be the most obvious symbol. Combinations of letters create different words; these words when spoken are accompanied by sounds; and these sounds in turn stand for different meanings. The relationship between the sound of a word and its meaning is an arbitrary one, however, set by rules and social convention. Similarly, different languages of the world have developed different scripts as symbols of meanings. Hieroglyphs from the ancient Egyptian civilization are among the earliest examples. Archaeologists have unearthed coins from the ancient Harappa and Mohenjo-Daro civilizations in the Indus Valley, about which little is known. However, the coins have on them symbols such as a bull, and scholars continue to try to unscramble the meanings of these in order to learn more about these societies.

4.5 Types of Symbolism

4.5.1 *Animal Symbolism*

Animals played an important role in the art of several ancient civilisations. Animals could be represented realistically or in fantastic guise, in whole or in part, and with or without human characteristics. Works representing animals are called "zoomorphic".

Egyptians' careful observation and profound knowledge of the natural world enabled them to identify certain animals with specific qualities that could symbolize certain divine functions and principles, in a particularly pure and striking fashion. \As such, certain animals were chosen as symbols for that particular aspect of divinity. This effective mode of expression is consistent with all cultures. For example, in the West they use expressions such as: *quiet as a mouse*, *sly like a fox* etc. The animal or animal-headed 'neteru' (gods/goddesses) are symbolic expressions of a deep spiritual understanding. When a total animal is depicted in Ancient Egypt, it represents a particular function/attribute in its purest form. When an animal-headed figure is depicted, it conveys that particular function/attribute in the human being (Moustafa Gadalla: 2001).

A dove is a universal symbol of peace and innocence. In ancient Greek myth it was a bird of Athena, which represented the renewal of life. In the Bible it was a dove released from the Ark by Noah which returned with an olive branch to show that the Biblical flood was over. Ever since, the dove has symbolized deliverance and God's forgiveness.



Fig. 4.1: Dove: Symbol of Peace
Source: www.princetonol.com

According to legend the devil and witches can turn themselves into any bird shape except the dove. In ancient Japan the dove was sacred to Hackiman the god of war, but it was a dove with a sword that announced the end to war.

4.5.2 *Colour Symbolism*

Symbolism of colours varies from culture to culture. Colours are more than a combination of red and blue or yellow and black. They are non-verbal communication. Colours have symbolism and colour meanings that go beyond ink. Sometimes colours create a physical reaction (red has been shown to raise blood pressure) and at other times it is a cultural reaction (in the U.S. white is for weddings, in some Eastern cultures, white is the colour for mourning and funerals). Colours follow trends as well. In addition to understanding colour meanings, it helps with mixing and matching colours to know the relationship of adjacent, complementary, and clashing colours.

- **Adjacent** or **harmonizing** colours appear next to each other on the colour wheel. Harmonizing colours often work well together but if too close in value they can appear washed out or not have enough contrast.
- **Complementary** colours are separated by another colour on the colour wheel. Complementary colours printed side by side can cause visual vibration making them

a less than desirable combination. However, separating them on the page with other colours will reveal they can work together.

- **Clashing** or **contrasting** colours are directly opposite each other on the colour wheel. Despite the name, colours that clash are not always a bad combination if used carefully. They provide great contrast and high visibility.

Colour symbolism can vary dramatically between cultures. Most colours have more positive associations with them than negative. So, although some colours do have negative connotations (such as Black for a funeral or for evil), these negative elements are usually triggered by specific circumstances. People's age also has an effect on how colours are perceived. For example, children tend to like bright, 'happy' colours.

a. ***Black***

Black is the colour of the night, and of "evil." Black can also be a colour of elegance or class (such as a black-tie only event, and black evening gowns.) Black can also represent ideas such as power, sexuality, sophistication, formality, wealth, mystery, fear, evil, unhappiness, depth, style, sadness, remorse, anger, and mourning. Black can also represent a lack of colour, the primordial void, and emptiness. It can also mean sorrow or mourning, in the Christian tradition of wearing black to funerals. According to Dreyfus, (2000), Black is the colour of mystery and solemnity; the colour of the night. Black expresses the depths of the unknown, and encourages the imagination of a different world from that of daylight realities. Used alone, black can represent bad luck or misfortune.

b. ***Black/White***

Black and white stands for mourning and cheerless occasions. For example, traditional garb for a funeral is black and white. Black represents the loss, and white for their passing onto the heavens.

c. ***Blue***

It is the colour of water and the sea, with all the symbolic references already discussed for that element- that is, blue usually indicates femininity, life, purity, etc., just as water does.

Blue can also symbolize peace, calm, stability, security, loyalty, sky, water, cold, technology, and depression.

d. ***Brown***

Brown represents the ideas of earth, hearth, home, the outdoors, comfort, endurance, simplicity, and comfort.

e. ***Gold***

Dreyfus, (2000) also proposed that gold can evoke the sensation of looking upon waving fields of ripened rice stalks. Gold is also associated with royalty. It represents the colour of the heavens, and is used to decorate statues of the Buddha and religious temples.

f. ***Green***

Green can represent nature, the environment, good luck, youth, vigour, jealousy, envy, and misfortune. Dreyfus, (2000) argued that green is regarded as the colour of eternal life, as seen in evergreens that never change their colour from season to season.

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g. *Orange*

Orange can represent energy, balance, warmth, enthusiasm, flamboyant, and demanding of attention.

h. *Pink*

The colour pink usually serves two purposes. It can be used to show childish innocence, or a characters child-like personality. It can also be used to show a more flirtatious personality. Pink is normally a colour associated with girls and femininity. Pink is considered a colour of good health and life- people are said to be "in the pink" or the "freshness" of a newborn babe.

j. *Purple*

Purple can represent royalty, spirituality, nobility, ceremony, mysterious, wisdom, enlightenment, cruelty, arrogance, and mourning.

k. Red

Red can symbolize many things; from blood, to love, to infatuation. Basically red symbolizes strong emotions, or things of strong emotions rather than intellectual ideas. For example, red can symbolize excitement, energy, speed, strength, danger, passion, and aggression.

It is popularly felt that red, the colour of blood and fire, represents life and vitality. Red also signifies the colour of the sun: a symbol of energy, radiating its vitalizing life force into human beings. Red is also looked upon as a sensual colour, and can be associated with man's most profound urges and impulses. Ironically, red cats symbolize bad luck.

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l. ***Silver/Grey***

Silver/Grey symbolizes security, reliability, intelligence, staid, modesty, maturity, conservative, old age, sadness, and boring.

m. ***White***

White is a sacred and pure colour. It is used as the colour of angles and gods, as it reflects that which is sacred and pure. It is also the colour of doctors, nurses, and others in the health profession denoting cleanliness.

White can also represent reverence, purity, simplicity, peach, humility, youth, winter, and snow, good, cold, clinical, and sterile.

n. ***Yellow***

Yellow can symbolize joy, happiness, optimism, idealism, gold, dishonesty, cowardice, deceit, illness, and hazard.

4.5.3 *Religious /cultural Symbolism*

Symbolism based on religious or cultural beliefs also plays a significant role in architecture as it greatly identifies the ways of life of the inhabitants of such buildings. This is easily observed in the method of construction, arrangement of functional spaces and overall appearance of the building. In central Africa, for example, the concept of arranging buildings close to one another signifies their religious beliefs for the stars. Also the South African Hottentots sees the circle as a perfect symbolic form that brings blessing from heaven. Huts are therefore built in circular forms and also the arrangement within them.

4.5.4 *Technological Symbolism*

This involves the use of symbols to express a nation's state of economy or the economic consciousness of the government. With the advent of technology new construction systems have developed, which is often demonstrated in high rise buildings brought about by the technological discovery of steel reinforcement. The sky scrapers buildings of New York or the massive use of steel in the Eiffel tower of Paris are other example.

4.5.5 *Importance of architectural symbolism*

i. to give an expression of identity

ii. To enhance cultural and religious beliefs, as people feel the need for these beliefs to be enforced within and beyond them

iii. To serve as a reminder about different periods which a country

Must have experienced whether good or bad in order to bring hope to the people or enable them to work harder to achieve success

iv. to bridge the past and present by using history as a reference point. So far as the past lays a foundation for the future, it needs to be conserved to ensure continuity.

4.5.6 *Symbolism of the planned foreign office*

It has always been customary for diplomats to be accommodated in well designed surroundings. This is even from the earlier civilization, these diplomats were regarded as Gods representatives on earth, they were sacred and held in high esteem.

Boldness and impressiveness are seen as correlative qualities of the immaterial connection established between the planned foreign office and palatial architecture.

As the foreign office distinguishes itself by simple dignity through imposingness which is derived by largeness of manner as regards to the façade; the more it is stamped by impressiveness the entire better, all the more striking and appropriate it would be. The medium of expression used for various symbolic representations could vary from traditional architecture, modern, post modern, hi tech or even styles of the past.

For example the Nigerian high commission in Saudi Arabia was designed with the traditional architecture of the northern part of Nigeria to capture the flavour of Nigerian style of architecture. The overall appearance of the building looks like a traditional mud building with relief patterns on the walls and pinnacle which are used on typical Hausa building.

Also, the U.S embassy in Berlin designed by More RubleYude in 1997 is described by the designers as full of sentimental touches. The entrance on Pariser Platz is dominated by a rotunda with a curved glass porch symbolizing the American "ethnic melting pot". Above it light from the south falls in through a crack in the façade, directly on the flag symbolising "a sunny and shiny American future". This post modern design combines elements from architectural history to form an eclectic college.

Similarly, the United States embassy in new Delhi (1954) was designed afters Indians best known monument, the Taj Mahal which is exemplified by pierce concrete sunscreen that is used to shield the embassy's glassy wall from the blazing sun. the architect durell stone claimed that he only wanted to link his design to the Indian tradition, he was therefore not bothered by the fact that the taj mahal was a tomb, what mattered was the local connection.

What ever form of symbolism employed in the design of foreign offices, the key point generally is for building to exhibit grandeur and sophistication. In this case it is the general impression of the setting that is symbolically and politically critical, even if that impression is invalid in a particular instance. The size luxuriousness or decrepit conditions of the foreign building define the capability and worthiness of nations.

4.5.7 *Symbolism in Flags*

Flags are light pieces of cloth, usually rectangular in shape, but varying in size, colour, and design, and intended for use as an emblem or as a kind of signalling device. Flags are most commonly displayed hanging free from a staff, pole, or rope, to which they are attached along one edge. The attached edge of the flag is called the hoist; the body of the flag is known as the fly. Depending on their form and function, flags are variously known as standards, banners, ensigns, or pennants.

The best-known type of flag is that used for identification, such as the flag of a country or flags that distinguish governmental subdivisions, officials, agencies, and services; military units; classes of yachts and yacht clubs; and various other types of organizations and institutions. Some flags convey information, such as those giving notice of an impending storm or a state of quarantine, or as in signalling from one location to another. Flags sometimes also serve as trophies of achievement or victory in athletic contests.

Flags have been used as symbols of tribal, national, and military identity since ancient times. The ancient Chinese and Indians were probably the first to use flags. It is recorded that a white flag was carried in front of the founder of the Zhou (Chou) dynasty (256 BC). In ancient India, flags were carried on chariots and elephants. Both

Chinese and Indian flags may have developed from the streamers attached by the ancient Egyptians to poles crowned with symbolic figures.

CHAPTER FIVE

CASE STUDIES

In this chapter, some case studies on embassies and high commission are examined. Some are selected to enhance the identification of the problem in this research, while others are selected for their effort in the direction of solving the problem that are related to the use of architectural symbols in embassy design. Therefore conclusion drawn would be the basis for a conceptual frame work in regard with the research topic.

5.1 Case Study One

Project - the Sudanese embassy

Location - central area, embassy zone. Garki

5.1.1 *History*

It was build in the year 2000, with a square floor plan of three storey buildings which stands on about 20 structural columns with mosaic finishing.

It is characterized by long vertical openings. A dome is placed over the banquet hall which helps to admit sunlight into the building through the opening made around it.

The dome is a symbolic element commonly associated with Arabian architecture. The floral like decoration arabesque used at entrance and pedestrian gate is also associated with the people of this region.

5.1.2 *Gate House*

It has two gate houses with two entry and exit points



Plate XXX: *Sudanese embassy*



plate XXXI: *gate of Sudanese embassy*

Source: self

5.1.3 *Parking Area*

Visitors park outside while staff parks inside the premises.

5.1.4 *Fence*

Average high walls providing adequate security against intrusion, also security wires are provided to enhance security.

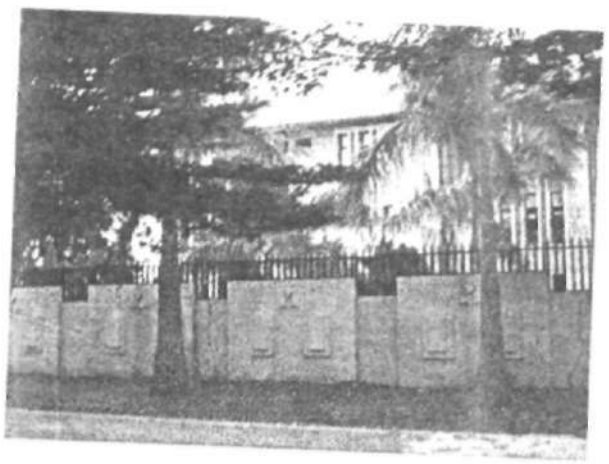


Plate XXXII: *fence of Sudanese embassy*
Source: self

5.1.5 *Circulation*

Provisions are made for proper circulation paths in the premises and a well landscaped area providing beautiful surrounding.

5.1.6 *Facilities*

- consular offices
- multipurpose and banquet hall
- library
- conveniences
- buffets
- ambassadors residence
- service quarters

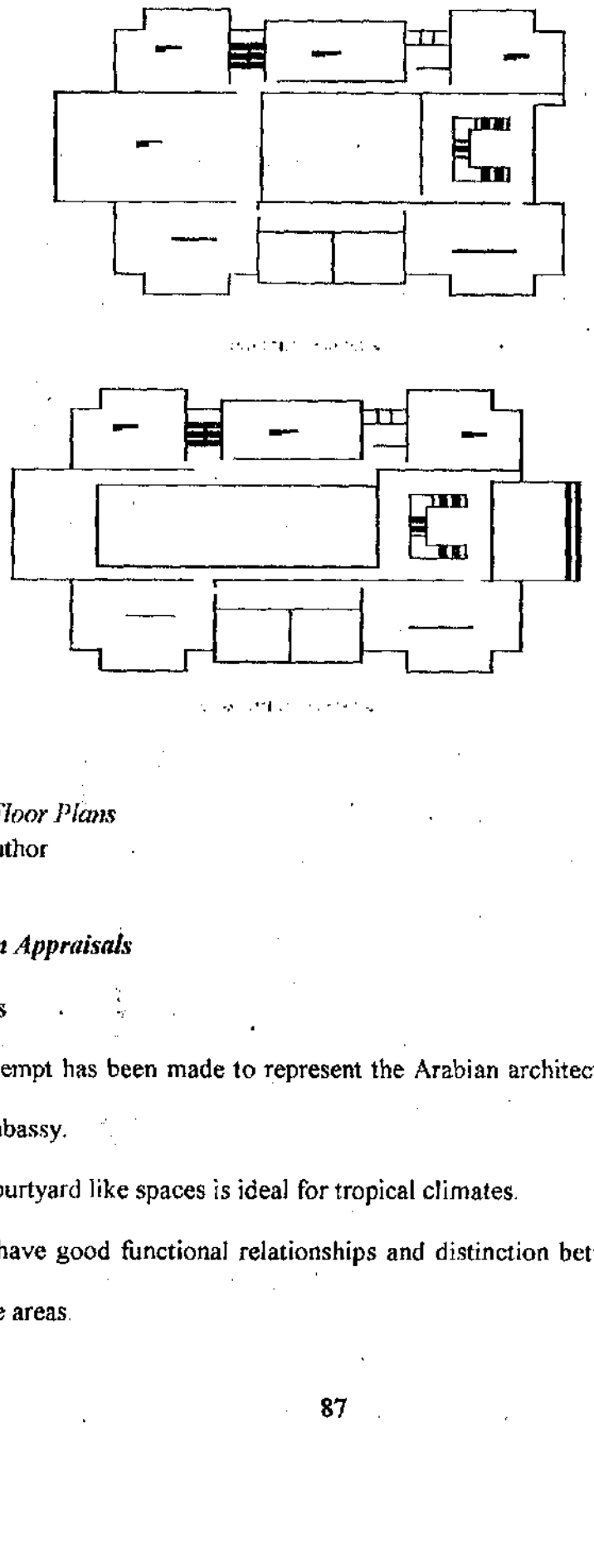


Fig 5.1 *Floor Plans*
Source: author

5.1.7 *Design Appraisals*

- **Merits**

- An attempt has been made to represent the Arabian architecture in the design of the embassy.
- The courtyard like spaces is ideal for tropical climates.
- They have good functional relationships and distinction between the public and private areas.

- The long narrow opening is ideal for hot region, to reduce heat and penetration of solar radiation.
- The use of limited storey is of great security advantage.

- **Demerits**

- Security is threatened due to many entrances.
- The flat roof used is not ideal for a place like Abuja with high annual rainfall.
- The main entrance of the building is not well celebrated.
- The symbolic concept used in expressing the Arabian culture of the Sudanese may not be accepted without blending it with modern architecture.

5.2 Case Study Two

Project - The Ghanaian high commission

Location- plot no. 301, central area, embassy zone. Garki.

5.2.1 ***History***: It was constructed in 1998, by Cappa Construction Company. It is a four storey building with mosaic finishing used in the exterior walls. The main entrance is centralized with a concrete slab of about 3m projecting out to rest on two columns. It serves an entrance and a car porch.

The façade directly above the entrance is completely glazed. A portion of the ground floor is used as parking area. The façade of the building consist of a series of columns which are canopy like structure. The shapes of these columns were derived from the Ashanti golden stool.

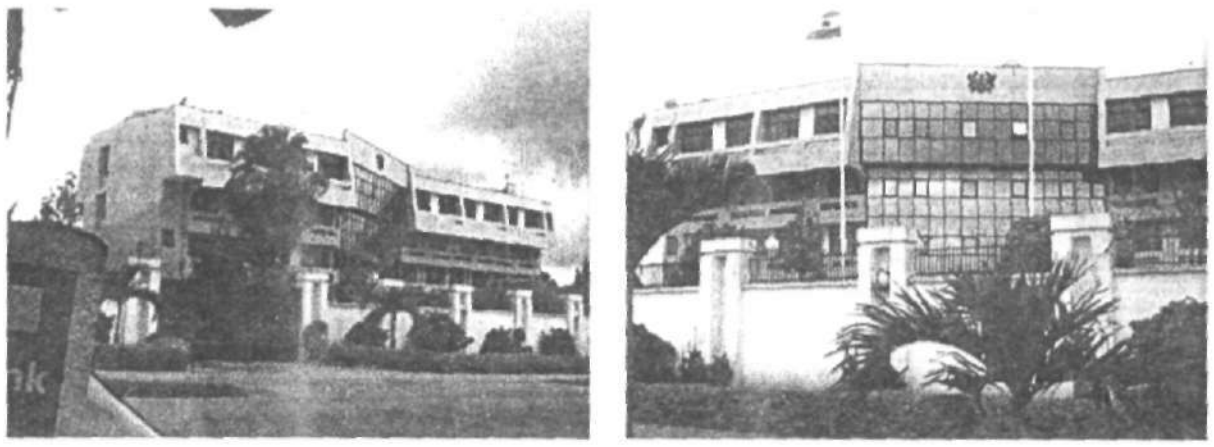


Plate XXXIII: *approach elevation of Ghanaian high commission*
Source: Author

5.2.2 *Gate House*

There is a security gate house with one entrance to the premises. This serves for both staff and visitors. The gate house is secured by a couple of private securities.



Plate XXXIV: *gate house of Ghanaian high commission*
Source: author

5.2.3 *Parking Area*

There is adequate parking space for staff s but Visitors Park outside for which provision was not made.

5.2.4 *Fence*

Average high walls are provided which goes round the building for security purposes



Plate XXXV: *fence of Ghanaian high commission*
Source: author

5.2.5 *Facilities*

The chancery building which includes:

- the ambassadors office
- the head of chancery
- a library
- three multipurpose halls
- Three consular rooms
- the defense, welfare, administrative and accounting attaches
- the guest accommodations unit
- A servant's quarter.

5.2.6 *Security Network*

Security guards and armed policemen are strategically located around the building. Alarm systems are installed and surveillance cameras are placed to capture strategic angles and views.

5.2.7 *Design Appraisals*

- **Merit**

- The façade is open and welcoming; embracing the goals of diplomacy.
- The surroundings are well landscaped.
- The symbolic concept of using the Ashanti golden stool will be easily accepted in culturally diverse nation.
- The number of storey is adequate for security reasons.

- **Demerits**

- Inclusion of guest accommodation is not advisable as it can prone the chancery to insecurity as not all guests can be trusted.
- The building can not be readily associated with any African country.

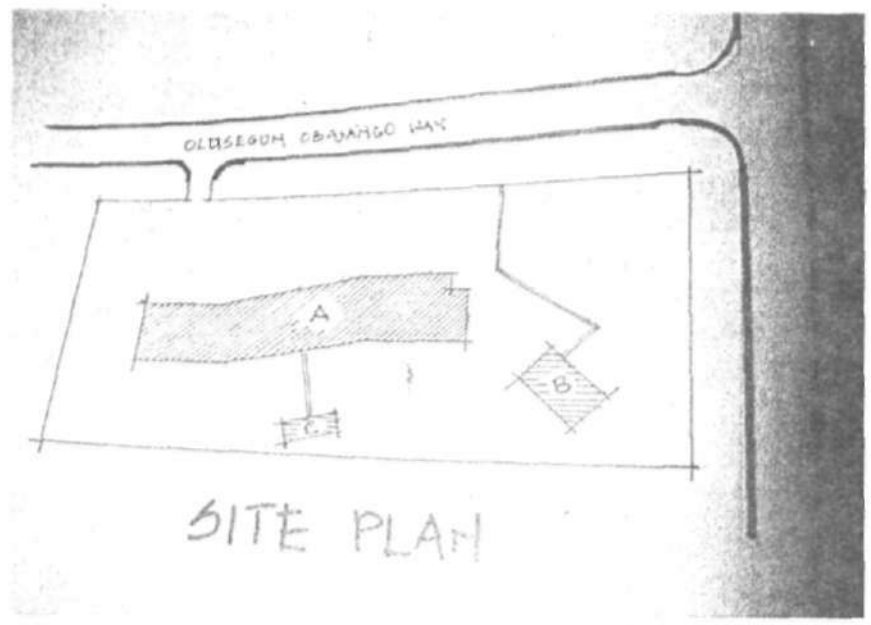


Fig. 5.2 Site plan of Ghanaian high commission
Source: author

5.3 Case Study Three

Project - The Indian high commission, Abuja

Location – 15, Rio Negro close, off Yedesran Street. Maitama

5.3.1 *History*

The building was initially constructed for residential purpose, but on the compulsory order by the federal government that all embassies should relocate to Abuja, the embassy rented the building in 2004 pending on when it would execute its own project. The building is composed of 5- bedroom apartment of two storey building. The main entrance is quite attractive but not centrally located. It is accessible from the side which has a canopy that is glazed resting on four columns; but says nothing about Indian architecture.

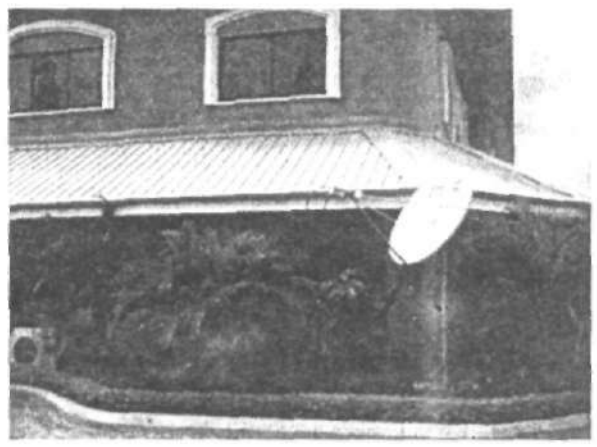


Plate XXXVI: *Indian high commission*
Source: Author

5.3.2 *Gate House*

There is a security gate house with one entrance to the premises. This serves for both staff and visitors. The gate house is secured by a couple of private securities.



Plate XXXVII: *gate house of Indian high commission*
Source: Author

5.3.3 *Parking Area*

There is adequate parking space for staff but Visitors Park outside for which provision is not made.



Plate XXXVIII: *parking area*
Source: Author

5.3.4 *Fence*

Average high walls are provided which gives adequate security against intruders.

5.3.5 *Facilities*

- Consular offices
- conference room
- library
- 10-15 offices
- 3 reception rooms
- toilets
- defense welfare
- administrative and accounting attaches

- ambassadors office
- head of chancery

5.3.6 *Security Network*

Security guards and armed, and policemen are strategically located around the building.

5.3.7 Design Appraisals

- **Merit**

- the surrounding is well landscaped
- the façade is open and welcoming, embracing the goals of diplomacy
- the number of storey is adequate for security reasons

- **Demerits**

- The architectural function does not relate to that of diplomatic building design.
- The seclusion of cultural attaché and the ambassadors residence from the premises increases insecurity of the mission, they will have divided security attention

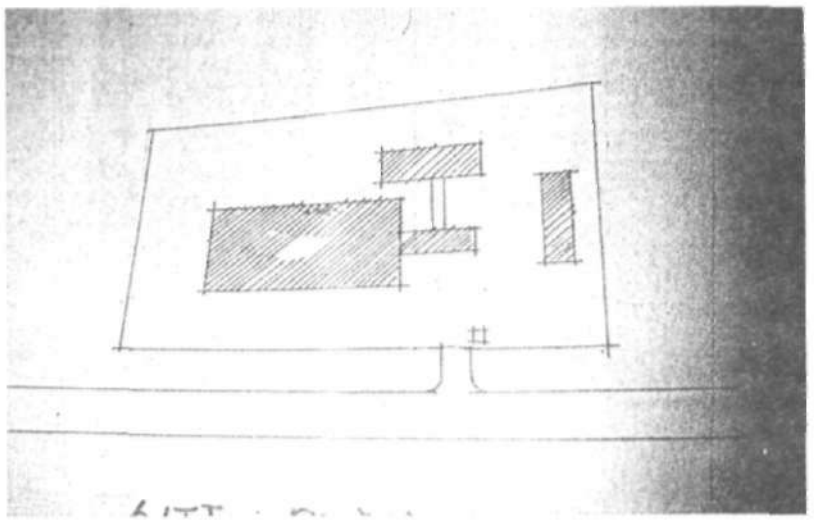


Fig. 5.3 *Site plan*
Source: Author

5.4 Case Study Four

Project- the Bangladesh embassy, Washington DC

Location – International drive NW, USA

5.4.1 *History*

The building was completed in the year 1986. It is a three storey building with a smooth high polish for exterior finishing. The windows are projected in to reduce the effect of glare which is also found in the traditional architecture of Bangladesh. The building material used is predominantly brick.



Plate XXXIX: *Bangladesh embassy, Washington DC*
Source: www.bangladeshembassy_washington_DC

5.4.2 *Gate House*

Typical of western countries no provision for walls are made. Adequate interior security provisions are however used.

5.4.3 *Parking Area*

Parking spaces are provided for about 43 cars.

5.4.4 *Fence*

No provision for fence was provided.

5.4.5 Facilities

- Ambassadors office
- Offices
- Boardroom
- Archives and gallery
- A library
- 50 seats auditorium
- a catering kitchen
- guest room facilities

5.4.6 Security Network

Adequate provision was made for high tech security. A security observation room is stationed on the last floor. Television systems were also installed to monitor the movement within the outside premises.

5.4.7 Design Appraisals

- **Merits**

- The façade has a characteristic openness that welcomes guests to the building.
- The interior is a colorful highly decorated vibrant space
- Brick being a popular building material in Bangladesh is used for the construction.

- **Demerits**

- The building cannot be easily associated to Bangladesh architecture.

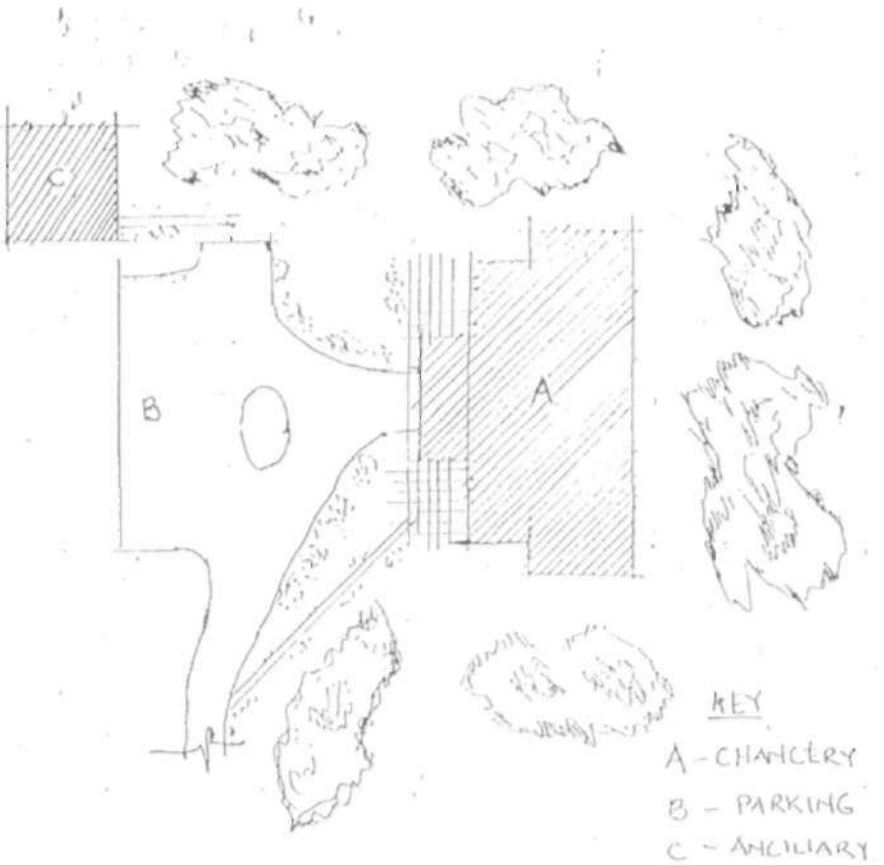


Fig. 5.4 site plan

5.5 Case Study Five

Project – The France embassy, Abuja

Location – no. 32, Udi

Street, off aso drive. Maitama

5.5.1 *History*

The embassy was commissioned in April 2000, near the IBB golf course. The building represents modern architectural trend in France with the use of aesthetic windows and columns to beautify the façade which is moderately glazed. The façade has a reinforced concrete canopy over the entrance and a low level perimeter fence around the entire embassy complex.



Plate XL: *front elevation of France embassy, Abuja*
Source: *Author*

5.5.2 *Gate House*

There is a security gate house with one entrance to the premises. This serves for both staff and visitors. The gate house is secured by a couple of private securities.

5.5.3 Parking Areas

Visitors park outside while staff park inside the premises.

5.5.4 *Fence*

Low level perimeter wall is provided around the embassy complex.

5.5.5 Facilities

- Ambassadors office
- Deputy ambassadors office
- Consular offices
- Library

- Conference room
- Exhibition hall
- *Cultural attaché office*
- Offices
- Conveniences

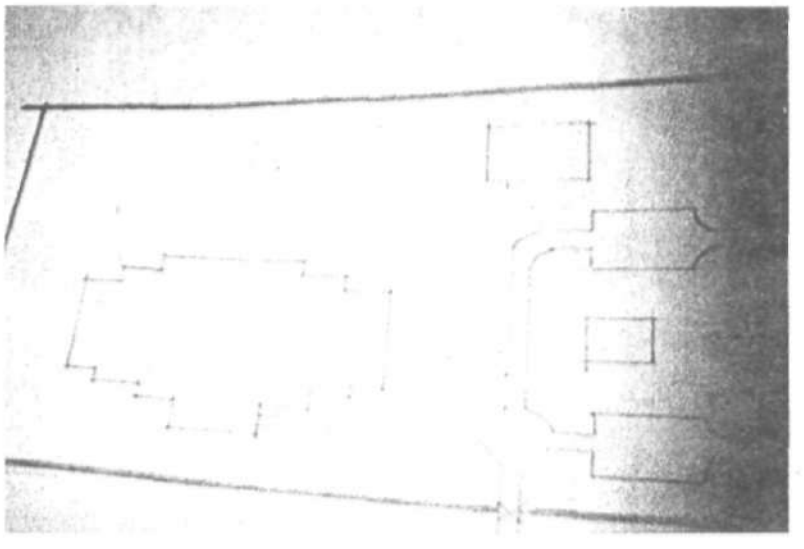


Fig. 5.5 *Site plan*
Source: author

5.5.6 *Design Appraisal*

- **Merit**

- good site layout with reinforced concrete floor
- external walls are quite heavy to enhance security
- good interior planning and function
- the façade exhibits openness which embraces the goals of diplomacy

- **Demerits**

5.6 Case Study Six

Project: High Court of Justice

Location: Dhaka, Bangladesh

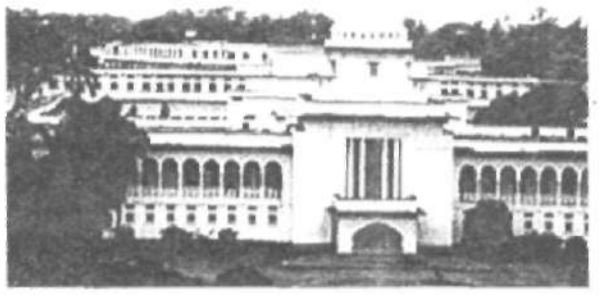


Plate XLI: *high court of justice, Dhaka;*
Source: tourists attraction of Bangladesh

5.6.1 *History*

This is a court house that represents the high court of justice. It was build around 1971. It used the traditional architectural element: arches, massiveness and dome to give it a sense of locality.

5.6.2 *Security:*

Security guards and armed forces are strategically located. It also has a fence that controls the circulation.

5.6.3 *Design appraisal*

- **Merits**

- The white colour gives it a look of serenity which goes in line with its function as a court.
- The interior is well planned.
- Used the courtyard, domes and arches which gives it a look of traditional architecture.

- **Demerits**

- Not well landscaped.

Fig. 5.6…Site plan

.7 Case Study Seven

Project: Ahsan Manzil Museum

Location: Dhaka, Bangladesh

5.7.1 *History*:

This was a palace for the Nawab (chief) of Dhaka. It was constructed in the year 1872. This is one of the significant traditional buildings of the country. It is raised on a flat form of one meter. It is a two storey palace that measures 125.4m X 28.75m.

Since Nawabs are in no more existence it has been turned into a museum. It is constructed of brick and wood.



Plate XLII: *Ahsan Manzil museum, a beautiful display of Bangladeshi traditional architecture.*
Source: author

The exterior is beautifully landscaped using hard and soft landscape. The design of the building is linear in shape.

5.7.2 *Design Appraisal*

- **Merit**

- good site layout and well landscaped.
- the façade exhibits an openness
- reflected the architecture of Bangladesh
- Used brick for the building which is a popular building material in Bangladesh.
- The exterior walls are colourful making it look appealing.

- **Demerits**

- Not security conscious except for some guards found in the entrance.

Floor plans

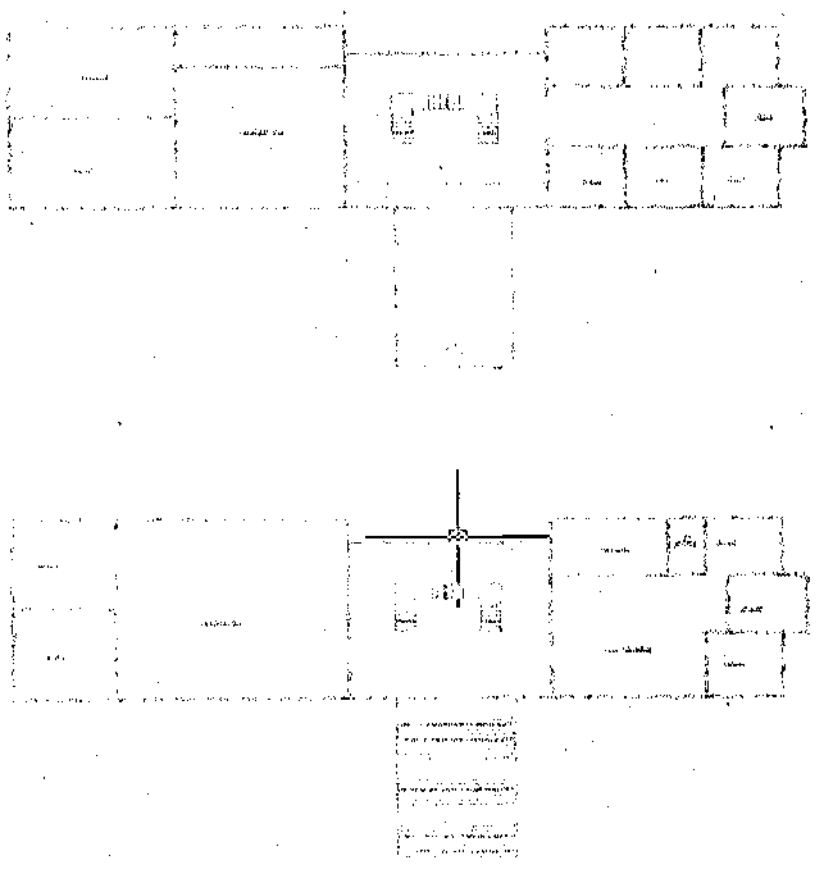


Fig. 5.7 floor *plans*
Source: Author

5.7 Summary of Findings

Obviously, from the case studies undertaken, it's seen that most of the embassy building are inclined to modern design and are lacking in symbolic expression of their traditional architecture.

It is therefore very important, that embassy/high commission exhibit a symbolic architectural expression of the country it is representing be it traditional or modern by either use of elements or materials.

In addition, a good diplomatic building must be architecturally sound with impressive and attractive outlook to enhance image projection incorporating security in it. It must also go in accordance with the functional and physical requirements needed for an international standard without social conflict.

Therefore, an embassy/high commission is a very good model for studying elements, forms, diplomacy and culture thereby providing more options to exploit architecture in so many ways.

CHAPTER SIX

SITE AND IT'S ENVIRON

6.1 Federal Capital Territory, F.C.T

6.1.1 Historical Development

- The initiative came about when Lagos the erstwhile capital could not continue to play the roles of federal capital, state capital and commercial nerve center.

- Being a coastal city with land shortages, there were limitations for expansion which led to over population and congestion resulting into severe planning difficulties inconsistent with a capital.

- The panel set up to advice Government in august 1975 (Aguda Panel) recommended relocating the capital to a federal territory of about 8000 Km Sq in the center of the country where criteria of good climate, land availability, physical planning convenience and multi access possibilities would also be satisfied.

6.1.2 Location

Abuja the new federal capital city was ultimately conceived out of the FCT. With an area of about 250 Km Sq. the city represents a defining feature in our collective quest for national development and also serves as a symbol of our national unity.

The capital is located in geographical centre of the nation. It lies between latitude of 25N to 9 25'N and longitude 6 45'E to 7 39'E. It occupies an area of 8000 square kilometers representing about 0.08% Nigeria land mass.

6.1.3 Abuja master plan

- The Abuja Master Plan was produced by IPA, to guide development of the recommended organizational structure for the city.

- The recommendations were based on given parameters such as the city's dominant Administrative characteristics; the need for form and expression to be culturally relevant, and the choice of site.

- The city was planned in six phases, each with its design proposals, functions and projected population. The second phase is now being developed; while the first phase is divided into seven districts which are:

  i. Central area

  ii. Garki I district

  iii. Garki II district

  iv. Wuse I district

  v. Wuse II district

  vi. Asokoro district

  vii. Maitama district

The symbolic and physical focus of the city and the nation; the core or heart of the city which gives Abuja it's most distinctive character as a world capital.

It comprises the 3-Arm Zone (National Assembly, Presidential Complex and Supreme Court) Ministries Zone, Cultural Zone and CBD Zone, with complimentary provisions

for open spaces and landscaping. The other six districts are mainly for residential housing and supporting facilities for public and private ownership.

- The general framework established entailed relationships between prescriptive elements like Land Use, Transportation, Infrastructure, Housing & Economic Services – and the broad guidelines set for their organized and orderly development over a long period of time.

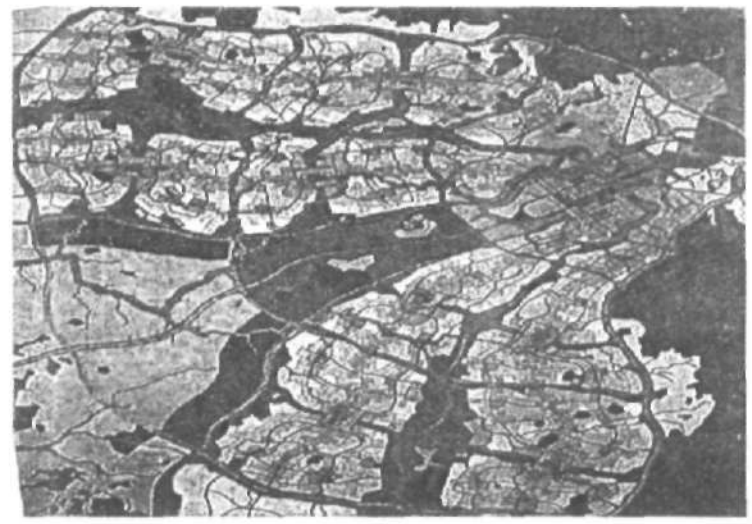


Fig. 6.1 *phases of Abuja*

Source: development of Abuja, 2003-07

6.1.4 Population

Assumed staged population growth reaching an ultimate figure of about 3 million based on which all services, provisions and incremental developments relating to infrastructure were accordingly planned as projected. Further growth was to be accommodated in satellite towns.

- Phase 1 ---------- 230,000
- Phase 2..... 585,000

- Phase 3..... 640,000
- Phase 4..... 1,700,000

Ultimate Population ---------- 3,155,000

Also assumed the following population data

- Sectors ---------- 100,000 – 250,000 (12,000 – 35,000 households)
- Districts ---------- 40,000 – 60,000 (6,000 – 10,000 households)
- Neighborhoods ---------- 5,000 - 15000 (500 - 2000 households)

Current realities and the need for re-evaluation and re-assessment

1. Phase 1 alone has population of about 7 million which makes initial projection unrealistic.
2. Original time tables have been over shot.
3. Negative fallout from above represent serious challenges to urbanization.

6.2 ABUJA LAND USE AND DEVELOPMENT GUIDES

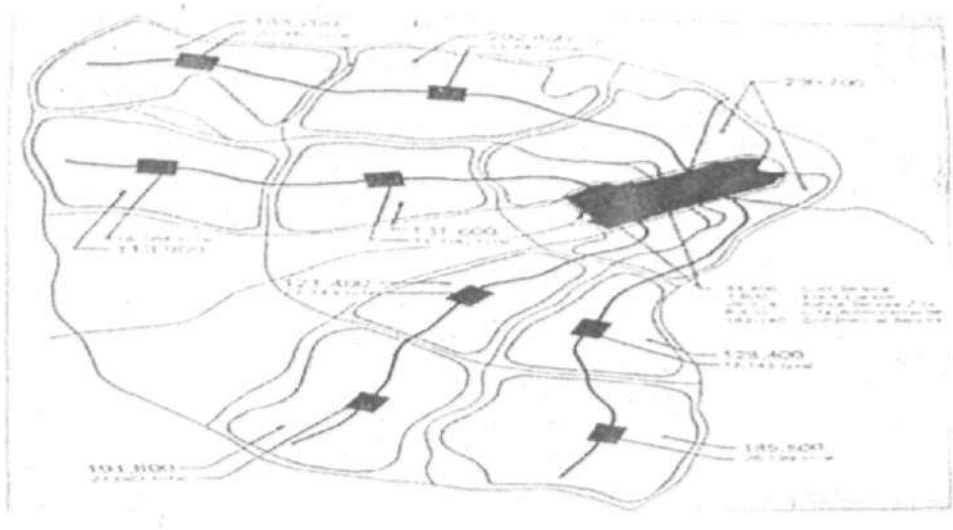


Fig. 6.2 land use map

•	Govt. Activity	500ha
•	Service	891ha
•	Residential Land	12,486ha
•	Light industry	920ha
•	Transport Infrastructure	1,840ha
•	Commercial	561ha
•	Open and Recreational Land	8,300ha
	Total area	25,498ha (250Km^2)

1. Phase 1 alone has population of about 7 million which makes initial projection unrealistic.
2. Original time tables have been over shot.
3. Negative fallout from above represent serious challenges to urbanization.

6.3 TOWN PLANNING REGULATION IN ABUJA

1. There should be harmony of buildings with the site and surrounding environment.
2. The site should be accessible in terms of:
   a) Traffic
   b) Parking
   c) Pedestrian movement

3. Proper and effective landscaping is appreciated.

4. The design project should take into account, the existing buildings in the area with respect to linkage with the following network.

    a) Water in collaboration with the water supply grid.

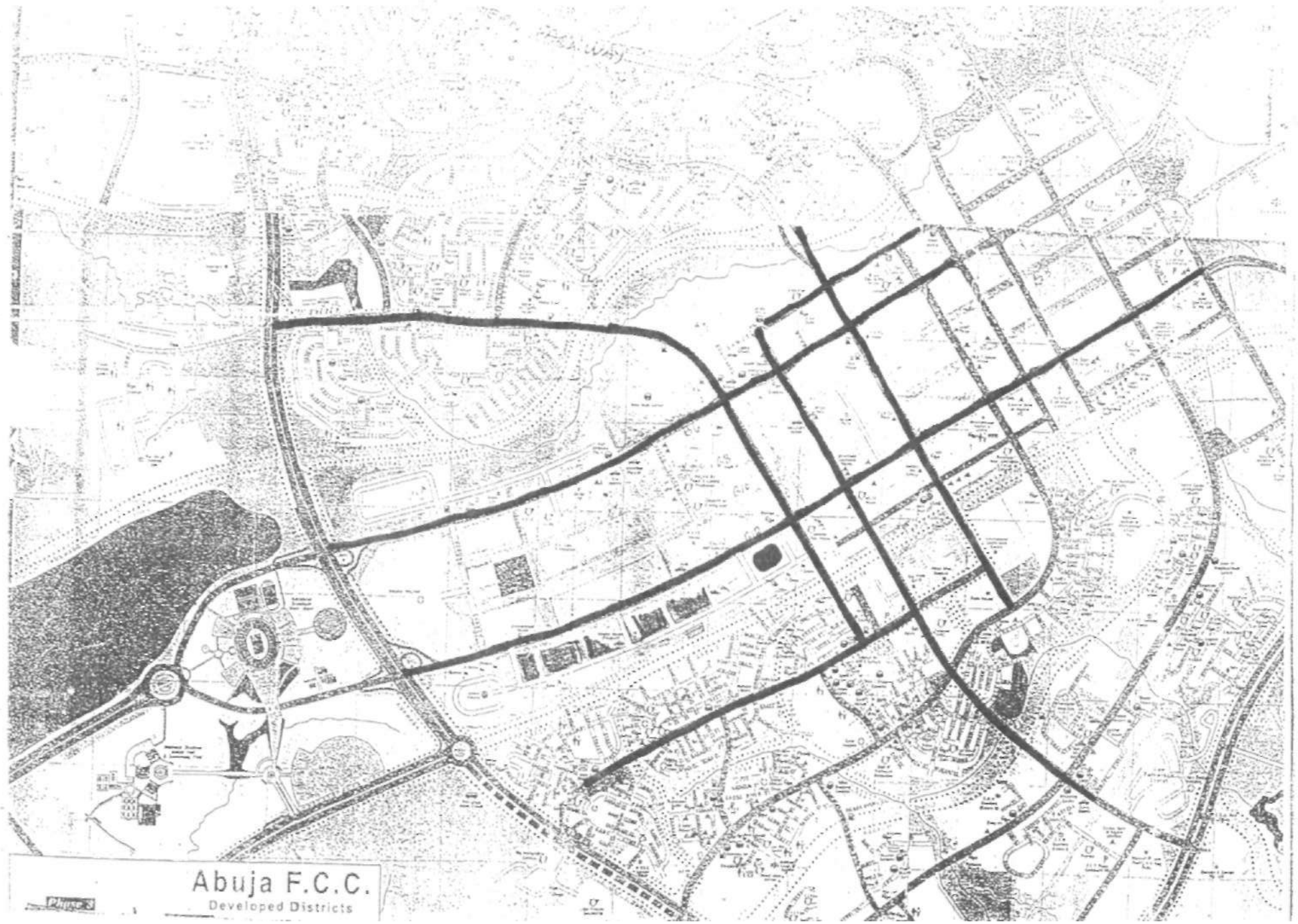
    b) Electricity in consultation with NEPA supply grid.

    c) Drainage of rain water and waste water complying with lain down guidelines and Procedures.

5. Fire security for the area involved.

6. Proper zoning and good building orientation.

The federal capital development authority must approve of all the parameters prior to the design and construction of any project.


Abuja F.C.C.
Developed Districts
Phase 3

6.4 SITE LOCATION

Based on the first master plan produced for the federal capital territory, the high commissions and embassies were allocated in Asokoro district opposite to the ministries zone in the central area and also in garki I District.

Based on this, a site was selected out of three sites for high commission of Bangladesh, in area 10, Garki opposite ministry of defense due the following reasons:

i. The site is accessible, since the area is developed and is connected to the trunk "A" road.

ii. The site is in the central area of phase I having the advantage of high security consideration in the area.

iii. The site is in the central area within the civic and public facilities of the city.

iv. The site is large enough to accommodate the proposed project of the high commission, ambassador's residence and ancillary facilities.

v. The site is also accessible and close to emergency support responses from the police and fire stations.

vi. Essential services such as electricity, water supply, telecommunications e.t.c. can be tapped from the mains that serve the whole district.

vii. The site has the advantage of being opposite an Asian embassy that is the embassy of china.

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6.5 CLIMATIC DATA

A comfortable living environment will depend on maximizing the aspect of the environment which will reduce the heat and effect of the humidity and protect it from excess sunlight, strong wind and dust.

Climatic factors include:

i. Temperature

Abuja records its highest temperature during the dry season. As much as 17C have been recorded between the highest and lowest temperature in a single day. During the rainy season the minimum temperature is low due to the dense cloud cover.

Orientation of all buildings should be within the longer axis facing north south direction. Water bodies and planting should be closely related to the buildings so as to help reduce the high temperature during the hot season. All glass used in building should be double glazed and tinted.

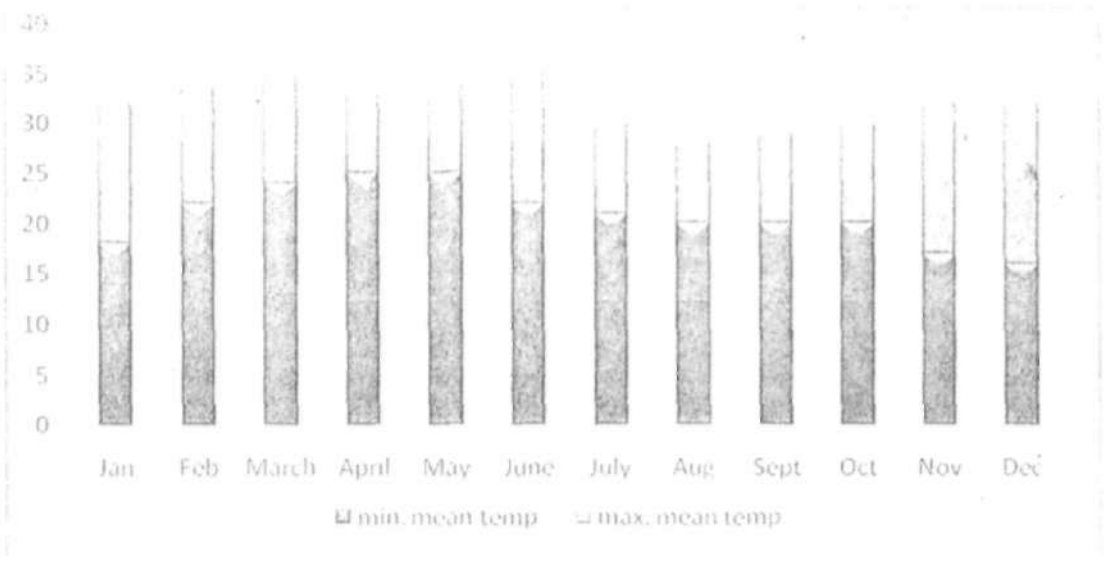


Fig. 6.4 temperature

ii. Humidity

In the federal capital territory, the relative humidity during the dry season between December and January fall in the afternoon to as low as 23%. This low relative humidity coupled with high temperature accounts for the desiccating effects. In the rainy season between June and august, the relative humidity is much higher, especially in the morning hours when it can reach as high as 90%, this high humidity with low temperature can create a heat trap.

Effective sun-shading devices, water bodies and trees are required to reduce the effect of high temperature/low humidity situation. The comfort zone conditions for human beings are 29c-32c for temperature and 30% - 70% for relative humidity, the charts indicate that conditions in the federal capital territory are hardly within the comfort zone.

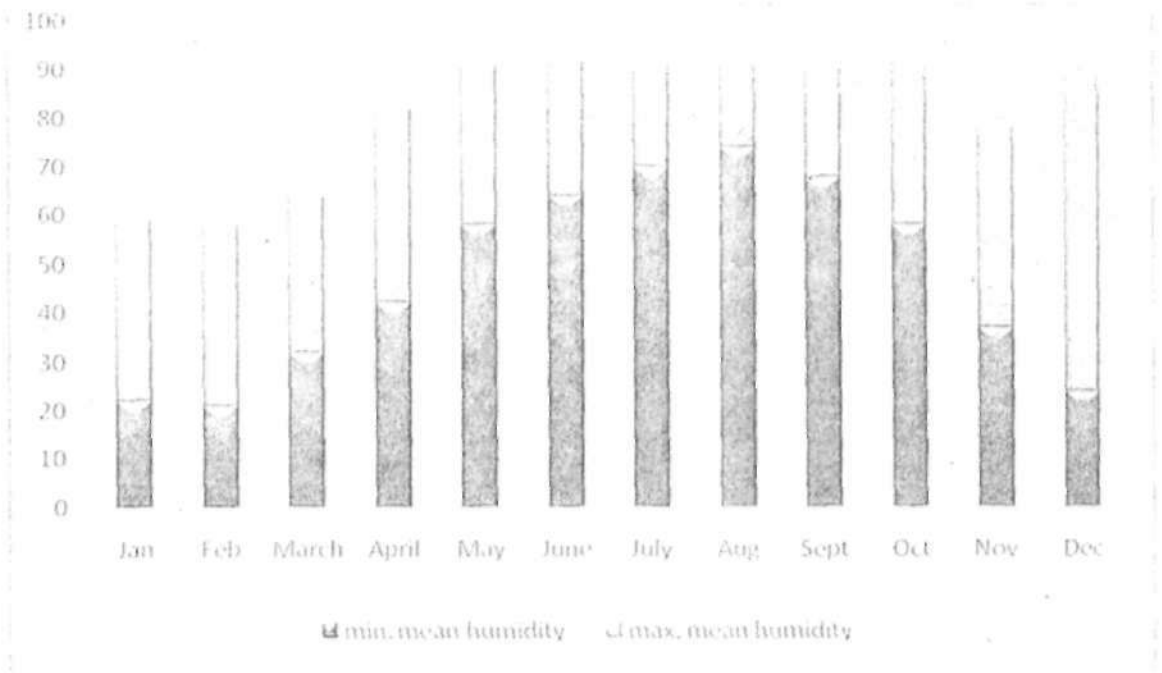


Fig 6.5 humidity
Source: *Source: development of Abuja, 2003-07*

iii. Rainfall

The rainy season usually starts in the federal capital territory around the second week of April and tapers off after every third week of October each year. Thus the duration of the rainy season is between 180 to 190 days. The mean monthly distribution shows a tendency for concentration of rain in three months, July, august and September with about 60% of the annual rainfall.

The concentration of rainfall shows the need for adequate pitched roof in the building with good drainage system that can handle large volumes of water quickly.

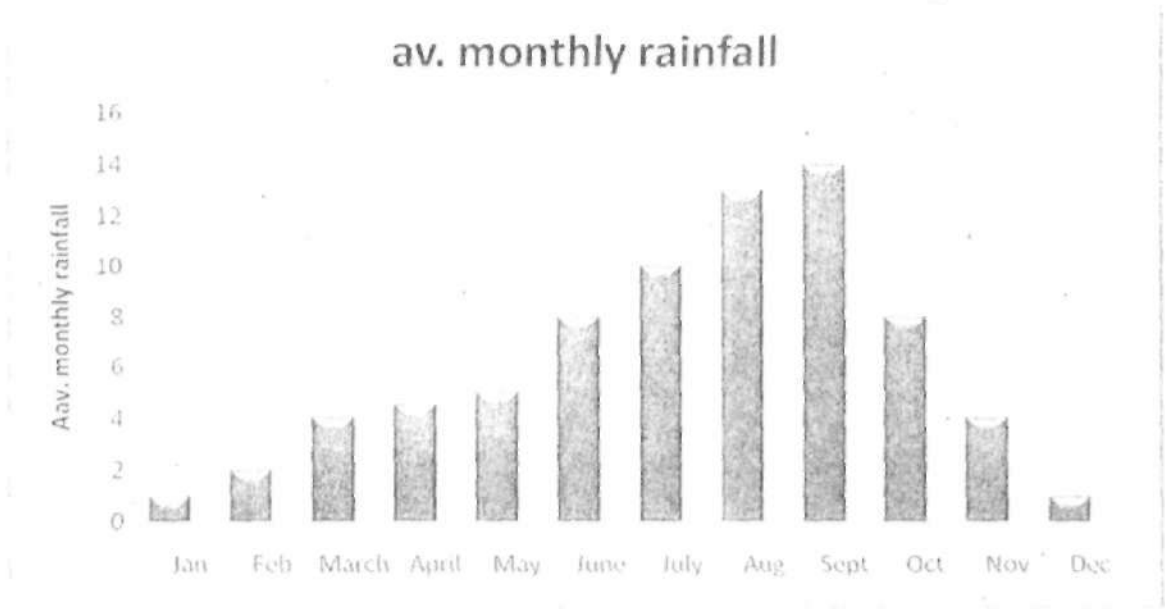


Fig. 6.6 monthly rainfall

iv. Sunshine

In Nigeria, there is a general increase in the total hours of sunshine further north from the Atlantic coast. The amount of sunshine hours range from the minimum of 1300hours in

the Niger delta is over 3200hours in the extreme north-east of the country. Abuja is however exposed to about 2500hours annually.

The greatest period of sunshine falls within the dry season months that corresponds with less cloud cover, while the lowest value of sunshine hours corresponds with cloud cover in the rainy season.

Adequate sun shading devices in buildings and trees on site can be provided to reduce the effect of heat and glare.

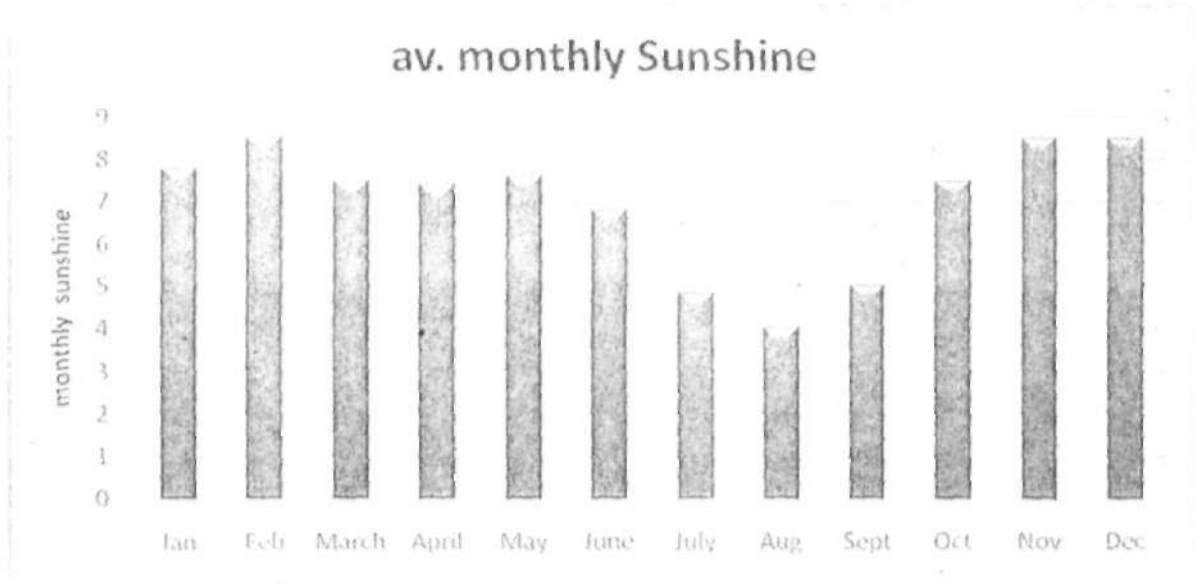


Fig 6.7 monthly sunshine

v. Wind

- The climate of Abuja is dominated by two major air masses, highly seasonal characteristics of weather conditions in the country. The intensity and duration of each type over a particular place vary due to the interface of the two air masses.
- The tropical maritime mass; is formed over the Atlantic ocean to the south of the country and is therefore warm and moist. It moves in land generally in a south west to north –east direction. It creates the wet season in the country.

- Tropical continental air mass; it is associated with the northeast trade wind. It is developed over the Sahara desert and therefore is warm and dry and blows in opposite direction. It is associated with dry season in the country.

  Building orientation should be such that it takes advantage of the maritime wind while harmattan wind should be screened off by the use of barrier walls and trees.

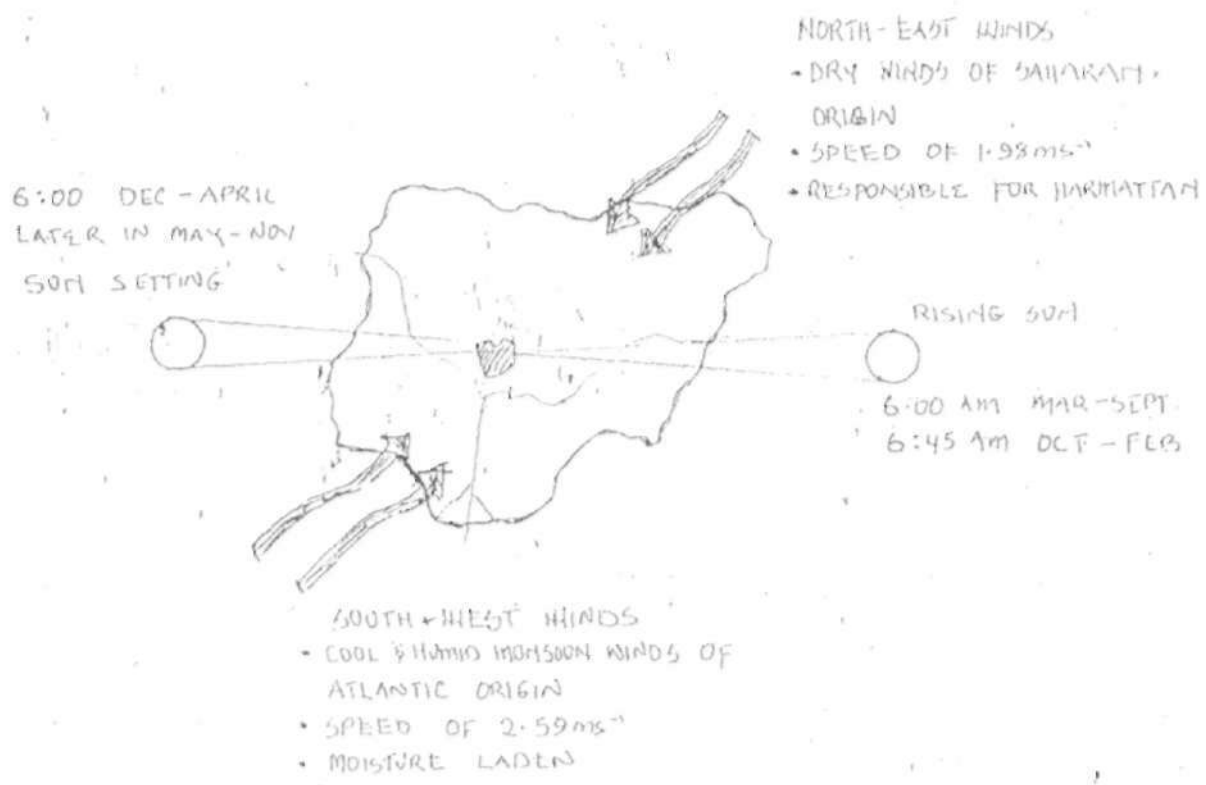


Fig. 6.8 (Wind diagram)

6.6 GEOLOGICAL DATA

Abuja geological structure is somewhat magnetic mixed with sneaky rocks, granite in part with dark softer bards and is much varied. Over most of the area the surface has decomposed to laurite. Some geological data includes:

i. Soil

The soil underlying the capital city site is generally suitable for most urban land uses; they are typically deep and well drained, having only local constraints for foundations, streets and underground utilities where they are high in stones, or when iron pan outcrops as sheet or scraps. Soil constraints because of depth are limited to inselbergs, hilltops and escarpments in vicinity of the city, in the plains to the west of the city, they occupy large area of land for which no urban development is planned.

ii. Vegetation

Generally, the vegetation of the capital city is characterized by park, savanna, which is typically a discontents canopy, shrub, and grass layer. Riverine depression is typified by fringes of thicket and high trees.

Shrub savanna vegetation occurs on flatter plain and undulating terrain. Savanna woodland occurs in isolated area on steeper slopes.

iii. Topography

Topographically, the area of the federal capital territory is typified by gently undulating terrain interlaced by riverine depressions.

The Gwagwa plain rises from an elevation of 305m in the west to 610m in the east within the area of the city. The upper Gwagwa plains are dotted by numerous large outcrops or

surface bedrock around which it is necessary to arrange development, and where necessary they have been incorporated into park areas. Aso hill and Abuja hill are used as local points.

iv. Rock

The major rock units underlying the federal capital city site are described in three categories;

a. Metamorphic rock: including biolitemuscovite schist in the eastern edge, migmatite in the majority of the city site.

b. Igneous rocks: including biotite granite (course, medium and fine grains) and rhyolite located throughout the city.

c. Sedimentary rock: including alluvium located in stream-bed throughout the territory consisting of largely sand with rare gravel beds and local deposits of clay.

The network stream valleys covering the capital city when looked at vertically is in rough fan shape draining the crescent of development areas. The site of the new capital city can be divided into small continuous water sheds all converging at one point.

Flood plains are located along all intermittent and permanent streams flash flood are also common in gullies adjacent to temporary and permanent stream particularly at the base of outcrops and inselbergs.

6.7 SITE ANALYSIS

The site is accessible from the Olusegun Obasanjo way. The site is a pentagonal in shape; the longest sides are 140m X 150m and are characterized with a gentle terrain, very spare trees, shrubs, and grasses with the absence of wind breakers, i.e. there is free movement of air. The site slopes very slightly towards the south which is relatively flat. The site is surrounded by one main road.

The site is not presently fenced with any specific entrance. The site has a good view from the trunk "A" road.

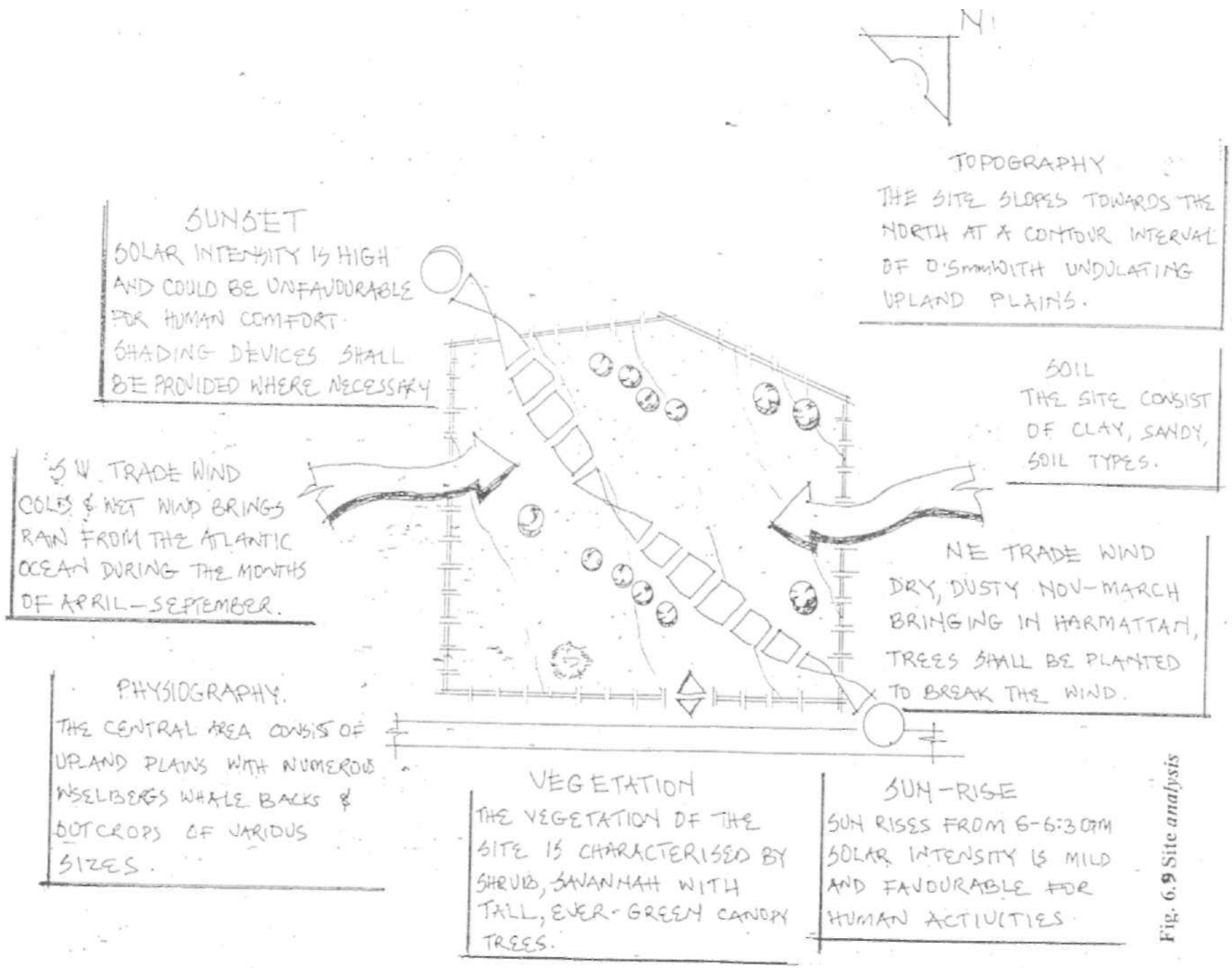


Fig. 6.9 Site *analysis*

6.8 SITE CONCEPT

Site concept is based on the following:

i. Accessibility: vehicular and pedestrian access to the site is very important and it happens that the site has only one access from the embassy road, which is quite convenient for the pedestrians and vehicular access.

ii. Zoning: the site is zoned according to public zoning and residential zoning. This is done so that the design would be organized and for security reasons.

iii. The chancery building is set away from the entrance for basically two reasons,

1. The traditional architecture of Bangladesh appreciates vista which the design tried to accentuate.
2. For security reasons.

iv. Circulation and parking: only staffs vehicles are allowed to park inside except for cases where V.I.P are around or there is something taking place at the banquet hall and visitors park outside the premises.

6.9 Some Peculiar Elements of Bangladeshi Traditional Elements Used On The Design

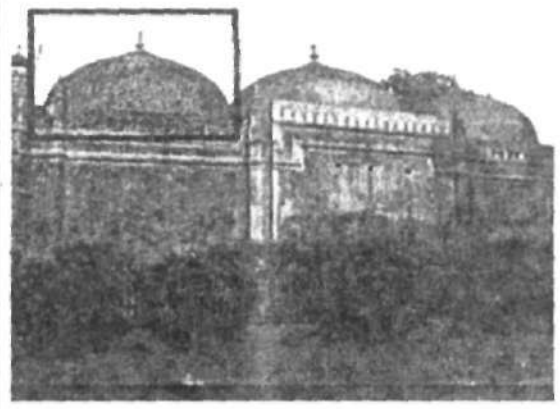
i. Domes



Ahsan Manzil Museum
Name of Dome: chepta dome

Source:www.bangladesh.com/blog/ahsan-manzil

According to "the Bangladesh travel guide "Ahsan Manzil is considered to be one of the most noteworthy architectural monuments in Bangladesh. This magnificent building is situated on the banks of the Buriganga River in Dhaka the capital city of Bangladesh. Ahsan Manzil was previously the official palace of the Dhaka Nawab family and is currently a museum preserving the culture and history of the area. The dome is strategically positioned in the building such that it also enhance ventilation and lighting and therefore this type of dome was used on the courtyard of the embassy.



Name: Kalwari palace
Location: Burishal, South bangladesh
Name of Dome: gul dome

Plate XLIV
Source: tourist attraction of Bangladesh

This type of dome is common to both Bangladeshi and Nigerian architecture and therefore, used on the Bangladeshi embassy design to encourage cultural similarities between the host and visiting state as diplomatic architecture.

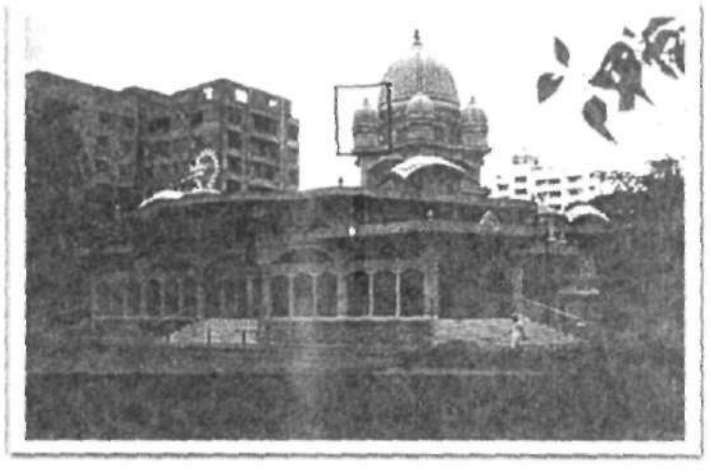
Name: Conference centre
Location: Dhaka
Name of dome: ulta pala



Plate XLV
Source: case study

This is another type of dome that is peculiar to Bangladeshi traditional architecture and therefore used on the entrance of the embassy.

ii. Turrets

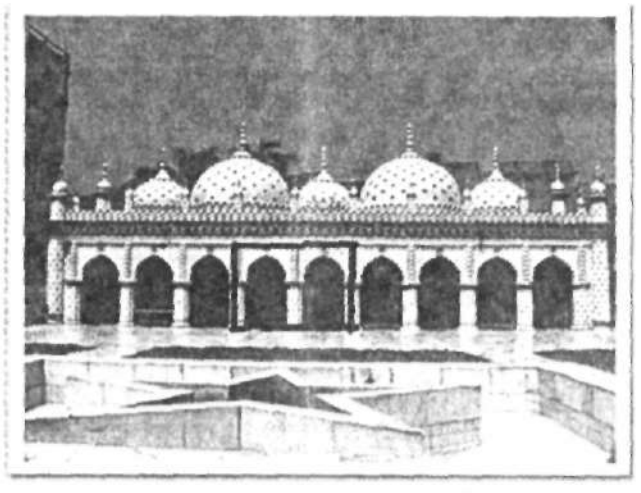


Name: Conference centre
Name of turret: kilisan

Plate XLVI
Source: Author

This type of turret is used on the embassy design.

iii. Arches

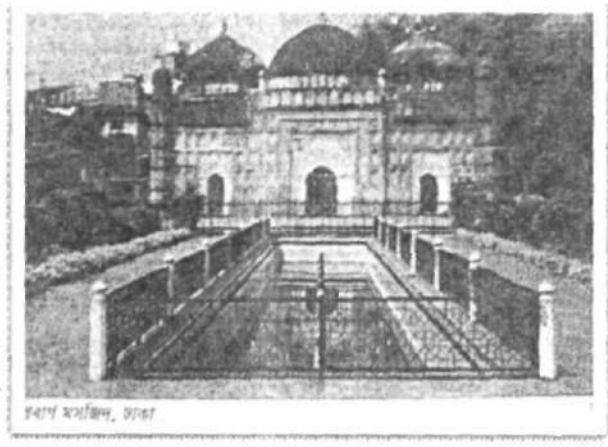


Name: star mosque
Name of arch: gul arch

Plate L
Source: tourists attraction of Bangladesh

These types of arches are common to both Bangladeshi and Nigerian architecture, also diplomatic architecture being exhibition of cultural similarities between the host and and visiting nation; therefore, this element was used on the Bangladeshi high commission design.

iv. Water Body



Name: Lalbagh Fort
Location:

Plate XLVIII
Source: Author

CHAPTER SEVEN

DEVELOPMENT OF DESIGN BRIEF

7.1 Introduction

This chapter mainly deals with the architectural aspect of the thesis. From the reviews taken, it can be seen that an embassy complex is a complex that represents her people in a foreign country for the welfare and development of her people and at the same time contributing positively to the host country in every sense of the word.

To achieve this goal, they usually go about doing this through negotiations without rancor or violence, in other words making compromise on certain issues where necessary; after all their main aim is to make peace around the world.

To achieve the aim of diplomacy, the complex has to reflect openness and her culture/architecture to enhance diplomacy and a sense of unity, honesty and confidence to the host country.

7.2 Design Brief

This project is divided into three parts; the embassy building, the ambassador's residence, a guest house and a servants quarter.

7.3 Schedule of Accommodation

7.3.1 *Embassy Building (Ground Floor)*

Function	**Unit**	**Area** **m^2**
Reception	1	65
Consular offices	4	92
Banquet hall		
Exhibition hall	1	715.36
Waiting room	1	28.35
V.I.P lounge	1	24
Administration attaché	1	31.49
Military attaché	1	54.48
Cultural attaché	1	44.84
Conference room	1	32.76
Toilets	1	55.86
	10	28.8

7.3.2 *First floor plan*

Function	**Unit**	**Area** **m²**
Reception	2	28.8
Consular offices	5	66.02
Commercial attaché	1	40
library	1	28.35
Waiting room	1	24
scholarship	1	14.32
agricultural attaché	1	54.48
Secretaries	4	30
Personnel attaché	1	58.54
Accountant/financial attaché	1	33.44
Conference room	2	55.86
Toilets	10	28.8

7.3.3 *Second floor plan*

Function	**Unit**	**Area** **m²**
Reception	2	65
Political attaché	1	92
Cafeteria	1	20
Tea room	1	16
Ambassadors attaché	1	80
Secretaries	3	14.57
Clerks	1	12
Conference room	2	134.4
Economic attaché	1	40
toilets	8	28.8

7.3.4 *Third floor plan*

Function	**Unit**	**Area** **m^2**
Reception	1	25
Conference room	1	40
Deputy ambassador	1	20
Secretaries	4	25
Conference room	1	80.4
Economic attaché	1	45
Communication room	1	20
toilets	6	20.21

Total fool area: 2973.95m^2

4 **Ambassador's residence**

7.4.1 *Ground floor plan*

Function	**Unit**	**Area** **m²**
Living room	3	125.61
Dining room	1	72.09
Kitchen	1	50.8
Store	1	14.0
foyer	1	21.45
Gym room	1	21.73
Toilets	3	11.88
Ball room	1	82.36
laundry	1	32.4

7.4.2 *First floor plan*

Function	**Unit**	**Area** **m^2**
Living room	1	21.15
Store	1	81.7
Bedroom	4	185.48
Toilet	4	20.16
study	1	22.68

Total floor area: 763.43m^2

7.5 Guest House

7.5.1 *Ground floor plan*

Function	Unit	Area m^2
bedroom	4	99.76
Store	1	5.04
Dining room	1	19.74
Kitchen	1	10.64
Toilet	4	21.28
foyer	1	33.64

Total floor area: 190.1m^2

7.6 Concept Development

Concept is defined by Encarta 2006 as a way of doing or perceiving something. It could also be the integration of elements together; which could be motives, ideas, thoughts and even observations.

The chief importance to have an embassy is to have harmony and unity in the country. Therefore to do this one has to be very careful in conceiving a concept.

From my research I came to know that, Bangladesh being a tropical country uses the courtyard system all over the country which is also quite common in Nigeria. I therefore, decided to adopt the courtyard system in the proposed design as my concept.

Secondly most of the building forms found in Bangladesh in regards to both traditional and modern architecture is linear in form, which I also tried to adopt for the proposed complex.

The elements used in the elevation are symbolic to the traditional architecture of Bangladesh especially those used on the public buildings.

7.7 The Design Report

The design evolved is as follows:

- The site concept has been derived from the zoning of the site.
- The site is well landscaped using both soft and hard element to enhance serenity and give a fill of welcomes' to the chancery.

- Water bodies plays a great role in Bangladeshi architecture, I therefore tried to effect it into the design by creating a pond, pools and a fountain.
- The walkways are paved with concrete tiles and well landscaped with colourful flowers and shrubs.
- In regard to Bangladeshi architecture, the chancery has been recessed into the site to give it a vista plus security reasons.
- There is a car parking provided for the staffs, while visitors park outside for which provision has been made.
- The chancery has been zoned into three parts; the general work area, the controlled access area, and the restricted area.

  The general area includes the first and second floor, while the restricted area is on the second floor and the controlled are is on the third floor.
- On coming into the chancery it is welcomed with a grand entrance giving u sense of welcome and "feel at home" kind of feeling.
- There is a metal detector as a security check at the entrance which moves into the reception area and a waiting which is connected to the c consular offices.
- There is also an exhibition hall which is accessible to everyone i.e. both staffs and visitors.
- There is also a separate entrance for the staffs and V.I.P which is complimented with a drop off. It leads to a V.I.P lounge and a reception which also has a security check point.

7.8 Form and Space

Basically the form adopted for the proposed design is linear in shape with a few curves to give it an enhancing look.

The elevation of the high commission exhibits difference in height levels and at the same time keeping balance in the elevation. The windows are recessed, and punctuated with minarets as in the traditional architecture of Bangladesh. It also exhibits some elements such as the screen walls and a couple of domes. It goes up to four floors to give the chancery a sense of imposingness and power.

7.9 Construction Material

The chancery is designed to resist shock and bomb blast attack. The structural members are specially reinforced for this purpose by the structural engineer. All the glazing used in the chancery and accommodation units is bullet proof. It goes ahead to symbolize the use of brick on the elevation to reflect it as a building material. Also the columns are finished with soft wood symbolizing bamboo. The building material used for the roofing of the accommodation unit used thatched tile to symbolize thatch roof of the homestead of Bangladesh in addition to high pitch roof which also compliment Abuja climate.

Marble tiles are proposed for the floor finishing of the chancery building. Also good acoustic and sound proof materials are used as panels on the walls of the conference rooms and banquet hall.

7.10 Services

Electricity will be supplied from the power holding company (PHC) from within that area. There will also be two stands by generator plant of 500kvA power in case of power failure which has a silencer to avoid noise pollution. Water will be supplied by the water board of Garki twenty four hours per day. In case of water shortage there is also stand by tanks to take care of such problems. There are also facilities for telecommunication and internet connections.

The gates are well improvised with security guards and camera gadgets to monitor movements give wider and more accurate views of the external surroundings. The interior is also camera equipped at critical areas for security reasons.

7.11 Conclusion

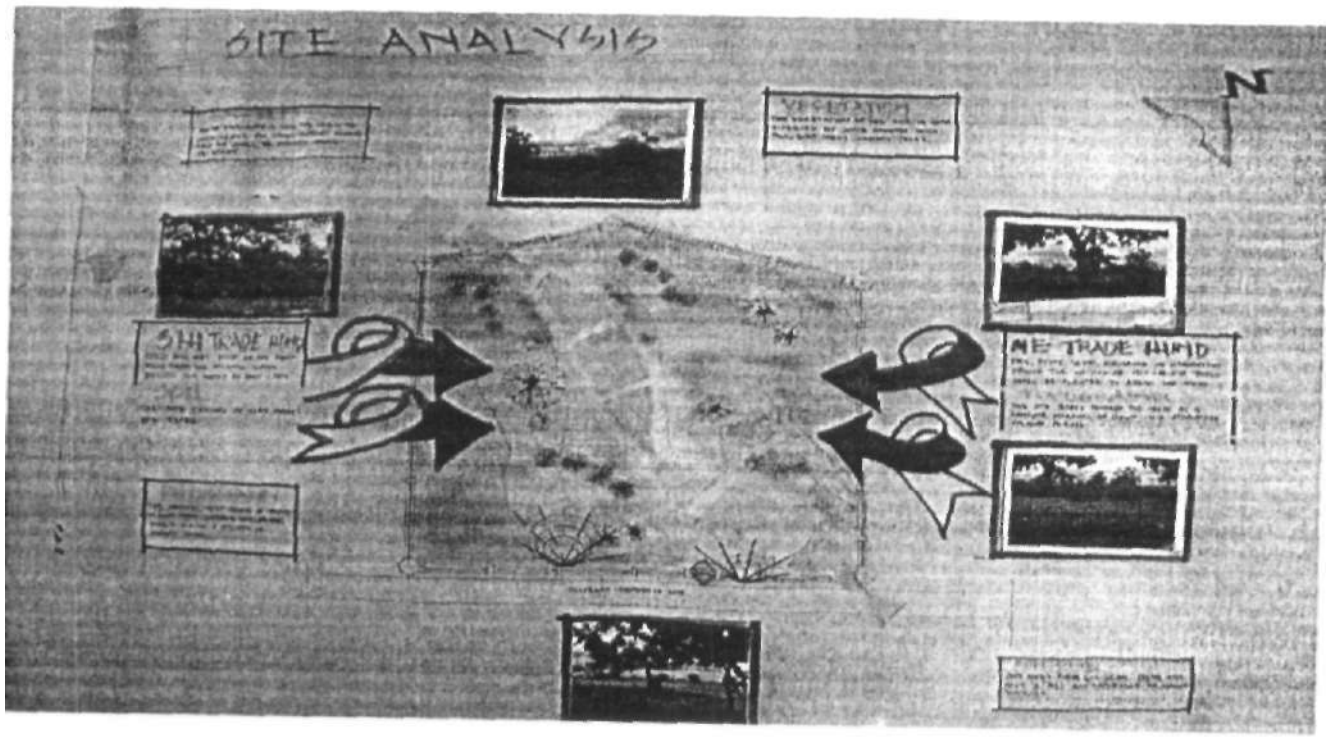
An embassy/high commission is a complex where all government or international relations takes place. They usually go about doing their business trough negotiations and compromises and at the same time protect their interest and project their image to the world at large.

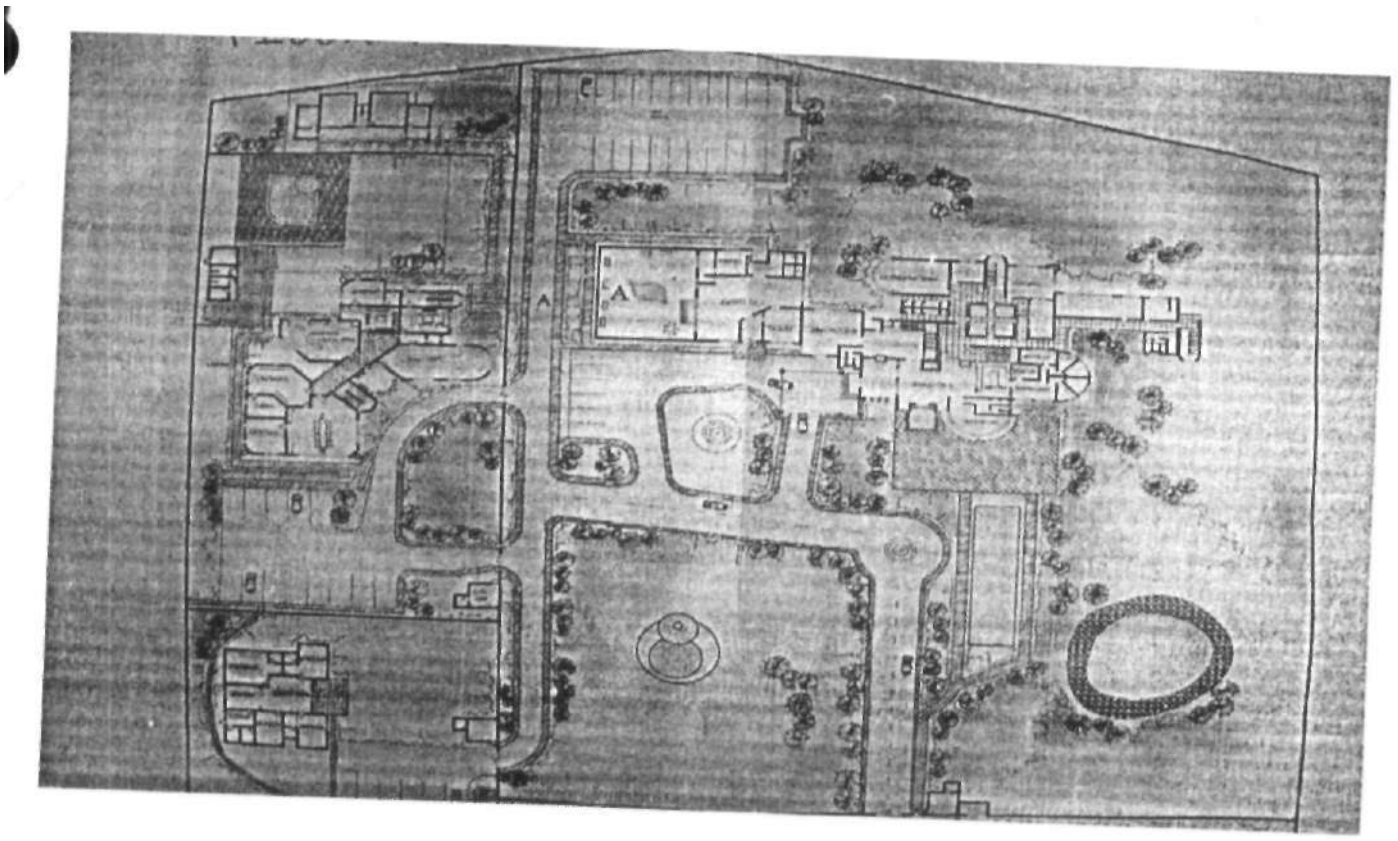
Therefore an attempt has been made to see that a high commission for Bangladesh has been designed which is functional enough for smooth activities of diplomatic missions to take place and made sure that it reflects her traditional architecture on the proposed design and simultaneously made sure that the security of the personnel and building was taken care of not just through functional arrangement but also through the design of the

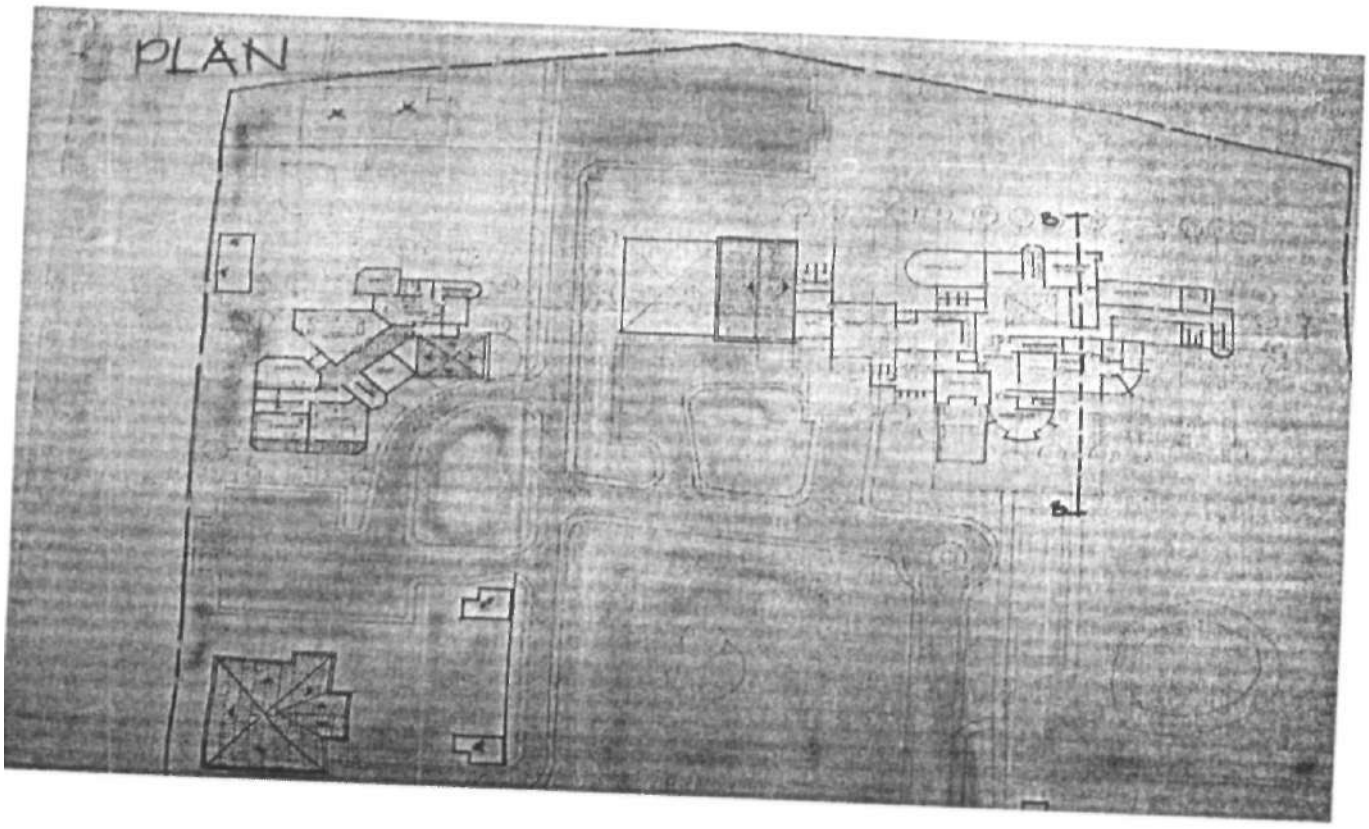
structural members and materials to avoid crashing of the building in case of any bomb attack.

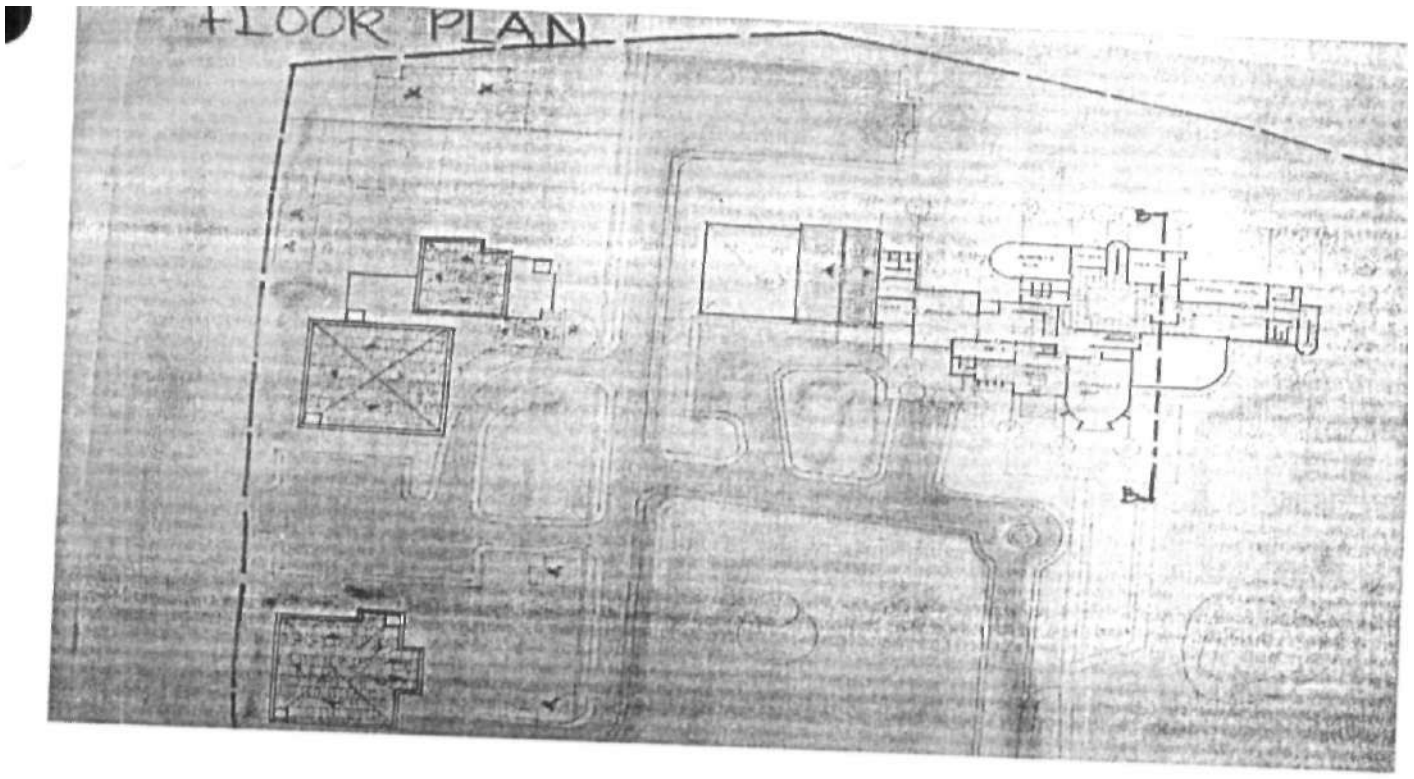
APPENDIX

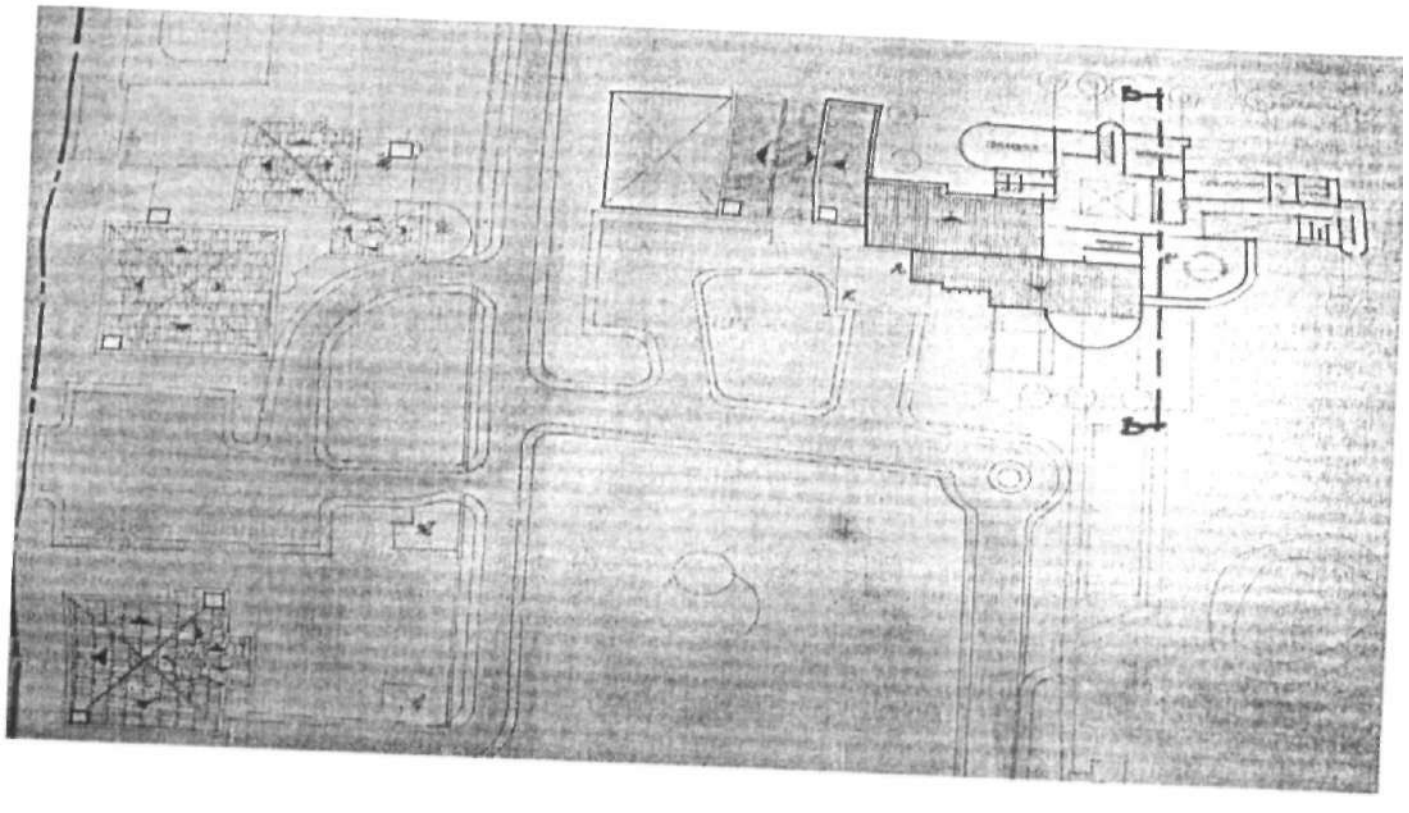
PHOTO OF PROPOSE HIGH COMMISSION BUILDING DRAWINGS

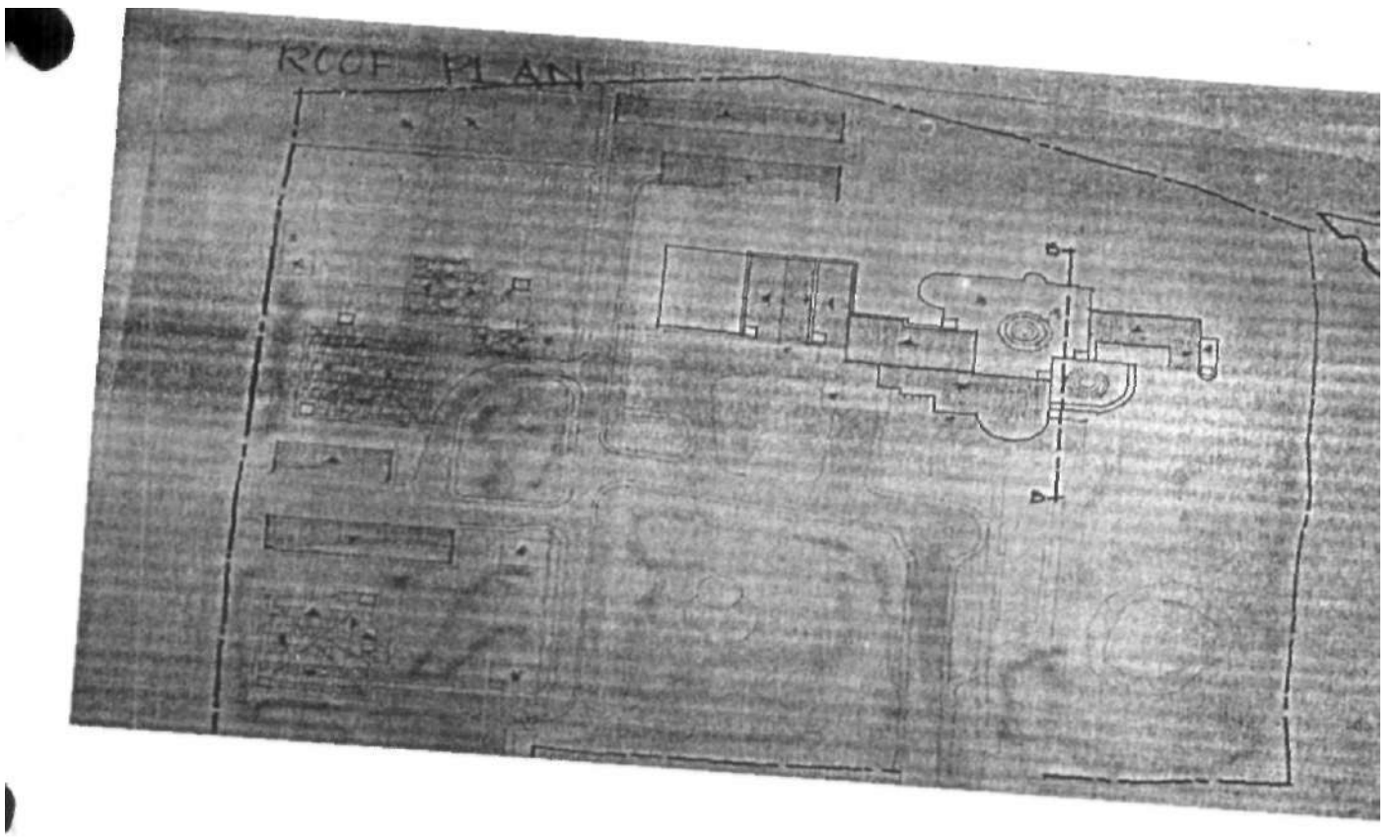


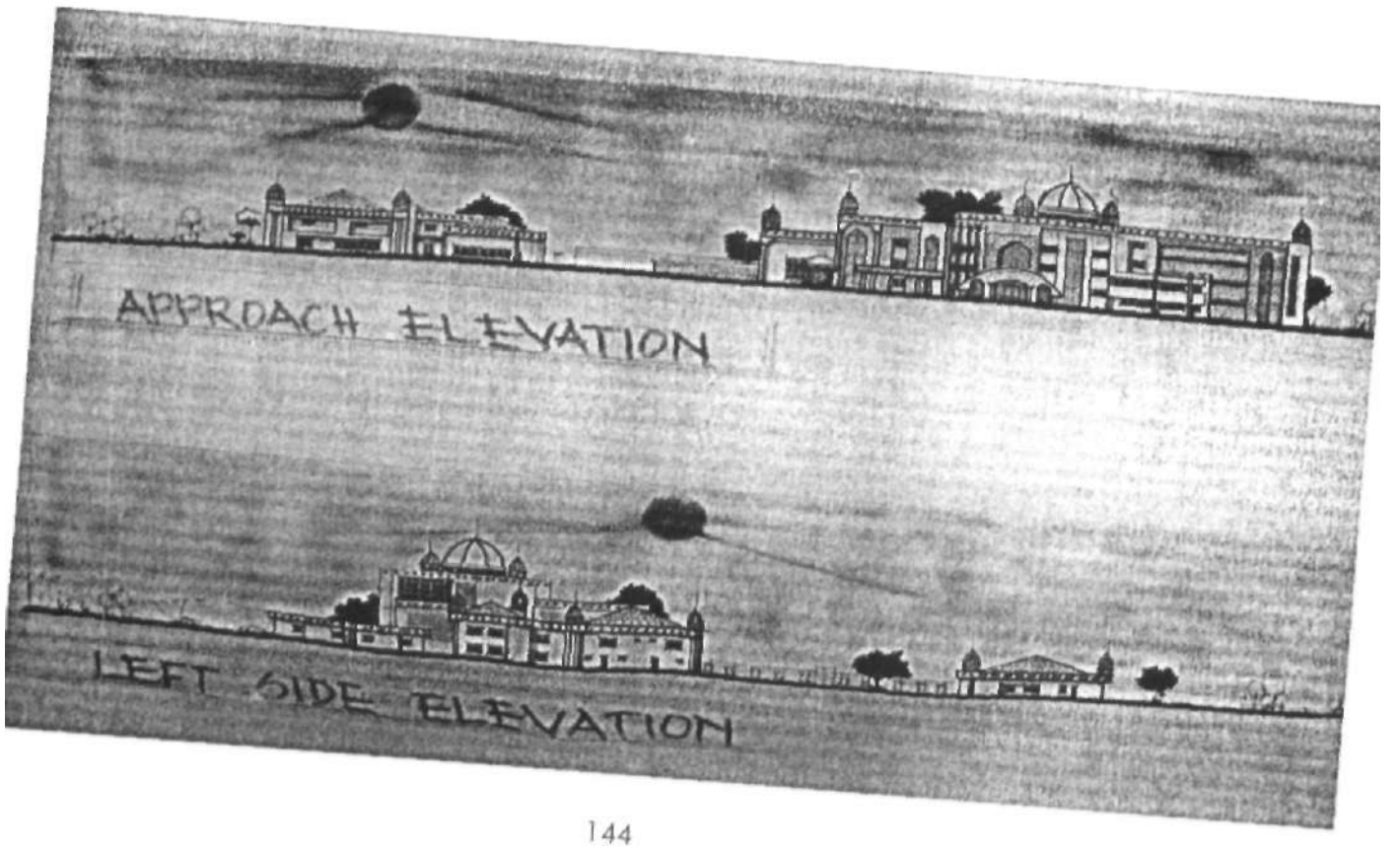


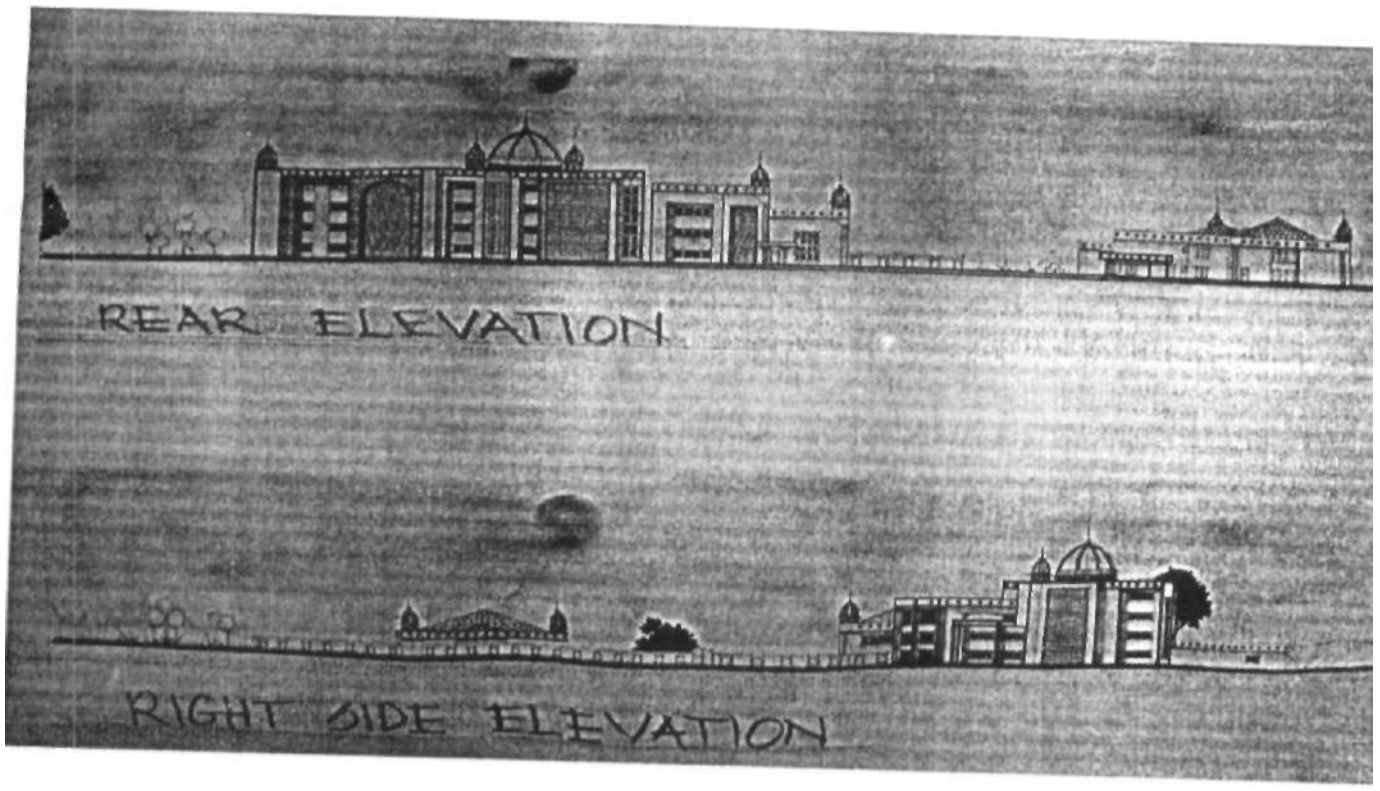

PLAN

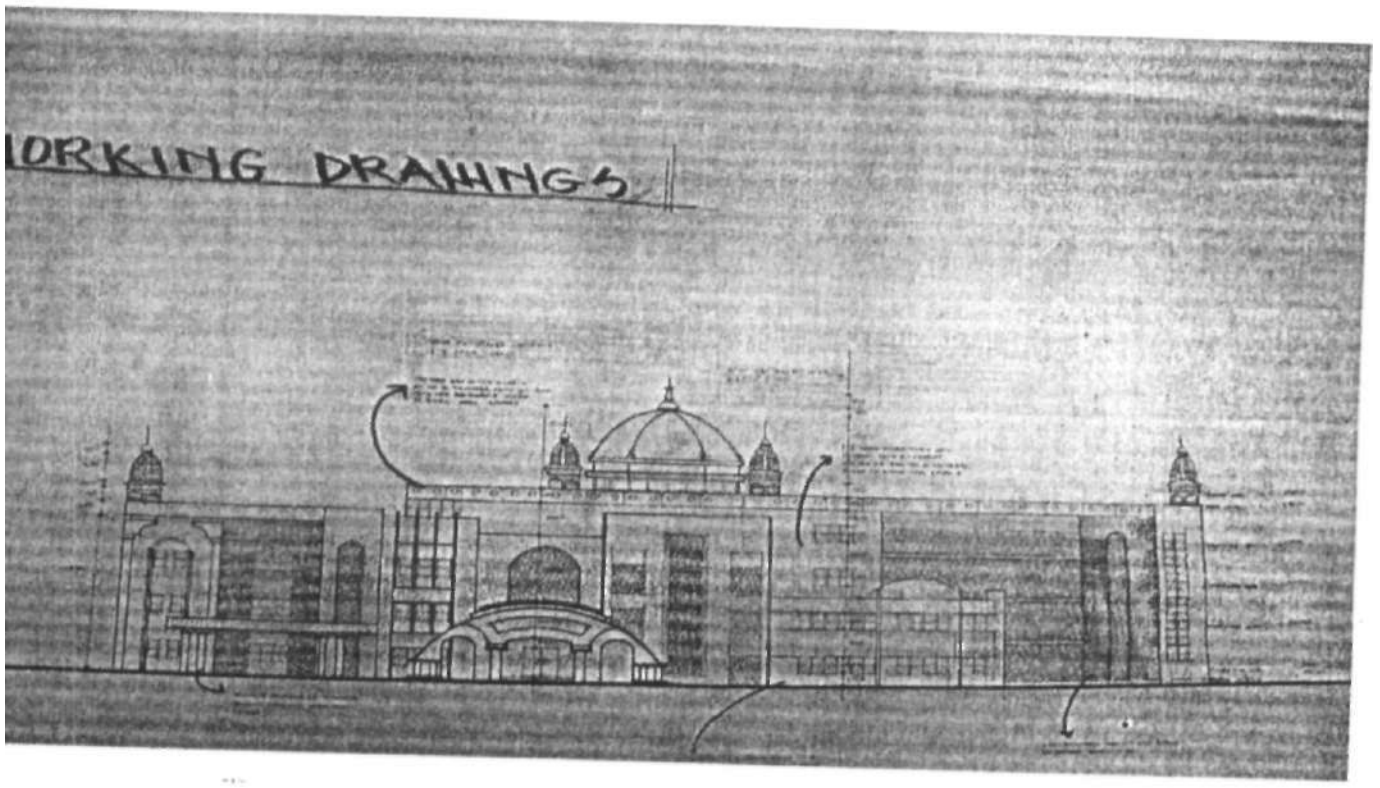

FLOOR PLAN




ROOF PLAN


APPROACH ELEVATION
LEFT SIDE ELEVATION


REAR ELEVATION
RIGHT SIDE ELEVATION


ORKING DRAWINGS

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