NIGER DELTA COMPLEX,

ARCHITECTURAL RESP0NSE TO CHANGING SOCIO-CULTURAL DEMANDS

BY

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A thesis submitted to the postgraduate school, Ahmadu Bello University, Zaria, Nigeria in partial fulfilment of the requirements for the award of the degree of Masters of Science in Architecture (M.Sc. Architecture)

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July 2004

DECLARATION

I hereby declare that this thesis has been composed by myself and is a record of my own research work. It has not been accepted in any previous application for a higher degree.

All quotations are distinguished by quotation marks and the sources of information are specifically acknowledged by means or references.

.....

OBINDU EMENIKE OBINDU
JULY, 2004 –Zaria

CERTIFICATION

This thesis entitled:" Niger Delta Complex, Architectural response to changing socio-cultural demands", meets the regulations governing the award of the

degree of Masters of Ahmadu Bello University (M.Sc Architecture) of the approved for its contribution to knowledge and literary presentation.

…… ……
Chairman, Supervisory committee Date
Date

…….. ……..
Member, Supervisory committee Date

…….. ……..
Member, Supervisory committee Date

…….. …….
Head of Department Date
Date

…….. …….
Dean, Postgraduate school Date Date

DEDICATION

This thesis is dedicated to my mum Mrs Juliana Obindu who was called to Glory on the 11th April 2004 on Easter day I know she is in the Lords hands. Mum you are always on my mind.

ACKNOWLEDGEMENTS

Glory is to God Almighty for all his numerous favours and blessings. He has made his work possible in his finite mercy, bringing it to a successful completion.

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ABSTRACT

The Niger Delta is amongst least well served in the Country. Successive governments have exploited the natural wealth of the Delta but put very little back in terms of infrastructure and service. Over recent years, the natural environment has been seriously damaged by mineral extraction and deforestation the latter due in large measure to oil companies opening up virgin land for resource extraction and steady incursion of people seeking land for cropping. Other threats of people's livelihood including oil spillage and damage to waterways and riverbanks through dredging and canalisation that indirectly affect fishing in the region. This situation have created the persistent violent in the region.

Niger Delta Development Commission has been commission to carter for development of the region. The existing office building was design without consideration the socio–culture of the people in the region.

This thesis attempted to create a design in response to the challenge of Niger Delta Development Commission (NDDC) base on changing socio–cultural demand.

In the quest to resolve changing socio–cultural demands and development of the people, this thesis is thus to provide an ideal Architectural solution a centre for Administration and Research to NDDC. The Research will be concern with environmental and ecological research problems and also train people that will in turn train the community's youth and reorient them. The commission thus, becomes an idea of how Architecture could help promote unity, identity and sustainable development in Niger Delta.

This design thesis has been executed in two major parts VIZ:

i. The thesis reports
ii. The architectural design proposal.

The documentation research or thesis report enables the author analyse, synthesize proposal of the architectural design.

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CHAPTER ONE

INTRODUCTION

1.1 INTRODUCTION

The protracted agitation, violence and resistance across the Niger Delta have not only posed threats to national security, and financial earnings of the nation, but also, the stability of the global oil market. The fundamental questions that agitates the minds of scholars, policy makers, development agencies, journalists and diplomats, among others is whether the Niger Delta Development Commission, NDDC, can deal decisively with the root cause of the governance problems including the underdevelopment of Niger Delta. There is also the concern whether the NDDC can within the existing uneasy political relationship between the central, state and local governments, depart from the path its predecessor took to the development of the Delta region. Can the commission really deliver given the political attitude of the Niger Delta people toward the Nigerian state? For, the people see the state as wicked, alienated and irrelevant to their existential conditions. In the light of all these, therefore the commission capacity to deliver resides largely with it understanding of the nature of the crisis.

Basically, the study of Niger delta region concerning the origin of violence and underdevelopment, The Niger delta Development Commission has good intentions, a sound strategy for developing the Niger Delta and a bright future, both for the commission, the people and the region. The realization of the foregoing needs inspired the idea of the undertaking this thesis, in which attempts would be made to incorporate in the building, facilities that enable the commission to function effectively and a design that will meet with the

aspirations and expectations of the people based on socio-cultural demands of the people.

1.2 MOTIVATION

Niger Delta Development Commission Complex as a proposal for the thesis intends to meet the demands of the oil and liquefied natural gas rich region. These people have been clamouring for edification and developments, which in spite of the abundance of natural resources, their immediate environment has been ravaged by oil and gas drilling explorations and spillage.

Thesis intends will create a sense of belonging via the NDDC Complex to the people of this region by incorporating a training centre for the staffs in order to closely monitor the projects of the commission and bring unity among the various ethnic groups in the Niger Delta.

1.3 GOALS AND OBJECTIVES

i) To serve as effective force for binding the Niger Delta region with the oil producing state into a united society with a distinguished identity and unity of purpose.

ii) To serve as base to promote a sustainable development of Niger Delta into a region that is economically prosperous, socially stable, ecologically regenerative and politically peaceful.

iii) To serve as a Complex for monitoring the commission projects towards effective development of the region.

1.4 DESIGN PHILOSOPHY

This thesis seeks to study in detail the problems and appropriate solutions to provide facilities to alleviate a common problem for a largely diverse people. *unity in diversely* is the philosophy for this thesis and focus will be on factors that can enhance harmony, unity and interaction rather than exposing their diversity. This can be trying, as allowance has to be made for equal representation without breaking the common bond.

1.6 SCOPE AND LIMITATIONS

Niger Delta Complex, a proposal for Niger Delta Development Commission aims toward awarding project for the development of the region and effective execution. This will embrace administrative block, a training section for the staffs for efficient monitoring of the project, exhibition space. Other facilities include multi-tenant office space for lease to corporate organisation. Conference facilities, library, e.t.c

1.6 RESEARCH METHODOLOGY

Review of relevant literature will be carefully analysed and the objectives, and conclusions drawn as part of design synthesis. Case studies of relevant complex buildings in Nigeria and outside the country will be done in order to understand the extent and the complexities of the design. This will also help to highlight the merits and demerits of the design.

Personal dialogue and interviews with the parties concerned will form useful data for this thesis. The socio-cultural life and architecture of the involved states will also be taken into consideration.

This thesis work will cover the feasibility of the project, research and synthesis, and the proposal.

1.7 JUSTIFICATION

Niger Delta Development Commission needs a building complex to offer a lasting solution to socio-economic difficulties of the Niger Delta region. Presently the former Oil Mineral Producing Area Development Commission (OMPADEC) office is used which is not sufficient. Two branch offices were put in place to enable them perform their function. One of the building is a residential building converted to office while the other section is for the executive managements which is a temporary head-quarters of Niger Delta Development Commission (NDDC}. This temporary arrangement is insufficient to carry out all the functions of the commission. It is therefore important to provide a new structure specifically designed to accommodate all the functions and duties from one complex.

CHAPTER TWO

LITERATURE REVIEW

2.1 HISTORICAL BACKGROUND OF THE NIGER DELTA

At the beginning, the area referred to as the Niger Delta was limited to the geo-political zone occupied mainly but minorities of southern Nigeria, which currently comprises six states of Akwa Ibom, Bayelsa, Cross River, Delta, Edo and Rivers. In recent years, the Niger Delta region was redefined and enlarged to include all the contiguous nine oil producing states. The new states of Abia, Imo and Ondo were, therefore, added to the original six.

The geographical region that constitutes the Niger Delta extends from the Mashin Creek to Bright of Benin and from Apoi to Bakkassi. It covers 560 Sq. kilometres, which are about 75 percent of the entire coastline of Nigeria with the Atlantic Ocean. Covering about 70,000 Sq. kilometres, half of the regions topography is criss-crossed with creeks and dotted with small islands and the rest as uplands. Located in the third course of the Niger River, the delta drains the river into the Atlantic Ocean. Its “deltaic salt” accounts largely for the huge deposit of oil and gas found in the region.

In addition to oil and gas, the Delta region is the third largest wetland in the world with fresh and brackish water and mangrove swamp forests.

The Niger originates in the highlands of southern Guinea near Guinea’s border with Sierra Leone. Several tributaries, including the Milo, Sankarani, Mafou, Niandan, and Tinkisso, join the Niger as it flows northeast through Guinea and into Mali. The well-defined valley of the upper Niger gives way to a broad, level floodplain downstream from Bamako, near Ségou. There, the waters

of the Niger and its tributary, the Bani, spread out over an inland delta that covers 20,000 sq km (7700 sq mi). Floodwaters move through a maze of channels, filling low-lying basins and replenishing several lakes, among them Lakes Débo, Faguibine, and Do. In the process, most of the Niger's water evaporates or is absorbed by the ground, leaving the river much diminished in size beyond the inland delta. The Niger flows to the east between Tombouctou (Timbuktu) and Bourem and then turns to the southeast. From Bourem through Gao in Mali and Niamey in Niger, to Kanji Lake in Nigeria, the channel is well defined but shallow and interrupted by several rapids. South of Niamey, before entering Nigeria, the river forms part of the Niger-Benin border. Heavier rainfall, plus inflow from the Mékrou and Sokoto rivers, adds to the Niger's volume in this stretch. Created by the Kanji Dam, Kanji Lake, about 135 km (about 84 mi) long, occupies the valley between Yelwa and New Bussa. Several major tributaries, including the Kaduna, Benue, and Anambra, greatly increase the Niger's size in its lower course. As it moves south from its junction with the Benue at Lokoja, past Onitsha, and toward its mouth, it is a broad, deep river that flows within a confined channel. Finally, before it enters the Gulf of Guinea, the Niger forms a wide, fan-shaped delta, dividing into dozens of channels that wind through a maze of swamps and low-lying islands and depositing most of its sediment load.

Environmental conditions in the Niger Basin vary widely. Rainfall decreases from about 2300 mm (about 90 in) near the Niger's source to less than 250 mm (10 in) in the bend between Tombouctou and Bourem, then increases as the river flows southward to about 4000 mm (about 160 in) at its mouth. The moist woodland savannah vegetation of the upper basin gives way

to progressively drier savannah and semi desert conditions in Mali. After the river turns southward, it flows through increasingly moist and lush savannah, and through tropical forest near Onitsha. In the delta, swamp forest containing many oil palms occurs where the water is fresh and mangroves grow where the water is brackish.

The region is rich in other natural resources like palm oil and kernel, herbal plants. The river contains nearly 200 species of fish, including catfish, African carp, Nile perch, lungfish, tigerfish, barbel, and tilapia. Crocodiles, hippopotamuses, lizards, and snakes are common in the river. Some animals, including various species of antelopes and monkeys, live in many parts of the Niger Basin. Others, including buffaloes, elephants, lions, leopards, and jackals, have more limited ranges. The inland delta serves as a major gathering area for birds migrating between Europe and Africa.



Figure 1.1 The Niger Delta region sources (Encarta)

2.2 BIRTH OF NIGER DELTA DEVELOPMENT COMMISSION (NDDC)

The origins of the NDDC, therefore, can be traced to the period of British rule. Confronted with the fears of the minority in Niger Delta, the colonial government was of the view that efforts should be made to reduce this basic problem of the region. As a consequence, the Henry Willink's commission was set up in 1958, to ascertain the real and imagined fears of the Niger Delta people. When the commission turned in its report, it specifically recommended that the region deserved special development attention on account of its delicate ecology. Thus, the region should be made a special area to be developed directly by the federal government.

Tafawa Balewa-led new government that was inaugurated on October 1, 1960, in that same year accepted the recommendation. The federal Government established the Niger Delta Development Board, NDDB, charged with the task of developing the Niger Delta. Opinions were divided as to why the Niger Delta should deserve special attention by the Federal Government. Some people particularly the politicians and activists from the Niger delta were of the view that, the delicate environment and backwardness of the Delta region called for such assistance. To allay the fear of domination by the Igbo's and Yoruba's and bring the region into the mainstream of national politics and national integration made it all the more so. Others think differently, contending that there are non oil-producing areas in the northern parts of Nigeria that are as backward as the Niger Delta if not worse, which deserved special attention as well. The politicisation of the special attention to the development of the Niger Delta

accounted in part for the inaction of the NDDB until the civil war broke out in 1967.

After the end of the 30-month civil war in 1970 the issue of whether the Niger Delta deserved a special attention resurfaced. Borne out of the overwhelming strength of the major ethnic groups, Hausa-Fulani, Igbo and Yoruba's, the Federal Government shifted ground and abandoned the Willink's recommendation. Instead of supporting the Niger Delta Development Board (NDDB), the government was, out of political expediency, of the view that, the River Basin Development Authorities (RBDA) should be created to facilitate the development of the rural areas inclusive of the Niger Delta. As a consequence, eleven development authorities were created, namely; Sokoto-Rime, Chad, Hadeija-jama'are, Ogun-Osun, Upper Benue, Niger River, Anambra-Imo, Lower Benue, Binin-Owina, Niger Delta and Cross River.

At the mid-term review of the RBDAs in 1982, it was obvious that, they did not impact positively on the lives of the rural people, or on the city dwellers. Rather, they were seen as drains on the nation's finances. Most of the commissions so far established only made Niger Delta worse off, particularly as some of the negative consequences of oil production had manifested in the lives of the people who live there.

By the early 1980s, the 1975 Anti-Sabotage Decree that prescribed death penalty had, rather than reduce, increased the tempo of agitation and violence across the Niger Delta region. This led to the establishment of the Presidential Task Force, PTF, which was allocated 1.5 percent of federal account for the development of the Niger Delta region. Until December 31, 1983 when the Junta

headed by General Mohammed Buhari sacked the Shagari-led government, there was no indication that money was released out of the 1.5 percent allocation to the Task Force. Both the RDBAs and the PTF were dissolved in 1984, leaving the Niger Delta in a deeper crisis.

In August 1985, General Ibrahim Babangida removed the Buhari junta by a palace coup. Under the Babagida regime, the Niger Delta issues came up again, but not in any way different from what previous governments had done. Concerned with his hidden agenda to civilianise himself, the Babagida's regime was of the view that incessant violent clashes between the states, oil companies and the host communities in the Niger Delta required an urgent solution. This led to the establishment of the Oil mineral Producing Area Development Commission (OMPADEC) in 1993. More than its predecessor, OMPADEC appeared better established to make some impact on the development of the region. But, it was to suffer from a number of factors: Namely; lack of a master plan that would define its developmental objectives and strategies, inadequate funding and official profligacy. Unfavourable political climate, e.t.c. Though its projects spread throughout the region, it was to suffer an untimely demise, with a lot of unfinished projects in its wake. The failure of all these development intervention agencies worsened the economic woes of the people, as well as the environmental and ecological degradation of the area. This was mainly because of the intensified activities of oil prospecting companies which adversely affected farming and fishing, the predominant occupation of the people of the region. Incessant oil spillages and years of gas flaring impacted negatively on the

environments, thereby making the inhabitants to demand for remediation and prevention strategise to resuscitate the rich ecosystems of the Niger delta.

This was the scenario when President Olusegun Obasanjo first made the campaign visit to the region. He then made a promise that if he becomes the President, he will establish a programme that would deal urgently and fundamentally with the developmental needs of the Niger Delta and bring sustainable prosperity and peace to the area. Following his election and inauguration as President on May 29, 1999, President Obasanjo made good his promise. Within two weeks of his inauguration, the President sent to the National Assembly, bill to establish the Niger Delta Development Commission as the agency to implement a programme for the sustainable development of the Niger Delta region. Obasanjo stated *"The amelioration of the hardship and problems of the people of the Niger Delta remained a top most priority of his administration"*.

The Niger Delta Development Commission, with its temporary headquarters at No 6A, Olumeni Street, old Government Reserved Areas (GRA), Port Harcourt, is a fulfilment of that promise. It also encompasses the dreams, aspirations and expectations of the people of this region, who believe that, finally, their region is getting the kind of attention, which its contributions to national development and growth only merit. The NDDC is not set up to replace the state or local government. President Olusegun Obasanjo, 2000 in his vision statement at the inauguration of the Board on 21, December 2000 at the state House in Abuja.

He said "the Niger Delta Development Commission has the potential to offer a lasting solution to the socio-economic difficulties of the Niger delta region

which successive governments have grappled with even before independence in 1960. The commission is an agency and one of the activities does not preclude other Federal Government development programmes that are normally due to the states. Nor is the NDDC intended to inhabit local initiatives that are the normal responsibilities of state governments, local governments and local communities. The commission is not to take over constitutional responsibilities of any tier of the government in the region: the federal ministries and agencies will continue to carry out projects in the region, just as states, the local governments, and the oil companies' e. t. c."

2.3 NDDC MISSION

The primary mission of the Niger Delta Development Commission is to oversee, to the overall and sustainable development of the Niger Delta region. This development will be in the following categories:

i) Infrastructures

ii) Technological

iii) Economic

iv) Ecological/Environmental

v) Human

vi) Sociological, including a buoyant culture, a peaceful socio-political environment, and tourism e. t. c.

2.3.2 NDDC Mission statement

"To facilitate the rapid, even and sustainable development of the Niger Delta into a region that is economically prosperous, socially stable, ecologically regenerative and politically peaceful"

2.4 FUNCTION OF THE COMMISSION

According to NDDC Act 2000, the Commission is established to perform the following responsibilities.

i) Formulation of policies and guidelines for the development of the Niger Delta.

ii) Conception, planning and implementation, in accordance with set rules and regulations, of projects and programmes for sustainable development of the Niger Delta area in the field of transportation, including roads, jetties and water ways, health, education, employment, industrialization, agriculture and telecommunications.

iii) Surveying the Niger Delta region in order to ascertain measures, which are necessary to promote it physical and socio-economic development.

iv) Preparing master plans and schemes designed to promote the physical development of the Niger Delta region and the estimates of the cast of implementing such master plans and schemes.

v) Implementation of all the measures approved for the development of the Niger Delta region by federal government and the member states of the commission;

vi) Identifying factors inhibiting the development of the Niger Delta region and assisting the member states in the formulation and implementation of policies to ensure sound and efficient management of the resources of the Niger Delta region;

vii) Assessing and reporting on any project being funded or carried out in the Niger Delta region by oil and gas producing companies and any other company, including non-governmental organizations, as well as ensuring that funds released for such projects are properly utilized;

viii) Tackling ecological and environmental problems that arise from the exploration of oil mineral in the Niger Delta region and advising the Federal Government and the member states on the prevention and control of oil spillages, gas flaring and environmental pollution.

ix) Liaising with the various oil mineral and gas prospecting and producing companies on all matters of pollution, prevention and control; and

x) Executing such other works and performing such other functions, which in the opinion of the commission are required for the sustainable development of the Niger delta region and its people.

2.5 COMPOSITION OF THE NDDC BOARD

The Board of the Niger Delta Development Commission was inaugurated on 21, December 2000, by President Olusegun Obasanjo. It comprises the following;

i) Chairman

ii) Managing Director, / CEO

iii) Executive Director, Projects; and

iv) Executive Director, Finance/ Administration

v) Representatives from the nine (9) states

   a. Abia state
   b. Akwa Ibom
   c. Bayelsa
   d. Cross Rivers
   e. Delta
   f. Edo
   g. Imo
   h. Ondo
   i. Rivers

vi) Sokoto state, representing North West zone

vii) Adamawa state, representing North East zone

viii) Plateau state, representing North central zone

ix) Representing the federal Ministry of Environment.

x) Shell Petroleum, representing the oil companies.

The defunct OMPADEC had staff of 481 persons, who the NDDC Act deemed to have been transferred to the NDDC. In line with Mr. President's directive on the subject, the commission decided against a wholesome takeover of the personnel. Instead, the commission decided to screen all employees and ask them to re-apply to the NDDC under the new structures. OMPADEC also

commissioned some projects. These projects were found by NDDC to have not been actually completed and made functional.

In order to reflect NDDC's independent establishment, the Board decided that the commission should have a logo and motto different from what OMPAEC had. The design competition was won by Dr. Constance M'maneh Sira Sarowiy from Khana Local Government Area of River state.

THE LOGO HAS AS ITS MOTTO: **EQUITY, PEACE AND PROSPERITY**.

The commission has begun the employment of new staff in addition to those from the defunct OMPADEC that has been retained in other to achieve the objective of the commission effectively.

2.6 STRUCTURE OF NDDC

The NDDC is made up of eleven Directorates via:

1. Administration and Human Resources
2. Finance and supplies
3. Community and Rural development
4. Utility, infrastructural development and control
5. Environmental Protection and Control.
6. Agriculture and Fisheries
7. Education, Health and social services
8. Commercial and industrial development.
9. Planning, research, Statistics and Management Information Systems.
10. Legal Services

11. Project Monitoring

Other Departments are:

1 Corporate Affairs

2 Internal audit

3 Youth Empowerment.

2.7 THE MASTER PLAN OF NDDC

Given the nature and terrain of the Niger region, a comprehensive and sustainable development of the area will require a carefully thought out master plan. The master plan, which President Obasanjo re-emphasized during the inauguration of the Board, will detail all the major infrastructural developments to be carried out in the region. It will also have time frames for the beginning and completion of each project.

Requirements for a comprehensive master plan include:

i) Utilizing maps obtained from the Geographic Information System;

ii) An inventory of existing infrastructures, social and economic facilities in the region;

iii) Identification of infrastructural deficiencies;

iv) Interviewing people and library research to estimate target parameters and sketching the path to achieving them; and

v) Establishing the phasing of projects to be executed.

When completed, the master plan will serve as Physical, Social, Economic and Ecological guide to decision making.

Immediate work programme

In order not to allow a vacuum to develop during the preparation of the master plan, the Board has drawn up an Action Plan for immediate take-off projects. The guiding principle is that any project selected must fit into the master plan when completed. The Board has, therefore, focused on the completion and commissioning of viable projects inherited from OMPADEC, essentially because they are already on the ground. These projects are in the areas of water supply; rural electrification; road maintenance and constructions; jetties and shore protection; school buildings, health centres, land reclamation and dredging.

New initiatives have been selected based on the following criteria:

The project selected make immediate impact, they have an impact on conflict resolution and risk management; they are equitably distributed to ensure that no community is left out; and they will fit into master plan, when completed.

2.8 HUMAN DEVELOPMENT PLANS

Though consultations with communities and other stakeholders in the region, the board has focused on some human development projects. The decision was based on the conviction that any development must begin with the human beings. These projects include: Education support; skill acquisition and computer training; vocational training; community-based surveillance schemes; agriculture support projects, roads, public buildings and utilities maintenance schemes.

During the inauguration meeting of the commission Board of Director the Chairman of the NDDC Board (Chief Ugochukwu 2000) stated that “We have also been confronted by their expectation, by their high hope that, finally here is

an agency which would tackle infrastructural and human development frontally and bring to their doorsteps the promise which their immense natural and human resources has long held for them…the sum of our mandate is to ensure that the people will rise above poverty level, hold their heads high and be proud to be from the Niger Delta. Niger Delta is a region steeped in rich culture and history. It is a region of diverse, hospitable, friendly and hardworking people. NDDC will help the people rediscover those fine things which endeared them to non-indigenes, and for which they have been richly blessed by God"

2.9 FUNDING

The NDDC act* provides several sources of funding, these include:

i) Federal Government contribution, which shall be equivalent to 15% of the monthly statutory allocations due to member states of the commission from the federation account.

ii) Oil and gas processing companies' contribution of 3% of their total budget.

iii) 50% of the Ecological fund allocations due to member states.

iv) Proceeds from other NDDC assets; and

v) Miscellaneous sources including grants-in-aids, gifts, interests on deposits and investments, loans by Federal and state government and any local or foreign bodies, donations, e. t. c.



Figure 2.1.1 NDDC Office building in Port Harcourt parking space

*An amendment to the Bill has been sent to the National Assembly to make all the member-states contribute 10precent of their monthly statutory allocation to commission. (President Obasanjo statement 2000) concerning NDDC fund “there are a lot of challenges before the NDDC. Some sceptics are already predicting it failure, on the basis of the notorious record and experience of OMPADEC and the petroleum (special) Trust Fund. In formulating the NDDC Bill, we drew lessons from the shortcomings of OMPADEC and PTF, while care was taken to include provisions that will assist the NDDC to perform effectively and creditably. Apart from the mode funding, there are aspects of NDDC Act that are aimed at transparency. Equity and accountability.”



Figure 2.1.2 NDDC Office building in Port Harcourt parking space for staffs



Figure 2.1.2 NDDC Office building in Yenagoa, Bayelsa State

CHAPTER THREE

SOCIO-CULTURE OF NIGER DELTA

3.1 CULTURE

Culture in its broadest sense engulfs all of human activity. Unoh,(1986) quoted Ebeogu who defines culture more succinctly as follows “culture is that complex whole which includes knowledge, belief, art, morals, law, customs and any other abilities acquired by man.” Culture, accordingly, encompasses those conventional understandings and practices which gives people it uniqueness and thus renders such people distinct from all others.

In other words, the term culture subsumes the totality of the materials, spiritual, artistic, intellectual and other accomplishments of people gives some indication of their type or level of civilisation.

3.2 CULTURAL TRASFORMATION

The definition of culture above implies that every culture is subject to the process of change, cultural confrontation or contacts could result in mutual cultural influences which could, in turn, result in the assimilation, adaptation and accommodation, of aspects of other cultures. The end product could be cultural refinement, advancement or development.

Contact between communities of different cultural backgrounds has always been perhaps the most active agent of change. The changes arising from the contacts of cultures are nothing new and that ancient civilizations, influenced and left their mark on each other: Egypt left her mark on Greece, Greece on Rome and Rome left her mark on Northern Europe. Similarly, the contact

between European and African cultures in a more recent time has brought about many changes within Africa. These changes are reflected in, the styles of our economic growth, the technological revolution, and new political order most African countries are still experimenting with. Those who have been exposed to outside influence especially to the western form of education have acquired new attitudes and modes of behaviour, new interpretations of life, moral codes, and social life different from our forefathers.

3.3 PEOPLE OF NIGER DELTA.

The population of Niger delta is estimated at 20 million with 50 ethnic groups' over 3500 communities who speak not less than 260 dialects. Among the major ethnic nationalities are Ijaw, Igbo, Yoruba, Urhobos, Isoko, Itsekiri, Ibibio, Annang, Kalabari, Ogbia, Efik, Ogba, Egini, Isha, Edo, Etsalo, Igoni, Idoni, Andoni and Ekpeye. Apart from Igbo and Yoruba which are majority, the remaining ethnic groups are in minority. One of the fears of the many minority ethnic groups in the late 1950s was their domination by the Igbo's and Yoruba's. It was more fear of domination as it included marginalization and exploitation by these two dominant ethnic groups. These fears over governance were expressed in the agitation for states to be created for the Ijaws, Efik, Edo and Urobos in the early 1960s.

3.3.1 Abia and Imo state

Their traditional language is Igbo who predominates much of the South-Eastern part of Nigeria. Globally, Igbo's are well travelled, they are mainly Christians and entrepreneurial. They are known and reputed to be industrious,

highly market oriented, very hospitable and accommodating, probably due to their migratory nature.

3.3.2 Akwa Ibom and Cross River

Akwa Ibom was carved out from the formal Cross River state on September 23 1987. This two state can be described as an ethnic and cultural museum. Although no one seems to know exactly how many ethnic groups are in the state. mainly because of lack of agreement on the classification The spoken languages are Ibibio (by far the largest), Annang, Oron, Eket, Ibuno, Efik, Efat and Ejagham in lower region while Yakurr, Biase, Yala, Boki, Mbembe, Bette, Bandi, Bekwarra, Olulumo, Okuni, Utugwanag, Afride in the upper region. Similarities in the cultures of the peoples of the region can be easily explained. These similarities are found in such areas as their common use of secret societies such as Mgbe, Ekpe (Ejagham, Efid Oron) and Ekpo (Ibibio and Annang), Uduibgm Ekong, Ekpiri, Akata (male) Iban Isong, Numm, (females) as instruments for the enforcement of traditional authority; the widespread use of the pantomimic language. *Nsibidi* which, though origination from the Ekoi, came to be found among the Ibibio, Annang, Efik, The entire Upper cross River region as well as the Igbo Aro, Bende and Edda peoples.

Cross River was formally called south eastern state. Which came to being in 1967 the name was change on February 1976, and in 1987 it under go reconstruction in1987 in which Akwa Ibom was caved out. Cross River have three major language: Efik, Bekwarra and Ejagham, sections of calabar municipality, calabar South, Odukpani, Akamkpa, Ikom and Ogoja Local Government Areas speak Ejagham while Efik is widely spoken in Calabar

municipality, Odukpani, Akpabuyo as well as parts of Akamkpa and Biase Local government Area. Other groups in the north of Calabar are the Ekois. These are found in Akamkpa and Biase Local Government Areas. Mbembe is predominantly spoken in Obubra Local Government Area and a small section of settlers in Yala Local Government Area. Yakurr is spoken in all parts of Yakurr Local Government area. Further north are several sub-dialectal groups made up pf Boki, Yala/Yache, Ukelle, Mbube, Bette and Utugwang. In spite of the dialectal differences, all the groups have a common linguistic root, traceable to the Bantus in East Africa. The cultures bear striking similarities too, as can be discerned from the music drumming, dancing and other form of Artistic heritage.

Cross River culture is very romantic and captivating and has expression in the language, dancing and festivals. Each rhythm and dance expresses the intrinsic feelings of the people, which relates to particular events, festivals or simply, their way of life; popular Dances include: Ekeledi, Obin, Moninkim, Giza, Aminakwol, and Ekombi.(see fig 3.3.2)

Festivals relation to farming activities is observed e.g.

New yam festival

The regatta festival (marking various conquests in tribal wars.)

The Efu festival (traditional wrestling)

The Anaka festival (celebrated by Ogoja people commemorating survival inter tribal war)

The Fattening ceremony festival (period between maidenhood and womanhood)

The Aji festival (it the religious as well as social values with ancestors).

The Atumibi festival (it is a war dance and ritual with spiritual significance)

3.3.3 Bayelsa and River State

There is diversity in the spoken language of the people of Ijawnation (Bayelsa).the Ijaw language comprises approximately 19 dialects, namely, Bumo, Tarakiri (East and West), Oporoma, Olodiama, Basan, Kabou, Tungbo, Gbarain, Ogboin, Ekpetiama, Kolokuma, Mein, Ekeremo, Apoi, Ibeni, Kumbo, Iduwini and Oyakiri, the inland Ijaw comprises of Biseni, Akita and Oruma; while Nembe Akaha are the dialects of Nembe and Akaha.

The Iduwini speaking Ijaws of Ekeremo Local Government can be found along the coastline between the Forcados Estuary in Delta State and Pennington River in Bayelsa state. The Portuguese pilot Pereire (1964) attested to the existence of this Ijaw tribe in 1508. According to Iduwini oral traditions, the town of Amatu in Bayelsa was the place out of which all other settlements originated. One will find bronze bells in the shrine of Suogbosu (Suo Egbesu) the national god of the Iduwi. (See figure 3.3.3 (i) & (ii)

Rivers state has Ijaws and the Ikwere. The most important urban industry in Niger Delta is the oil and gas industry. These areas referred as the treasure base of the Nation because the Nigerian Government earns approximately U.S $ 20 Billion a year or 90% of its revenue from crude oil.

3.3.4 Delta and Edo State

Delta and Edo States were formally one state called Bendel State (a contraction of the phrase BINin DELta). Edo State had the majority speaking Edo and other which had more heterogeneous mix of ethnic group (Delta State).

The main groups in the Edo State are Edo, Esan, Afemai, Owan and Akoko Eso. All the ethnic groups have things in common apart from the fact that they share common origin, they are exposed to the same cultural influence; a lot of communities in the state trace their roots to the ancient kingdom of Benin. Customs, burial rites, diet and traditional modes of dress tend to be similar throughout the state. The political pattern and behaviour were based on a system under which both monarchical and republican ideal flourished in an integrated manna. The monarchical (or chieftaincy) system revolved largely on primogeniture, while the republican element was reflected in the free selection by villages and communities of elders.

Delta State has Delta Igbo speaking People and Ijaw with other minority ethnic group Uromi.

Delta State has two important cities that play a significant role in the development of the Country. Sapele is situated at the headwaters of the Benin River, which flows out to the Niger Delta. Sapele is one of the major ports in Nigeria and has a wide variety of industries, processing timber, rubber, and palm oil. The demand for timber in the earlier part of the 20th century attracted workers from all over Nigeria to Sapele and contributed to the city's rapid growth. Sapele is the center of the Nigerian timber industry. Furniture manufactured from this timber is another important economic activity. Rubber plantations thrive on the outskirts of Sapele. The city is also a center for shoe production and has a major fishery. The Okoma Game Reserve is an important tourist attraction located on the outskirts of the city. (see figure 3.3.4 (i)-(v)

Warri, city is also located in Delta State. Warri is a major port city in the Niger Delta and serves as the cargo transfer point between the Niger River and the Atlantic Ocean. The major items shipped from the Warri port include rubber, palm products, cocoa, groundnuts, hides, and skins. Industries include bicycle assembly, rubber processing, and ship repair. Canoes, rope, and mats are among the traditional handicrafts produced in the city. In 1987 a major petrochemical complex was established at Warri; it produces plastics, pharmaceuticals, and paints.

3.3.5 Ondo State

Ondo State was create on the February 3 1976 by formal head of state, General Murtalar Mohammed the people are mostly of the Yoruba race although other Nigerians and nationals co-exist peacefully everywhere in the state the most know groups are the Akoko, the Akure, the Ekit, the Ijaw (made up of Apoi and Arogbo), the Ikale the Liaje, the Ondo and the owo. Generally, the people have similar customs, traditions, costumes and language. The people are lovers of arts, music (e.g. Onitun dance), witty sayings and poetry. (See figure 3.3.5)

3.4 SOCIO-CULTURAL ACTIVITIES IN NIGER DELTA

Human activities are still largely control by natural conditions, which in some areas limit the occupation of the people to fishing in a region which already has too much surface water, a high rain fall, which is associated with floods and swampy area creates limitations in terms of settlement and land use for cultivation.

The human activities in Niger Delta can be broadly categories into two groups "landsmen" who occupy the drier land at the head of the delta, and the "watermen." Further south the landsmen consist of the Urhobos, Isokos and Igbos whose occupations, include farming, fishing collecting and processing palm and hunting. In contrast the watermen, the Ijaws and Itsekiris, are essentially fishermen and traders with less diversified economy; and they depend on the landsmen for such essential food items as yams, grains and fruits. In the past, they produced salt which they traded with the landsmen for food crops such as Yams.

3.4.1 Farming.

Yams and Cassava are the main food-crops grown by the landsmen. Maize. Cocoa Beans, Beans and Groundnuts are interplant in the same fields. Yam of which many varieties exist, are the crop of the men while cassava and other crops are cultivated by the women folk. Another important occupation of the landsmen is the collecting of palm fruits which they process and sell.

The landsmen of delta also fish but do so, part time. Canoe building is an important industry since canoe is the only means of transportation in many areas. Canoe is also important in local fishing industry and fortunately, this part of the delta provides necessary trees for the industry. Other crafts include pottery, basket-making and mat making.

3.4.2 Forestry

The bulk of Nigeria's forest production is fuel wood, consumed either as wood or as charcoal. In 2000 fuel wood production was 91 million cubic meters (3.2 billion cubic feet), harvested mostly near dense urban areas. By contrast,

annual lumber production—mostly hardwoods such as mahogany, iroko, and obeche—averaged 2 million cubic meters (71 million cubic feet), almost all from the tropical forest zone. Consequently, Nigeria, once a significant exporter of timber, is a net importer. Ongoing, rapid deforestation makes it unlikely the situation will improve appreciably.

3.4. 3 fishing

The environment of the watermen precludes farming except in few districts like Ozobo in western Ijaw division where the levels lining the creeks are cultivated with water yams, cocoyam, cassava, plantains and maize. In Itsekiri area, where some cultivable land exists, there is virtually no cultivation since the Itsekiris look down on agriculture as **"**slaves work" their main occupations being trading and creek fishing. Fishing rights are as important to them as land rights are to the people farther inland and disputes over fishing rights occasion much litigation. nearer the open see, the watermen specialize in sea fishing and may travel considerable distances away from their home Ijaw fishermen are found as far east as Cross-River estuary and southern Cameroon's coast, and westwards they may be found around Badagry and Dahomey. Fishermen who travel to fish in distant waters usually stay away from home for many months

Various species of catfishes, tilapias, and Nile perch, among others, are harvested using small-scale and traditional methods. Sardinellas, bonga shad, and shrimp are harvested from the Atlantic Ocean. In 1975 the government established the Nigerian National Fish Company to enter into joint fishing ventures with foreign companies. Most of Nigeria's 293 vessels larger than 100

gross registered tons are concentrated inshore at the Niger delta region; deep-sea fishing is still dominated by foreign boats.See (figure 3.4.2).

3.4.4 Wine and Gin production.

The distillation of gin from wine obtained from the raffia palm is a longstanding traditional industry, which has now become the main source of income to some Ijaw groups in the western delta. At Ozobo, in Midwestern Nigeria. This industry is the main source of money for taxes, school fees and even for community development projects. The Gin is produced in large quantities and exported in bulk by canoes to riverside ports like Onitsha, Jebba, Lokoja and Yola as well as to the seaports of Warri, Lagos, Tiko and Duala in Cameroon.

3.4.5 Traditional craft

In Niger Delta, carving, cane and raffia work are important crafts in the Annang areas of Ikot Ekpene and Abak carved figures include masks of various shapes. The toys, doors, chairs, stools and trays are made from cane. A wider range of goods come from raffia and these include bags, mats, toys and hats. These products are made in rural areas and in scattered homesteads and their distribution was not organised until recently, when a dealer's co-operative society was formed at Ikot Ekepene.

Edo people that are in Benin also have an outstanding artistic works which distinguished them in their art and crafts work.

Another important craft industry is the cloth-weaving industry centred at Akwete along the Imo River. Raffia and Sisal hemp were use for making it.



Figure 3.3.4. (i) Benin women in their traditional costume

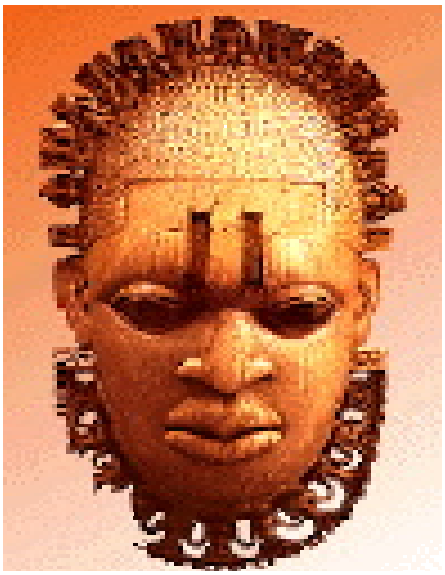


Figure 3.3.4 (ii). The world famous mask Of Queen Idia. FESTAC 77 symbol Sources (internet)



Figure 3.3.4 (iii) Benin bronze plaque sources (Encarta)



Figure 3.3.2 Wapakabo: By the Kalabari people of Rivers state

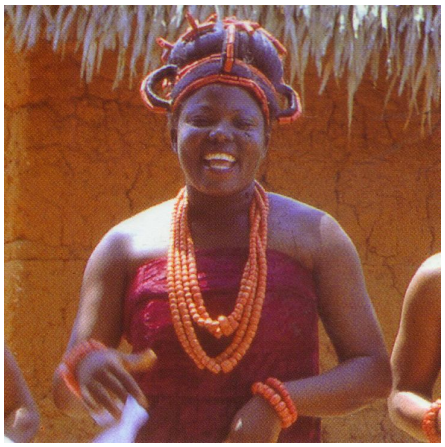


Figure 3.3.4 (iv) Ugbo: traditional royal dance from the court of the Oba (king) Of Benin, Edo state



Figure 3.3.5 OBITTUM: a maiden amongst Ondo state



Figure 3.3.2 AGANG: Efike dance Dance origin from Cross Rivers

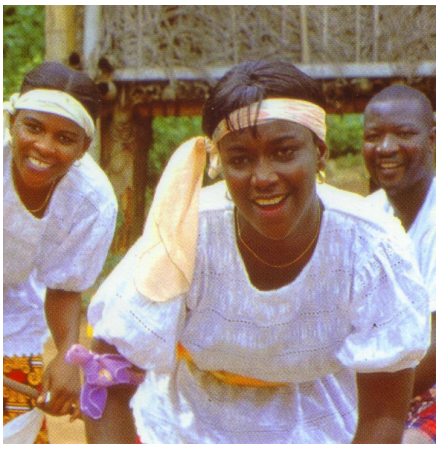


Figure 3.3.3 (i) KOROBEDI: An Ijaw Dance from Bayelsa state

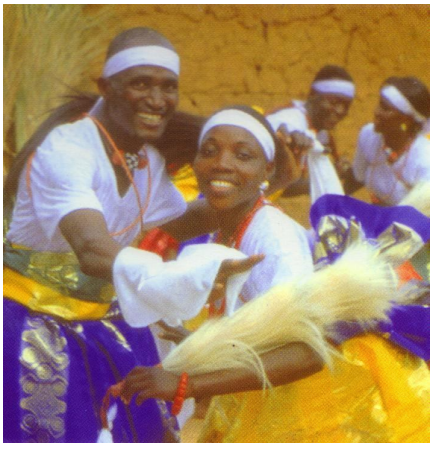


figure 3.3.4 (v) OMOKO: folk Dance of the Itsokiri of Delta State



Figure 3.3.1 Maiden dances from Igbo land



figure 3.3.3 (ii) Rivers state, Celebrating fishing festive.

Sources (shell petroleum calendar)



Figure 3.4.3 (i) fishing in the Niger Delta region.

Sources (Chevron Texaco magazine)



Figure 3.4.1 Draying cocoa Beans in Niger Delta region

Source (enchanter)

3.5 NIGER DELTA ARCHITECTURE

The houses erected by a particular society are in a style, which had been communally worked out over several generations and consequently tailored to the needs of the people (Denyer, 1978). Whether change is accepted or rejected depends on the structure and ideals of that society. Therefore, the way of life of people, the climate and environment in which a society finds itself as well as its social values are all reflected in the kind of houses individuals in that society build and live in. Most of the designs that are incorporated in the architectural forms among several societies carry a lot of meanings that may be dictated by political, social, aesthetic, cosmological and religious considerations (Aniakoar, 1978). Hence among the Igbo the 'ichi' marks that are worn on the fore-head as a protective envelope and badge of political authority are transferred on to carved doors as panels that adorn the compound entrances in order to imbue these entrances with their political symbolism while the elements of carved decorations found in the Ekpe society of the Cross River in south-Eastern Nigeria, whose collective symbol is the leopard, helps to underscore the mystical and political authority of that cult and society (Aniakor, 1978;1979).

Igbo building

In Nigeria, two basic types of architectural design are identified and these are the rectangular and circular types (Egowa, 1994). Aniakor in his study of house types and their variations in southern Nigeria have identified two basic house-types for the northern Igbo land, namely: the rectangular house-types with a rectilinear plan, and the spare house with a square base plan (Aniakor, 1995). The rectangular houses-types have rectangular walls underneath a gable roof

held by wooden posts. The roof, which has very low eaves, is thatched with grass. The low eaves protect the walls from the heat of the sun, consequently making the interior or the building cool. These house-types occur in Udi and Nsukka areas. In other areas of the northern Igbo land such as Awgu, the circular plan type predominates while the oval-type plans serve as its variant. The square house-types, which belong mainly to the wife/wives of the owners of the compound, have a pyramidal roof with low eaves. In this case, the circular and oval house-types are arranged in a circular form within the compound space that has the shrines at its centre and the family head's house with two entrances facing the compound gate (Aniakor, 1995).

In southern Igbo areas such as Owerri and its environs, the common house type is the rectangular type, which is usually built by the wattle-and-daub method. In this area, house units are arranged on all sides within the compound space and they serve to define the perimeter of the compound in the absence of compound walls, with the reception house (Obi, Ovu, Obiri or Otobo) situated at the entrance to the compound. In the Cross River area the most common house type is based on the courtyard architecture.

Yoruba building

The Yoruba's of the south-western Nigeria erect large rectilinear court-yards with mud laid in courses which are later smoothened. This technique is called mud impluvium. The mud is added in courses of about a half-meter high and about four courses are enough for a normal house height. There is a distinguishing scale inherent in Yoruba architecture which conforms to the status

of the individual in the society. For instance, the compounds belonging to ordinary people may have one or two internal compounds or courtyards that are roughly rectangular in shape surrounded by a veranda on all sides to which the various rooms open, while the palaces (affins) usually have an indefinite number of courtyards that are connected to each other. The palaces are usually walled around in order to ensure privacy and security for the Oba (Olaoba,1995). The Yoruba palaces, residences of the kings, were in the past the most impressive buildings of the towns in the western region of Nigeria. Architecture among the Yoruba was designed to assert individual privacy as well as promote group cohesion and social interactions.

Edo building

The Edo of mid-western Nigeria adopted the courtyard and impluval style architecture similar to that of their neighbouring Yoruba. Like the Yoruba, they build rectilinear courtyards with mud packed in courses of about half a meter high. In Benin (Edo), the Oba is allowed more than four courses of garbled thatch for roofing. The Edo architectural style, like that of the Yoruba, makes organization in family units around the court possible.

Niger Delta building

In Niger Delta, among the mainland Izon (Ijaw), Urhobo, Isoko and Itsekiri, the common house-type is the rectangular type and is constructed on the principle of wattle-and daub and later plastered with mud (Eegonwa, 1994). The Izon (Ijaw), dwelling in the swampy areas of the Niger Delta, build temporary structure of straw-screened house mounted on silts which could be abandoned if the area is flooded at high tide.

Settlement patterns and compound form

Generally, the town form reflects the social and political organisation of the people. In Rivers state this can be seen both at the level of the town and within individual compounds. Palace is strategic location in relation to the ancestral shrine and the town square. This signifies that the king is the custodian of the traditional heritage of the people. The location of the palaces often at the centre of the town implies that the social and political systems of the people revolve around them.

The settlement patterns are mainly linear along river banks in the riverine areas, and circular in areas further inland, but close to rivers.

Compound forms are generally U – shaped, with buildings arranged to form the (U – loop) around a central courtyard or private open space. The compounds are accessed from a straight road that closes the 'U' to form a loop

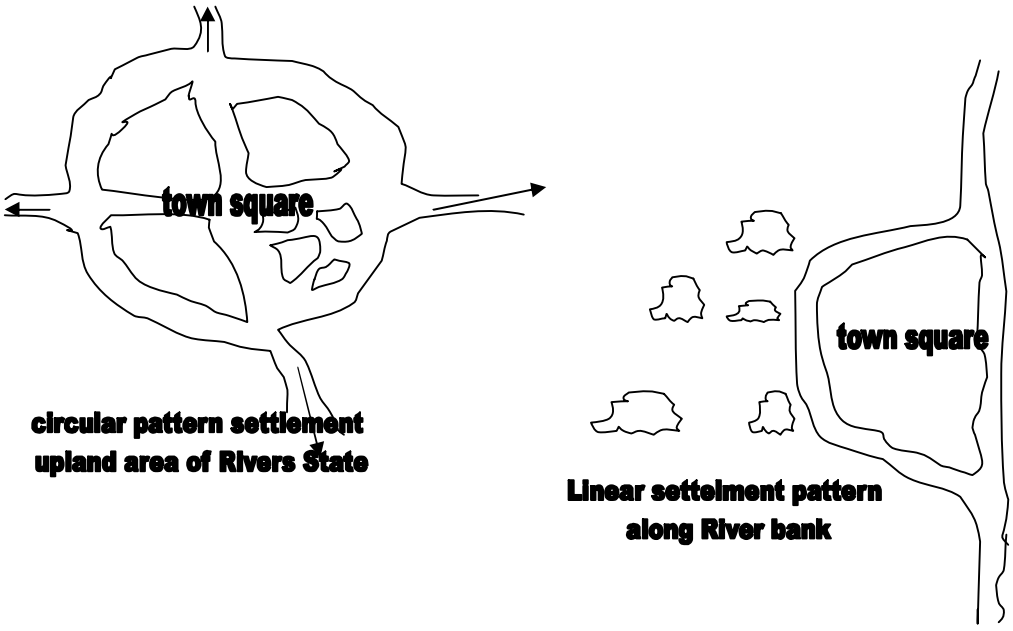


Figure 3.5.1 Rivers state settlement pattern

TRADITIONAL BUILDING FORMS

Traditional forms are those building forms that are widely used by our own local indigenous builders as could be found in the rural areas of this country. They include:-

The circular plan form

Is the fundamental form of all buildings and marked a pioneer stage to all house from which subsequently evolved from it.

Advantages

i) The circle requires only a simple process of setting out.

ii) Most spaces on circular plans are multifunctional in nature.

iii) The circle projects expressions which include psychological security.

iv) The circle rejects expressions that are aesthetically unique and images created are perceptible within traditional concept of aesthetics

Disadvantages.

i) The roofing system is mediocre; since it appears that the only type applicable is the conical types. However, cultural contacts, especially in the Islamic areas have introduced the use of domes.

Contemporary building form

Modern day building forms, commonly in use today are basically derivatives of the three primary shapes which have been with man since time immemorial. These shapes are the circle, triangle and the square. All others derive their forms in one way or the other from them.

CHAPTER FOUR

CASE STUDIES

4.1 CASE STUDY: SECRETARIATE BUILDING

LOCATION: Botswana, South Africa.

CLIENT/USER: Botswana Government

ARCHITECT: Bannie Bannie Britz and Michael Scholes.

The secretariat was designed by the South African firm. Bannie Bannie Britz and Michael Scholes. The construction period spanned from 1978-1983. It comprises of a Civic centre and offices for Government and civil servants.

Appraisal:

Each building within the complex features generous lobbies' conveniences and corridors. The architects noted that the traditional Tswana town was the guiding concept for the complex with the central courtyard of the complex representing the traditional town square around which sectors of the town are ordered.

This line of thinking arose primarily as a result of the request by the President of the homeland, for a Tswana building where the where the history and identity of the users should be recognised as the contemporary functional needs are catered for. The eventual design solution was circular in plan with clear circular elements on the elevation to communicate the overall concept.

FORM

The form of the building is circular in plan and translates into a cylinder on the vertical axis. The cylindrical mass is however, punctuated on the external façade by bold circular cuts. In line with the analogy of the Tswana town, the

roofing of the complex is compartmentalised in sectors to create an illusion of individual huts. The internal buildings are cubic in form providing ample variety and a break in monotony of the circular enclosure.

CIRCULATION

The circulation within the complex is defined along two major axes that cut up the circular plan into four main sectors. The ceremonial entrance to the complex is through the President's building and all the circulation paths intersect at the huge central courtyard.

Circulations between levels are by means of ramps and stairs and exposed internal walkways are open to allow visual exploration of the complex as well as allow an awareness of the sense of place.

SPATIAL ORGANISATION

The building basically comprises of five major components. The largest is the six hundred metre long horseshoe shaped four-storey office accommodation. There is the president's building on the north, the parliament building on the southern end while two ministry buildings by the sides which lie on the east and west ends.

The relationship of the components with the courtyards is similar to that between open spaces in towns and individual buildings.

Careful thought is put to the landscaping, to accentuate the feeling of a traditional setting through the use of indigenous trees, fountains and elaborate art works.

To control the climate low level openings are extensively used while sun shading devices and adjustable louvers are used to achieve adequate sun

shading. In addition, the upper part of the building is stepped to further achieve a copious macroclimate.

MATERIALS

The major material used in the complex is brick, which is left bare in most areas. Local Taung marble is also used for finishes in the building.

In other areas linoleum, quarry tiles and slate are used to create a much needed variety and colourfulness. Glazed tiles, timber and slate is used on other wall surfaces. Timber is used on internal surfaces for the cylindrical vaults, partitioning, doors and handrails.

For the roof, concrete shingles are used while concrete barrel vaults, finished with bitumen felting, cover the curved cylindrical roofing over the walkway.

MERITS

i) A clearly defined concept exists and it is seen to control the entire Architectural expression

ii) Circulation patterns are very simple.

iii) The planning and massing concept enhances macro climatic control as well as adequate lighting. The materials used are indigenous to the people. Hence, lending the building to an intimate appreciation from the people.

DEMERITS

i) The building concept is taken solely from one tribe.

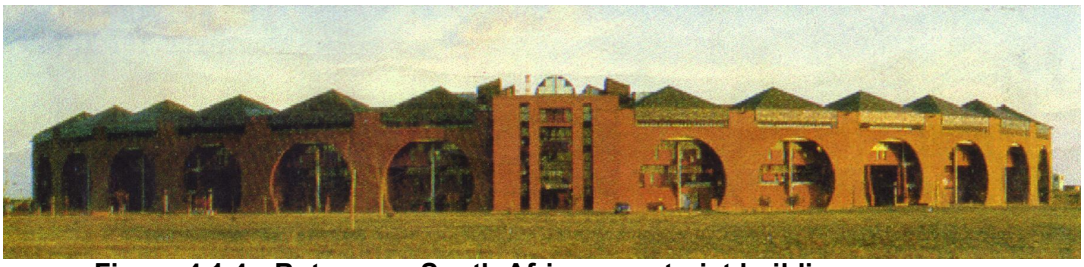


Figure 4.1.4 Botswana, South Africa secretariat building
Approach elevation

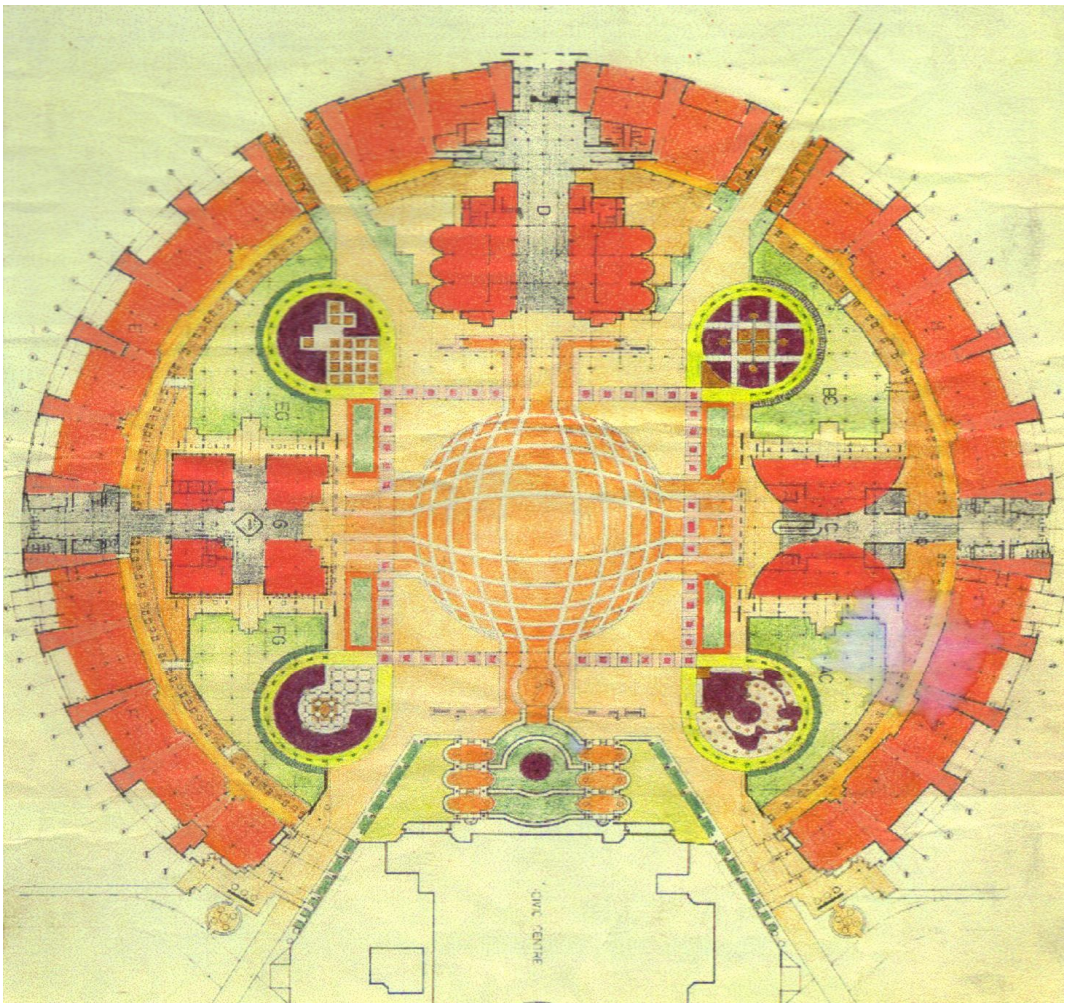


Figure 4.1.2 Botswana, South Africa secretariat building
Floor plan



Figure 4.1.3 Botswana, South, Africa secretariat building
Arial view

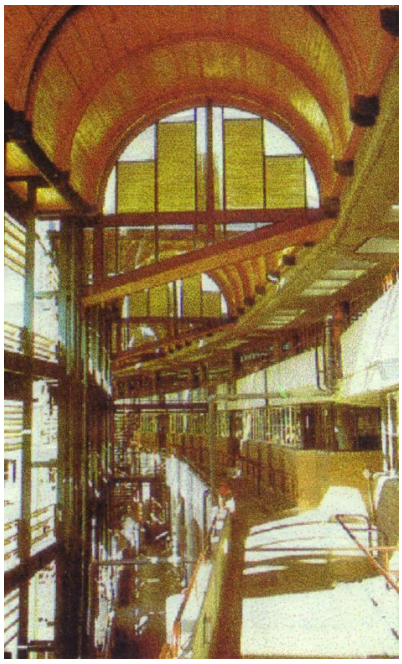


Figure 4.1.4 Botswana, South, Africa secretariat
Interior view

Sources (unpublished thesis)

4.2 CASE STUDY: ECOWAS FUND SECRETARIAT

LOCATION: Lome, Togo

CLIENT/USER: ECOWAS FUND SECRETARIAT

ARCHITECT: Pierre Goudiaby Atepa

Senegalese Pierre Goudiaby Atepa is perhaps Africa's most famous architect. He has astounded critics not only by the quantity but also by the quality of his works. *"In our buildings we use the latest technology from all over the world but we make them look African and feel African"*. This was his response to what the 20th century African buildings should be. His projects across the countries of western and central Africa portray African vernacularism on the building facades, the sculptural nature of concrete to achieve this- amongst other approaches. He has achieved this in different ways in his works. In fact, what is unique about his works is that he hardly repeats the same communication theme in his designs. It shows that many aspects of African traditional concepts exist that can be utilized to achieve regional character or identity in architecture. He has this comment on African identity for architecture. *"African architects must emphasize black African traits in the design, decoration and colour of their buildings. They are in a better position to take account of local climate and indigenous social values, as well as to integrate modern techniques*."

Appraisal:

The concept of the two towers bridged expresses unity, which is commendable for a complex like this. African symbolism has also been adequately exhibited in this complex both in expression of technique and in the

symbol of use approaches. Atepa has successfully composed the forms and integrated elements to convince all and sundry that this is indeed an African edifice.

This monumental aspect of the structure tends to be symbolic of African integration. The sixteen floor tower represents the sixteen member countries of the ECOWAS. The 13-floor tower represents the 13 stages to economic development. There is a sculpture of three meters scale representing the African woman to which the building is dedicated. The building is composed of two buildings connected by a true bridge, which points out the existing bond between the member states. The water symbolizes a point of abundance and fertility. The conference room is a turned-over water bottle (calabash), which symbolizes protection.

Basically, there are two major materials used in the construction of the building: glass and concrete. The curtain walls are interfaced with sculptural concrete fins, which are further complements with the African motifs located at the roof level of the parapet walls.

Form

The complex is made up of two towers of different heights the west tower is 16-floors and the east tower is 13- floors. There these two towers are sectors/ segments of a circle, which dramatically bridges on the seventh floor it has a sunken circular conference hall set in the sector formed by the arc-shaped complex.

Circulation configuration

The circulation patterns is simply a mirror of the other it is a deep planning with the staircases located at the extreme end of the buildings and two lifts located at the other end of each tower.

Spatial organization:

Considering that it is offices design, the functional arrangement of the spaces is quite commendable. An important part of the complex is the conference hall, which has a sunken access way covered by a glazed space-frame and opened at all sides. The ground floor has sixteen boxes to the rear. These are exhibition galleries for the sixteen ECOWAS members.

Merits

i) There is an attempt to express African architecture through successful symbolic representation of forms, elements and colours.

ii) There is an attempt to express or symbolize African integration and development through the dramatic bridging of the towers.

iii) There is a clearly definition concept which is seen to control the entire architectural expression.

Demerits

i) There is confusion in accessibility due to the two created carport entrances by the interwoven road network.

ii) The building has little or poor security considerations due to the open access from the sides of the complex to the conference hall.



Figure 4.2.1 ECOWAS headquarters Lome Togo

Sources internet (www.atepa.com)

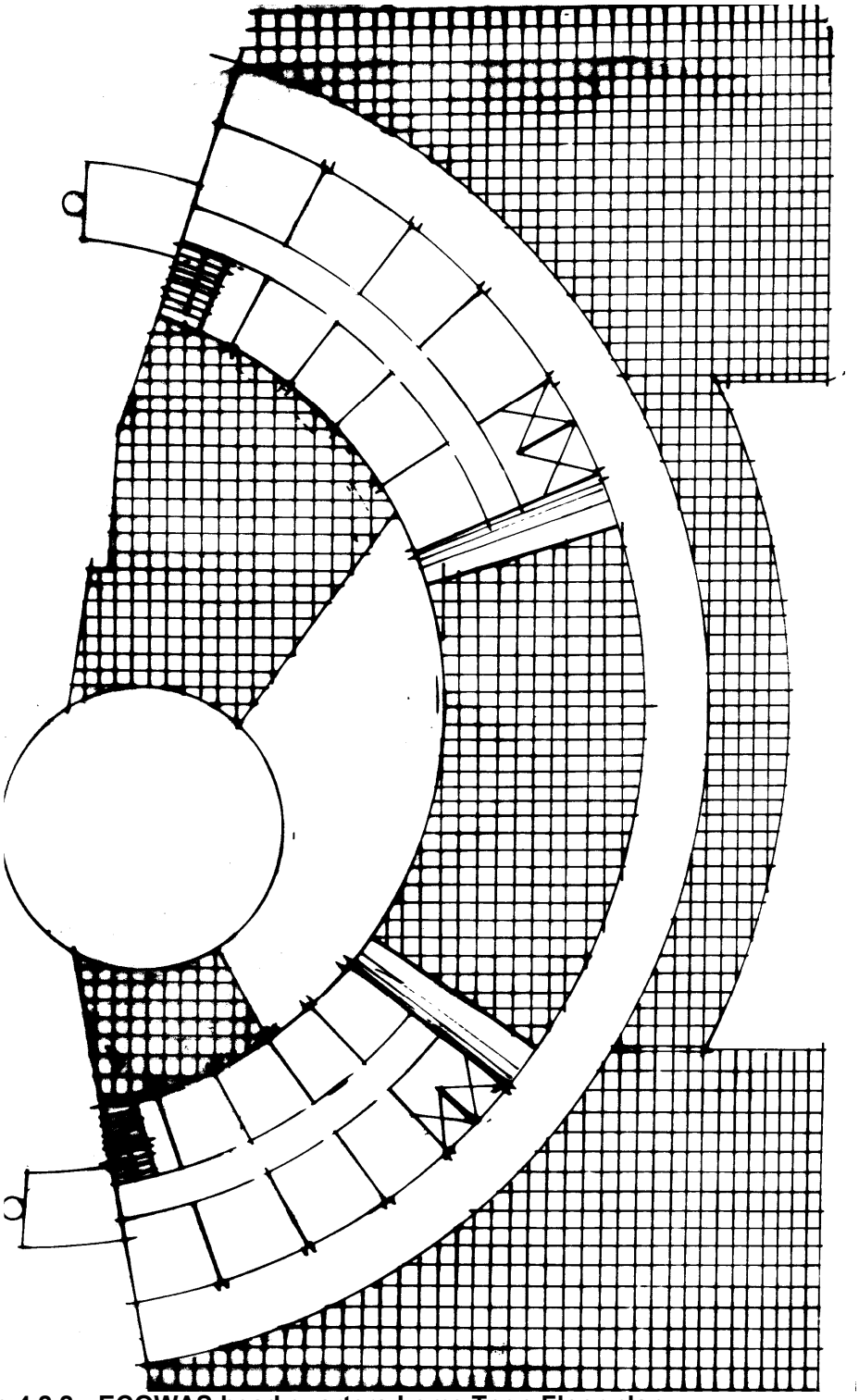


Figure 4.2.2 ECOWAS head quarters Lome Togo Floor plan



Figure 4.2.2 Central bank of Senegal approach source (internet)



Figure 4.1.3 Central bank of Senegal approach source (internet)



Figure 4.1.4 Central bank Senegal rear source (internet)



Figure 4.1.5 Central bank Senegal Approach source (internet)



Figure 4.2.6



Figure 4.2.7



Figure 4.2.8 Atepa interior design

'This edifice, which symbolizes liberty, peace and Equilibrium, mirrors the movement of something taking off for a new destination. A departure towards development.'



Figure 4.2.9 Pyramid House Atepa office

'This truncated pyramid houses the working premises of the master Architect. It constitutes a solid backdrop for his budding projects. In the interior of the building, the emphasis is on thermal comfort, in response to the stifling summer heat.'

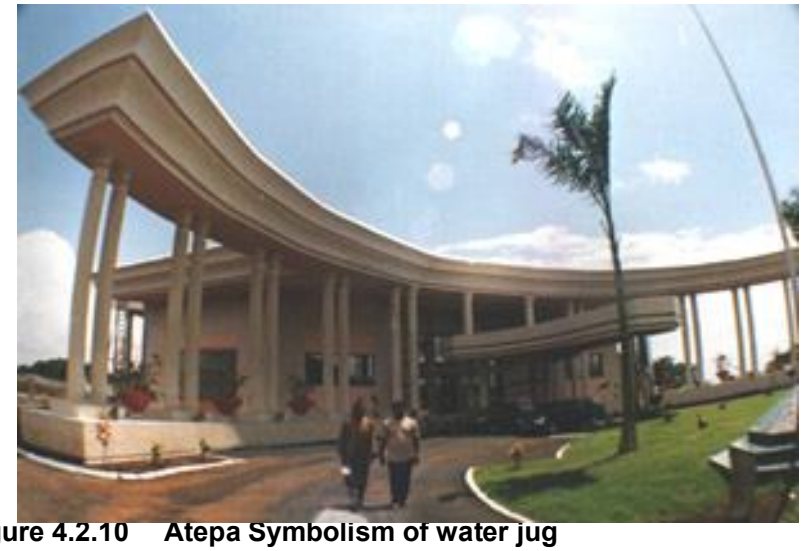


Figure 4.2.10 Atepa Symbolism of water jug

Source internet (www.atepa.com)

'In every compound in Africa, one finds an earthenware water jug. It is again the background of this statement that one should judge the attraction that the water jug commands in traditional architecture. Together with the compound itself, it constitutes a recurring element and symbolizes abundance.'

Brief summary

In all Atepa design he exemplifies Africa symbolism with modern technology. But critics say they should not be built. Western donors have singled out 'Goudiaby-type development' saying it overextends Africa. "You have to learn to walk before you can run," said one World Bank representative in Dakar. “Wrong," says Goudiaby. "When they claim, 'Hey, you folks have to use local materials', they still think we should live in mud houses." He looks at how the United States has developed. "Many Americans are poor and yet America is the richest country in the world. Why? Because they try to live out their fantasies with skyscrapers and Disneyland. People there know that if they work hard they can have anything. It should be the same here."

4.3 THE KENYATTA CONFERENCE CENTRE

LOCATION: Nairobi, Kenya.

CLIENT/USER: The Government of Kenya

ARCHITECT: Karl Henrik Nosvik

BACKGROUND:

The Kenyatta conference centre became operational in July 1973 and several international conferences have been held there. It is highly functional and is located in the very heart of Nairobi city and therefore has been well utilized. The Kenyatta conference centre has been described as one of the most practical complexes of its kind in the world achieving African identity. The conical African roof has been styled for amphitheatre. The cylindrical office tower is clearly visible on the skyline of Nairobi.

Appraisal:

The Kenyatta conference centre achieved some sort of African identity through the use of symbolism, elaborate in approach with maximum respect for flexibility and circulation. The revolving restaurant and African style conical roof of the amphitheatre are very innovative. The location of the centre is excellent enhancing its utilization on a daily basis.

Facilities:

The centre consists of an extremely large plenary hall to the East, a magnificent amphitheatre to the West and a twenty six story administrative tower mounted in between. On the twenty-six floor of the cylindrical tower is a revolving restaurant from which panoramic view of Nairobi can be appreciated.

Plenary hall:

Facilities include complete sound amplification and interpretation booths with simultaneous interpretation by wireless system. Two observation galleries can accommodate four thousand delegates, Banquets can serve two thousand, five hundred people while cocktail parties may host up to five thousand people. The halls also function for exhibitions.

Medium Size Conference Rooms:

Each room has accommodation for about four hundred people with six language interpreters' booths with simultaneous interpretation by wire system, public address, microphone and tape recording facilities. The design concept of two separate rooms each a mirror reflection of its neighbour, makes these two meeting room uniquely suitable for bilateral type conference meetings.

The amphitheatre:

The mushroom shaped amphitheatre seats eight hundred at tables on three balconies circling the main auditorium. The podium is on the central balconies circling the main auditorium. The podium is on the central balcony immediately above the entrance from the covered walkway leading at the roof level across the main link building from the two main entrances to the complex. This facility is soundproofed with the use of dark grey felt on the walls and floors. The highly pitched ceiling with its patterned louvers provides both filtered daylight to the interior and gibes an interesting sense of proportion to the building.

Press facilities:

A special telex room communicates, with all parts of the world, provision is made for a press coverage complete with bar and catering facilities.

Tower block:

The tower block accommodates office spaces for lease in its majestic twenty-six floors and also banking facilities, postal services, travel agencies, and insurance companies. The offices spaces are open and can be partitioned to suite various office accommodation.

FORM

The form of the tower block is circular in plan and translated into cylinder on the vertical axis. The amphitheatre is conical in shape depicting the Africa roof juxtaposition of slots and louvers on this mushroom shaped edifice enhancing its aesthetic qualities. The third building consists of the L shaped podium base.

CIRCULATION CONFIGURATION:

The circulations within the complex are well defined. The main entrances are located in the podium on the opposite side and are linked by reception hall. There is access to the offices and restaurant via staircases and lifts or various meeting rooms located under the plenary hall or the amphitheatre through walkways and staircases. The roof concourse also links the tower to the amphitheatre.

MERITS:

i) A well-defined concept displaying African identity in the symbol of use.

ii) One major problem with this kind of design, being; circulation has been solved using different levels.

i) The location or the centre at the heart of Nairobi enhances it utilization on a daily basis.



Figure 4.3.1 The Kenyatta International Conference Centre, Nairobi



Figure 4.3.2 kenyatta international conference centre, Nairobi
Sources internet (www.kenyattabuilding.com)

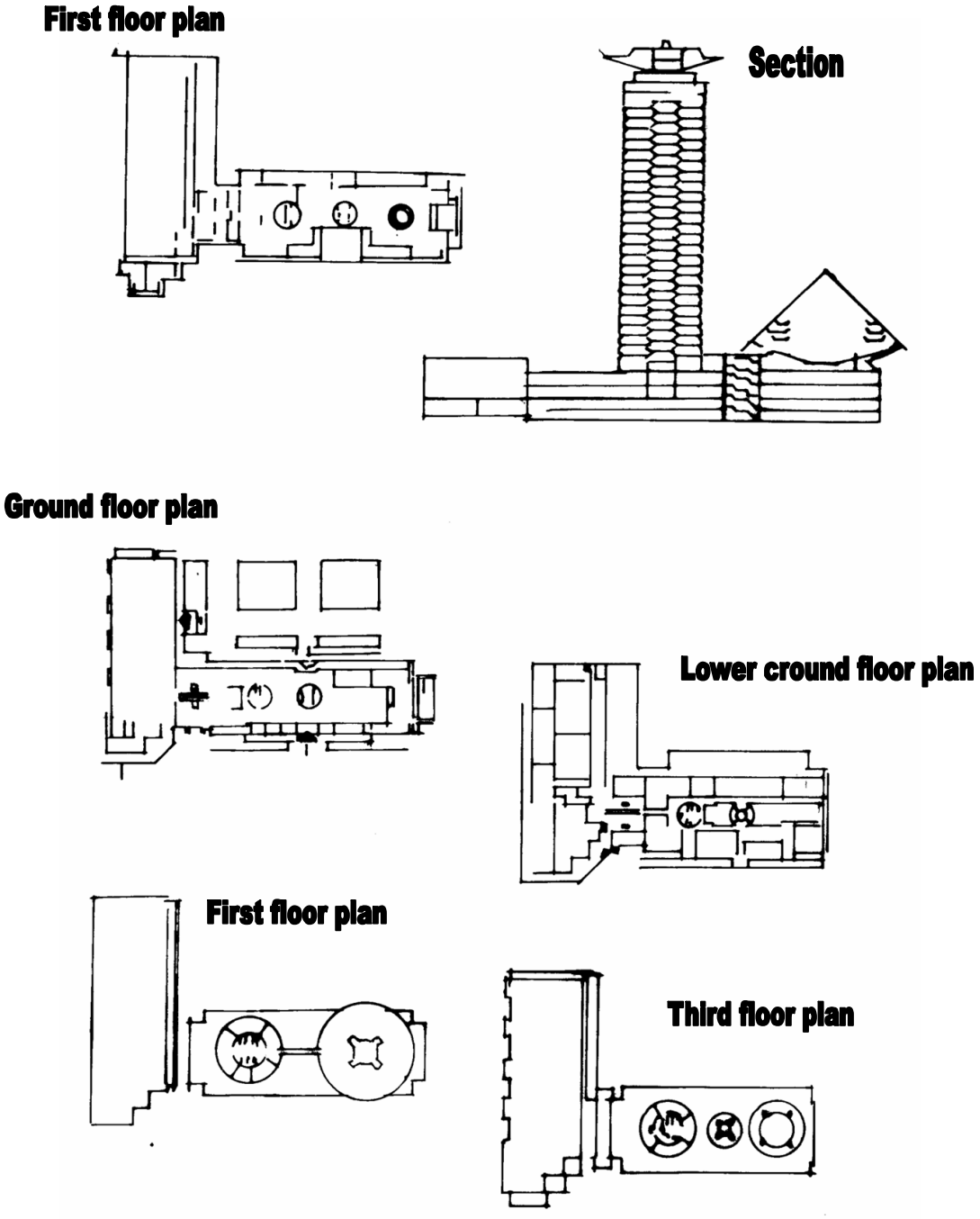


Figure4.3.3 the Kenyatta international conference centre, Nairobi
Plan & sections

4.4 FEDERAL KADUNA.SCRETARIATE,

LOCATION: Kaduna State, Nigeria

Client/user: Federal Government

Architect: Prime Consultant, Research & Chartered Architects.

BACKGROUND:

The Federal Secretariat Kaduna was built in early 80's and was constructed in mid 80's. Several federal functions are executed their. The secretariat is highly functional and it is located along the major road (Ahmadu Bello Way) in Kaduna.

Facilities:

Administration Apartment

Offices

Staff restaurant

Conference Hall

Auxiliaries

-Parking for members and other staff

-Public parking spaces.

Appraisal:

Federal Secretariat Kaduna is a linear rectangular building which is sub-divided into three rectangular spaces with the centre larger than the other rectangular spaces. The building has five levels, the basement, the ground floor, the first, second and third floor. The building has two approaches. The main approach is from the front, the staffs and the visitor mostly approach the building from the side. The parking space are covered.

The secretariat is constructed of concrete block and aluminium glass frame windows.

Circulation:

The circulation within the secretariat is well defined. The main entrance is located on the approach elevation and the second entrance at the side of the building. The various offices are accessed through walkways and staircases.

Merit

i) Single entrance access to the site is good for control and reduces cost of keeping too many staff.

ii) Circulation on site is well defined.

iii) Simplicity is achieved.



Figure 4.4.1 **Federal Secretariat, Kaduna parking spaces**



Fig: 4.4.2 **Federal Secretariat, Kaduna main entrance**



Figure 4.4.3 Federal secretariat, Kaduna approach from side view



Figure 4.4.4 Federal Secretariat, Kaduna court yard

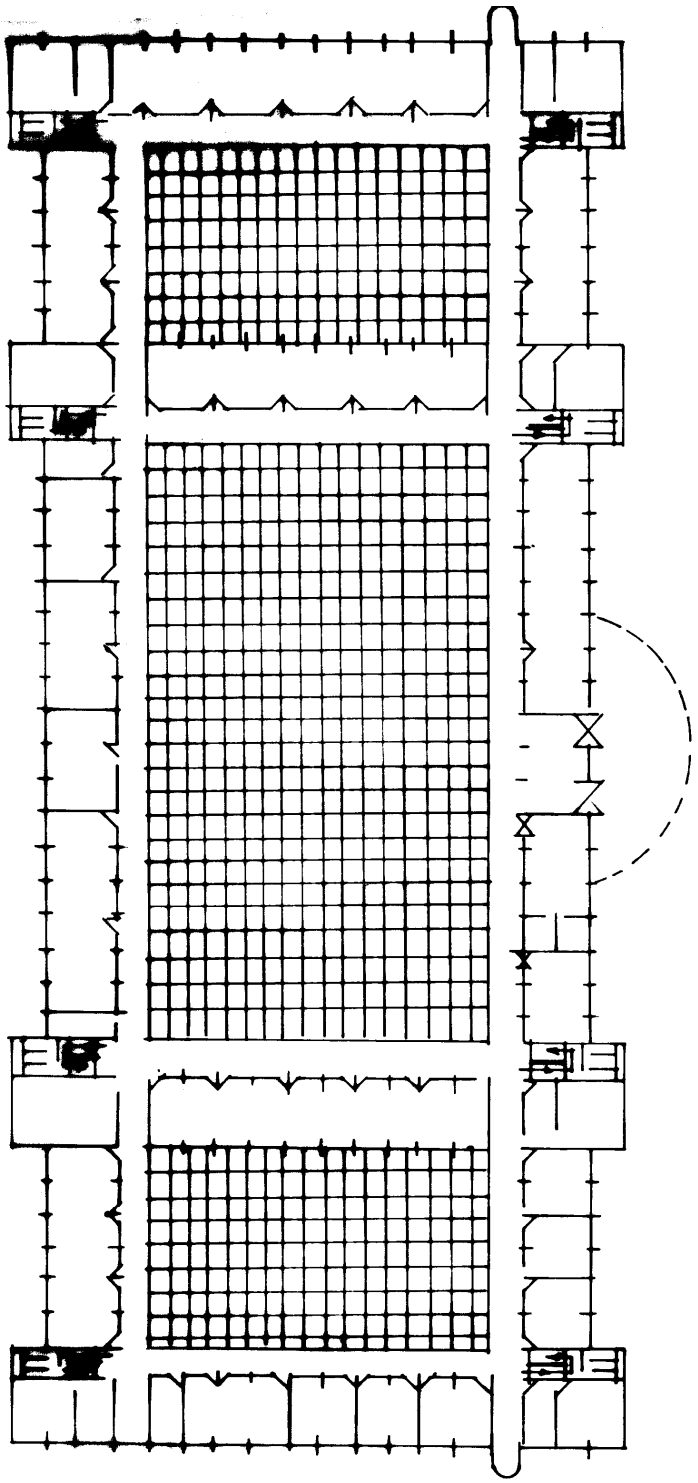


Figure4.4.5 federal secretariat Kaduna Ground plan

Functional spaces of the federal secretariat, Kaduna

Basement

Name	no of bays
Fed staff clinic	$7^1/_2$
Canteen	$9^1/_2$
Fed Works co-operative society (store)	$^1/_2$
Auditor general of the federation	10
F.M. W & H (electrical)	2
Nigerian society of engineers	2
Nigerian prisons service	6
Prisons, customs & immigration pensions board	2
Fed Min of aviation (metrological department)	6
Fed mi of external affairs	5
Stores	18

Ground floor

Federal pay office	18
Fed ministry of information	9
F. M.W &H (pub. Bldg, urban &Reg Dev)	18
Federal internal audit	8
Nigeria immigration service	20
D.N.C.R	11
Nigerian customs service	8
Federal character commission	8
Raw materials development agency	$4^1/_2$

N.Y.S.C (liaison office)	3
First floor	
F.M. W & H	9
fed min of environment	8
Federal staff clinic	6
N.A.P.E.P	12
Committee & conference rooms	12
Second floor	
Federal Min. of education	24
National lives stock	10
F.M. W & H MECH & electrical	13
National steel council	13
Nigeria prisons service	13
Presidential committee on barracks renovation	5
N.D.LE.A	3
Conduct of conduct bureau	11
National orientation agency	19
U.N.D.P	3
Third floor	
Federal character commission	3
Establishment & pensions	3
U.N.I.C.E.F	3
N.A.F.D.A.C	10
Nursing &midwifery council of Nigeria	5

Legal aid council	6
Nigeria prisons service	10
F.M.W & H	18
Fed min of commerce& tourism	18
Fed Min of industries	5
Afaokuta steel mill	6
Federal office of statistics	10

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Brief conclusion

This study has served to familiarise the researcher with existing complex with socio-cultural influence and other projects in general.

CHAPTER FIVE

SITE AND ENVIRONMENT

5.1 THE SITE-PORT HARCOURT

Port Harcourt city is the capital of rivers state and was founded in 1912. The city began to serve as a port (named form Lewis Harcourt), then colonial secretary after the opening of the rail link to the Enugu seal fields in 1916.Port Harcourt city, the capital of Rivers state falls within the south- south geo-political zone of Nigeria, it lies along the Bonny river (an eastern distributory of the River Niger) 60km up stream from the Gulf of guinea. Port Harcourt city is made up of four major areas or parts. These are Diobu, Borokiri. Port Harcourt Township and Trans-Amadi industrial area. On the map Port Harcourt city is to be found on latitude44.6^0 N and longitude70.1^0 E within the tropics.

The city is a leading port of the country, a road and rail hub, and a major industrial centre, and its exports include palm oil, petroleum, coal, tin, columbite, palm products, cocoa, and peanuts. Industries of the area include sawmilling, auto assembly, food canning, flour milling, tobacco processing, and the manufacture of rubber, glass, metal, and paper products, cement, petroleum products, paint, enamelware, bicycles, furniture, and soap. Located in the city are the University of Port Harcourt (1975) and Rivers State University of Science and Technology (1971). The port was established by the British in 1915 and serves eastern Nigeria and parts of northern Nigeria. The Population was estimate 399,700, in 1995.



Figure 5.1 Map of Nigeria



Figure 5.2 Niger Delta Region 1 sources (Encarta)

5.1.1 Geology and Topography

Port Harcourt lies on peninsula with Bonny River to the south, comprising vast deltaic swamps. On the East it is flanked by meandering creeks and on the North is a coastal plane of dry land. A homogeneous layer of silt and sand form the upper soil layer.

5.1.2 Landscape and Ecology

There exists a monotony of mangrove swamps smirched in Nature's dullest green, a landscape not worthy of preservation save for its role in stabilising the delta area and preventing erosion. Inland is a tropical rainforest with fine strands of trees of attractive foliages.

5.1.3 Vegetation

The vegetation cover in Port Harcourt can be classified in three. They are salt water swamp vegetation (mangrove swamps), fresh water swamps inland and a high tropical rainforest vegetation further.

5.1.4 Economic Activities

Port Harcourt is a sea port where export and import trades are carried out. It has served as the base for the exportation of the bulk of economic products of the hinterland in the Eastern zone with Lagos as the base for the engaged in agriculture, production and manufacture with a very good base for economic growth. Oil companies form the dominate industry within the region and the state controls exportation of crude oil in Nigeria.

5.1.5 Occupations

The major occupation of the people of Port Harcourt are fishing and farming with a large number engaging in the distillation of wine from palm trees.

5.2 SITE ANALYSIS

Site selection criteria

The site was evaluated and selected based on the following parameters.

- Easy accessibility
- Sufficient size to accommodate future growth.
- Minimum topographic restrictions.
- Good perceptual characteristics.
- Natural setting.

5.2.1 Climatic Data

Port Harcourt is situated in the sub-equatorial region. It has a tropical climate, which is moderated by the stabilizing influence of the Atlantic Ocean and a layer of humid air over the Delta region.

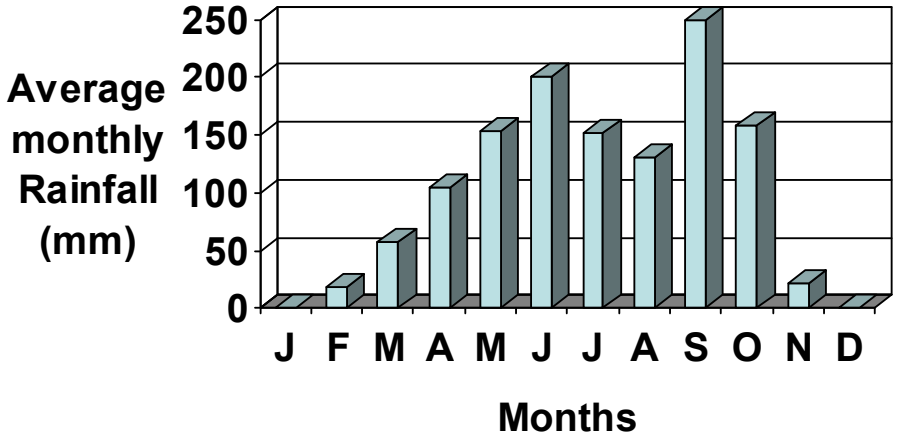


Figure 5.2.1 proposed site in Port Harcourt

i) **Rainfall**

Port Harcourt experiences heavy down pour of rain lasting nearly year round, Rainfall months are from March to September with instances of some downpour in December or January. It reaches its peak in August and most often has a break also in August.

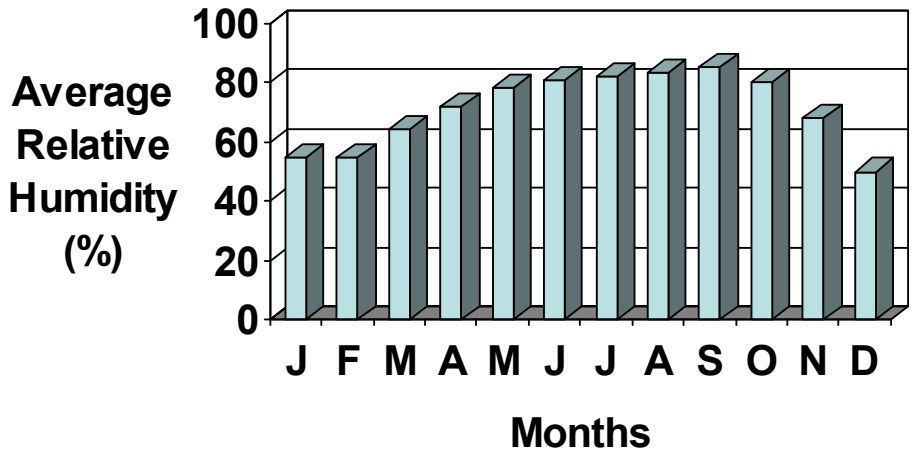
figure 5.1 average monthly rainfall.source:internet



ii) Relative humidity

A high relative humidity prevails in Port Harcourt all year round due to its nearness to the Atlantic Ocean (80% to 90%). This high moisture content, when combined with high temperature can be very discomforting to inhabitants.

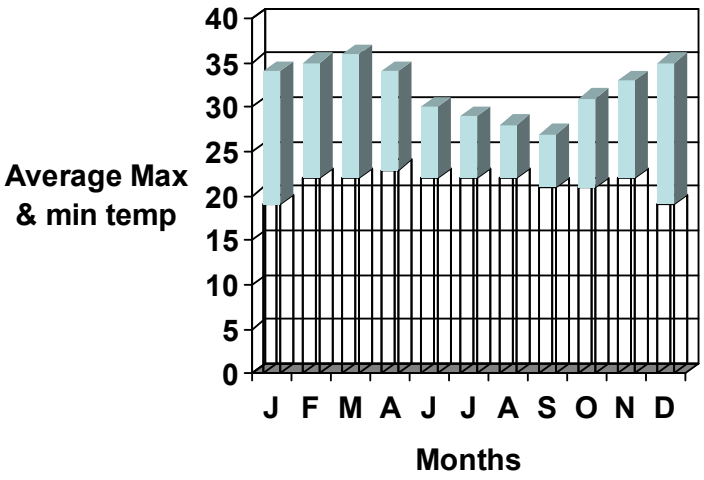
Firgure 5.2 Relative Humidity (%) for Port Harcourt.



iii) Temperature

Maximum temperature values range from about 35^0 C in January when there is little cloud cover to about 28^0c in August, the peak of the rains. Temperature as low as 17^0C have been recorded during the harmattan months.

Figure 5.3 Temprature Range(centigrade) for Port Harcourt



iv) Prevailing Wind

The southwest maritime wind is mostly predominant and blow with constancy from March to November while the north east trade winds blow from about two to three months.

5.2.2 Topography

The topography of the site is relatively flat and gently slopes towards the north western side on the site. The design proposal will consider the slope for easy drainage system

5.2.3 Geology and Soils

The area consists mainly of pale brown loamy alluvial soils developed from sedimentation.

5.2.4 Vegetation

The site is covered by tropical rainforest some part of the land is used as a farm land to cultivate cassava. Some trees in the site should be retained to compliment the design in the area of landscape.

CHAPTER SIX

PROBLEMS AND PROSPECT OR NIGER DELTA

6.1 THE ORIGIN OF VIOLET IN NIGER DELTA

Before the discovery of oil in 1958 in Oloibiri village the Niger Delta boasts an ecosystem that supports plants and wildlife. Subsistence agriculture, particularly crop farming is the dominant economic activity in the Niger Delta. Farm sizes are very small, and the major crops are cassava, plantain, maize, bananas and different varieties of yams. Rice is produced in some places and minor crops include groundnut, sugar cane, green vegetables and Okoro. Oil palm is harvested in the wild. Logging is also common and takes place at an alarming rate. Fishing is a major occupation in most areas and is carried out both along the coastal areas and in the freshwater swamps, lakes and rivers. Over the years, local communities have developed ingenious ways of catching and trapping fish, as well as processing and marketing them.

One of the major grouses of the youths is that, they have been excluded from the governance process and those decisions quite often taken by the elders are handed down to them. They are the worst hit by the recklessness of the oil companies and the state. They have no jobs, no land to farm and no creek to fish. They; are at the brink of extinction due to the oil spillage and devastation of land by oil explorers with in the region.

6.2.1 Oil Drill Rig and Reservoir

The rotary drilling rig uses a series of rotating pipes, called the drill string, to tap into an oil reservoir. The drill string is supported by a derrick, and turned by the rotary table on its floor. Mud-like fluid circulated by a pump removes cuttings as the teeth of the drill bit dig into the rock around the reservoir. Petroleum reservoirs occur in many places. They form as a result of intense pressure on top of layers of dead marine and land organisms mixed with sand or silt. The reservoir shown abuts a salt dome, which has trapped a layer of oil and natural

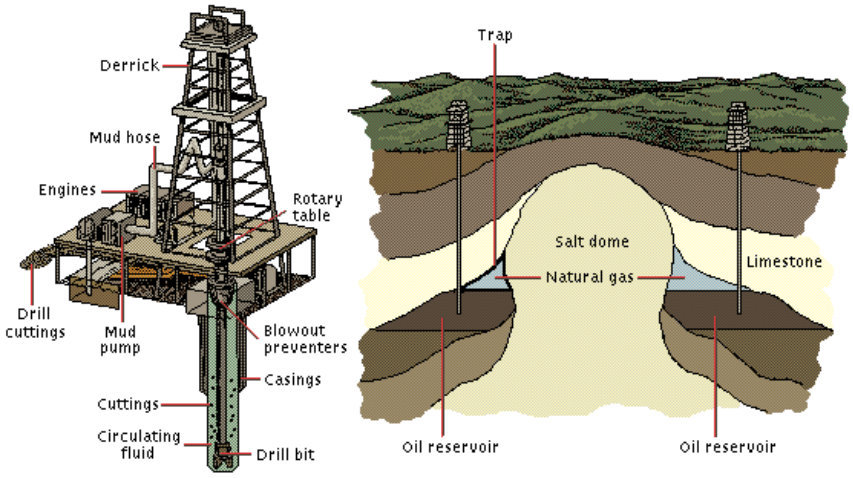


Figure 6.2.1 Oil Drill Rig and Reservoir

6.2.2 Oil Refining and Fractional Distillation

The first stage in the refining of crude oil is to separate it into parts called fractions, according to molecular weight. The crude oil is heated in a furnace and passed into the fractionating column, in which the temperature decreases with increasing height. The fractions with heaviest molecular weight, which will become lubricating oils, waxes, and so on, can exist in vapor form only in the lower part of the column, and are drawn off there. The lighter fractions, which will become jet fuel, petrol, and so on, are driven higher up the column, where they are drawn off. All the fractions receive numerous and complex further treatments to turn them into the desired end-products.

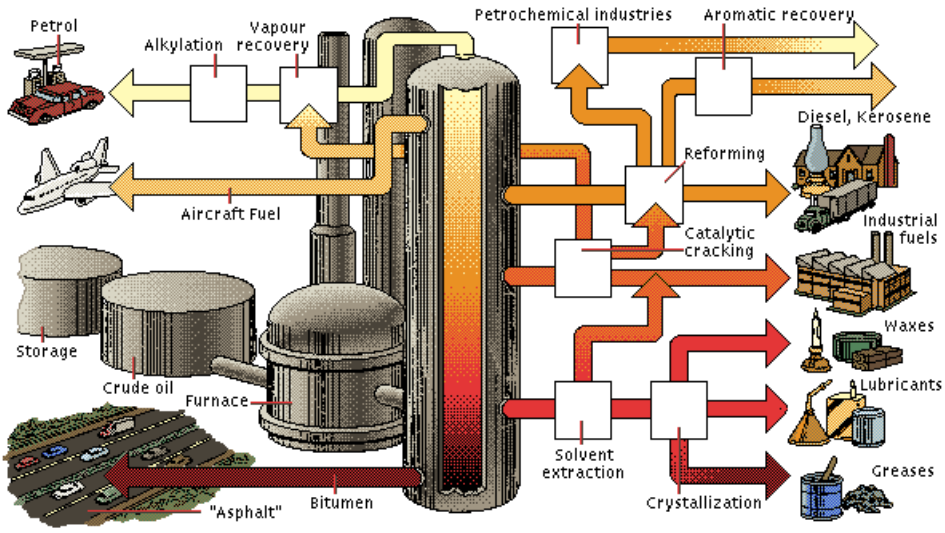


Figure 6.2.2 Oil Refining and Fractional Distillation diagram



Figure 6.2.3 oil pipe



Figure 6.2.4 Oil Storage Tanks, Nigeria.

sources (Ecarter)

*Nigeria ranks as a major exporter of oil. At Brass, on the southern tip of the Niger Delta, oil is held for export in these huge tanks. Surrounded by significant oil fields and adjacent to large seaports, Brass provides a convenient storage point.

6.3 INTERCOMMUNITY VIOLENCE IN THE DELTA REGION

Intercommunity violence in the Delta region of Nigeria often precipitated a crisis in the international petroleum markets. Overall output of petroleum in Nigeria goes down by 40 percent in 2003 since the major companies operating in the Delta closed most of their production and exporting facilities. The African Union is one of the world's largest producers of oil, with the Niger Delta region being the world's sixth largest source of petroleum. Intercommunity violence in the Niger Delta is triggered by concerns over the production methods of the oil and gas industry in Africa. In addition to the communal violence are problems of environmental pollution affecting thousands of impoverished fishermen and farmers in the African Union. The violence in the Niger Delta often cut oil production by nearly one million barrels a day, and has driven up world oil prices.

Nigeria normally pumps about 2.2 million barrels per day (bpd) and exports up to 1.8 million bpd. March 2003 due to crisis in the Niger delta region Oil corporations including Shell, Chevron-Texaco and TotalFinaElf have all shut down operations in the Niger Delta. Shell's production of 370,000 barrels a day of the company's Nigerian output remained closed. Anglo-Dutch Shell has shut its 50,000 bpd Bonny operations to the east of the Delta, and 320,000 bpd output from Forcados in the west of the Delta. France's TotalFinaElf has closed its Uponami field, which produces 7,500 barrels per day. Oil production loss stood at 622,500 bpd. In other ward Nigeria losses $20 million per day.

Nigeria is one of the top six oil exporters to the United States, supplying more than 560,000 bpd.

The response to the communal violence has been military intervention by the Nigerian Armed Forces, prompted by the unexpected access among Delta youths to small arms, most supplied from Uganda, overland via Sudan, Congo, Chad, Cameroon and the Central African Republic. The Nigerian army deployed armoured vehicles, helicopters, and naval gunboats to patrol the region around Warri city in Delta State.

The violence in March 2003 was sparked by a dispute over the rezoning of electoral wards in preparation for the coming presidential election. The uprising escalated when members of the Niger Delta communities took over oil production facilities. The Nigerian army was deployed to secure the oil facilities. This was followed by armed attacks by Ijaw youths directed at members of the Itsekiri and Urhobo communities, at the oil workers and at the Nigerian military. More than a dozen civilians was killed in the fighting. Six soldiers was killed in the incident.

The Nigerian government has blamed the violence on youths from the Ijaw community, the largest community in the area. The Ijaw are concerned about their marginalisation by Nigeria government and the fact that they receive virtually none of the benefits from the oil wealth, which they say comes from their traditional lands in the region. The Ijaw community was demanding greater compensation and political representation from President Olusegun Obasanjo. Major oil producing communities the Ijaw communities have six major oil fields in

their territory that generate a daily average of $20 million into the treasury of the republic of Nigeria, and yet the communities are without proper services and remain impoverished.

In a petition addressed to the president of Nigeria, Olusegun Obasanjo, and the Managing Director of the Niger Delta Development Commission, Mr. Godwin Omene, the group expressed dismay that after four years of democracy and about three years since the inauguration of the NDDC, their communities namely, Egbemo-Angalabiri, Peretorugbene and Ogbotobo, all in Ekeremor local council of Bayelsa State had remained epitomes of neglect, poverty and environmental devastation. The petition warned that the situation could have serious consequences for the oil firms operating in the area. "It is quite disheartening that in spite of our enormous contributions to the nation's economy and the consequent health hazards associated with oil exploration and production, our communities are unduly denied their rightful place in the allocation of projects by the NDDC. Leaders of the association warned that "the communities will be constrained to take steps that will make the area ungovernable for we shall no longer sit back and watch further gross marginalisation while we contribute the bulk of the nation's resources."

6.4 PROGRAMS AND STRATEGIES FOR THE GOVERNANCE OF THE NIGER DELTA

First, it is important to clarify certain conceptual issues that underpin the democratization of governance and development, then the projects, actors,

constraints and prospects to start with, to democratize governance and development means to use the instrumentality of democracy to further the processes of governance and development t in such a way that the people become the means, agents and ends of development. That is, to say, the people have their own development and are empowered in its process. It becomes the right of the people to existence, to live commodiously and right over natural resources, more than that, it means the people are involved right from the conception, planning to implementation stages of the development.

All these will have to be based on the circumstances of the people, but not something either done for them, or imposed on them. It means that the development is experiential and not received. It is a development that is anchored on popular participation and exclusivity instead of exclusivity. It means the consolidation of development instead of the people and their social and cultural lives, which should be respected. Because the people now possess development they are likely to protect it at all cost and by all means. They also become transparent and accountable about the development process and decision making process. They (people) see development as their own development. It is in this context that the democratization of the governance and development of the Niger Delta is to be located.

In practical terms the promotion of human development in which the people are the agents, means and ends of the development. If the people are to be the agent of development that is, deciding what kind of development and its values and how to make judicious use of them, then they must be involved in public policy and its control. Beyond participating in the development process,

the responsibility of deciding what type of social transformation to undertake resides with the people. In fact, the people can only become the means of development when their resourcefulness, time and energy become the driving force of that development process. The people can be the means of development if it is based on self reliance. The context in which the strategy of self reliance is used in the development on the Niger Delta is not just to halt foreign domination. Rather, it means the people have to rely on their indigenous knowledge of the production system and culture (and improve on them) in order to reproduce themselves socially, economically and politically instead of relying on someone else's image of the world and its interests. If the people are the very essence of development, then their interests and wellbeing will be the yardstick of assessing it, the supreme law of development. Lastly, the building of good governance, transparency and accountability at the local level through democratization process, calls into question the cultural context of such exercise. The cultural environment of the Niger Delta entails the traditional religion, traditional medical system, how the people marry and bury their dead, among others. This means that the democratization of governance and development will permit the people the chance to conceive of development in the context of their cultural milieu. The primary objective of this project is to empower the people to participate actively in how they are governed at the grassroots. It will support the people to communities, freedom, and self realization. Its ultimate is to build a second legislative chamber where all the nationalities across the delta area with considerable power and irrespective of their numerical strength are equal. With the second legislative chamber of nationalities, it would make more sense to the

local people that a political party or a politician must secure a stipulated minimum number of votes in all parts of the country in order to win an election.

The targets are the mass organizations, particularly the youths, the labour movement, market women, students, taxi drivers who are usually marginalized. This is because without the effective participation of these marginalized groups there can hardly be good governance, democratization arid development at both local and national levels. Spanning over one year, about 1200 person's representative of the marginalized groups from the Niger delta should be trained with 100 trained monthly. This can be increased later. The NDDC, together with the nine state governments, local governments and NGOs, organize the training programme. With adequate publicity in print and electronic media, and in the dialects of the people, the initial difficulty of mobilizing the people would be avoided.

YOUTH IN GOVERNANCE

At the root of the violence in the Niger Delta, are the youths defined as people between 20and 40 years. The reality is that, the majority of them do not understand what governance especially the bottom up approach. This is evident in the intra youth crises which centres largely on leadership tussle. Which means they are not better than the elders and traditional rulers they have either sacked or refuse to recognize their legitimacy? In essence, they need to be trained in leadership and authority. They need to understand the principle and practice of devolution of power, and the need to redistribute power to the people. They need to be taught what accountability is all about. They need to understand and embrace dialogue, and accommodate the views of others. The project will

begin with a pilot scheme of 200 youths from each of the nine states constituting the Niger Delta. This brings the total to 1800 youths. Spread over 12 months, 150 youths should be trained per month. In turn, the first set of the beneficiaries should train others. The NDDC should collaborate with the state governments, non governmental organizations, and developmental agencies. One of the likely problems is the difficulty of mobilizing the youths. Furthermore, except the youths are deployed in retraining others, they may back out.

WOMEN IN GOVERNANCE

Like the youths the women are excluded from governance at the local level. Though they constitute the bulk of the rural dwellers, they hardly have any input into the decision making process of how they are governed. They are the ones who care for the household, engaged in farming, fishing and petty trading. They are easily mobilized into the struggle and can be committed to their cause. For instance, in 1998, the women of Ajekota, Ughelli north local Government Area of Delta occupied shell's oil wells for 21 days and production to a halt. They moved into the oilfield with their children and cooking utensils, which forced their husbands to join them in the agitation.

This project aims at empowering the women in the political process. It intends to train them on their rights and roles in governance at the local levels. It wants to encourage the women to form political groups and associations, and where they exist, help to strengthen them. It wants to prepare women to seek elective posts, and educate them on the need to have women wing of all political parties and pro -democracy movement in their locality.

The bulk of the resource persons can be drawn from the women unit of the non governmental agencies, the relevant stat institutions, universities and international development agencies. With a pilot scheme of five women from each of the nine oil producing states, bringing the total to 45, two months should be used. Thereafter, it can be mainstreamed. The NDDC should collaborate with the non governmental organizations in training the women for governance. The greatest obstacle to a project of this nature is the reluctance of the men to permit their wives to participate. But this can be overcome if the training does not dislocate the families

It was also the contention of this group of scholars that, the legal framework under which oil is produced in Nigeria is at the root of the conflicts, and that until it is revised in favour of the people, violence will continue to deepen. The land use decree of 1978, which vested all land and its content in the state, came heavy attack. As provided for in the decree, any land where oil is exploited, produced, transported and stored is vested in the state. Scholars and activists alike, were of the view therefore, that not only is the land reform policy anti people. And that the land use decree had finally pulled the people out of land and turned them into squatters in their own ancestral home, what is more, for people who subsist on land, denying them access to, control of, land is the highest stage of their underdevelopment.

It is the legal regime under which oil is produced that informed the nature of the joint venture agreements that the NNPC signed with the oil companies, since the state solely owns the land, and operates a joint venture in which it has majority participatory shares, it is unable to enforce the case re injection decree

of 1979. for one thing, the state is of the view that it can not sanction itself even when it glaringly pollutes, in the alternative, it imposes fine for gas flaring. To the state, as technical operator of the joint venture, the oil companies are liable for gas flaring and insist that they must pay fine. As operator of the joint venture, the oil companies think otherwise, arguing that the fine has to be paid by the joint venture and in proportion to their ratio of participatory shares; in reality, the state is paying a greater share of the fine, leaving the oil companies with very little, which they, in turn, expense as part of the cost of oil production. In the final analysis, it is the people who bear brunt. What this means is that, until the governance of land is democratized so that t the people are empowered to own land, it will be futile to resolve the protracted conflicts in the Niger Delta.

From the forgoing, the policies and politics that informed the development of the Niger Delta are no less than a false start. The fundamental problem resides with these who decide the development desirable in the Niger delta. These are the policy makers in control of the state power, the oil foreign companies, the World Bank, IMF and the imperial powers. Each of these agents of development propagates an idea of development that corresponds to its images and interests, they are not interested in making the people as the agents, means and ends development, explaining why the people who ought to be the development are not consulted. In the end, the kind of development being promoted helps to worsen the misery of the people. It is easy to understand why this is so. The political economy of the operations of the oil companies and the state has brought into greater focus, the hollowness in the approach taken to the development of the Delta region so far. How can the NDDC proceed with the

development of the Niger Delta in the light of these crises? The most appropriate approach is to use the instrumentality of democracy.



Figure 6.3.1 Ewan platform source (chevron Texaco)



Figure 6.3.2 Ewan Platform **source (chevron Texaco)**



i



ii

Figure 6.3.3 (i &ii) Seismic data acquisition crew

source (chevron Texaco)



Figure 6.3.4 Planting seedlings promotion or natural conservation.
Source (chevron Texaco)

6.5 COLLECTIVE SELF RELIANCE

This project is concerned with the promotion of collective self reliance in the development of the Niger Delta. It places high premium on the people as the agents, the means and ends of the development. For the people to possess their own development, it has to be self reliant. This is because the past efforts at the development of the oil producing communities are false starts in the sense that they were not based on the experience of the people.

Issues to be addressed include responsibility, self actualization, self reliance, culture and development, people driven projects, public policies, self

esteem, confidence building, inclusively, community development and governance. One of the expected gains of this project is that, it will help reduce the deepening trend of dependence among the local people as a result of their insecurity and poverty. It will take the people of the Niger delta not as they ought to be, but as they are. This way, the people will be empowered to find ways on how they can move out of the vicious circle of poverty by their own efforts and in line with their own needs and values, a major hindrance is the difficulty of getting the people interested and educated on the aim of the project, as they are likely to see the credits from the NDDC as gifts from the government, and would be taken seriously.

As part of the practical strategy of actualizing this purpose, the NDDC should first delineate three pilot cases in each of the nine oil producing states, bringing the total to 27. Then, the commission can proceed to initiate a policy dialogue on the desirability of collective self reliance at the local level between and among the people, particularly the farmers, women, youths, chiefs, elders and its officials/consultants. This dialogue should be held at the levels of the households, communities, villages, cooperatives, farmers association, farmers' thrift societies etc. the process of debating these issues has to follow democratic routes so that the people are not just participants, or legitimizing what others have said, but to accept whatever emerges as solutions and policies as their own. This way, the NDDC would have inculcated into the people the idea that they will be held partly accountable for the success or failure of their development efforts. The scheme is to span 2 months, thereafter, it can be mainstreamed.

6.6 COMMUNITY SECURITY

The aim of this project is to train the people to effectively participate in the acts of preventing, resolving and managing conflicts at the local level and strengthen them where they exist as in some communities in the Ughelli and Warri council areas of Delta State. Ti intends to build local capacity on communal security such as vigilante groups, and enable the people understand the origins and nature of the conflicts, and distinguish the causes from the symptoms of the conflicts. It will expose the people to early warning signs of conflicts in order to stem them before they explode. It will educate the people on the need to safeguard public property.

A pilot scheme of 900 people representing the nine oil producing states will commence the project. It is planned to span nine months, with 100 participants in each group. The targets are the youths, chiefs, elders, traditional rulers, the security agents, the oil companies, government agencies, civil society groups and all those who are connected with the development of the Niger Delta in one way or the other. Resource persons are to be drawn from the academia, the security operatives, the governments, civil society and non governmental agencies.

At the end of this pilot scheme, each state will have a council consisting of 20 representatives of the people, civil society and the marginalized groups, bringing the total to 180. A community security board of 35 members will be created. It will meet monthly. Its members will be drawn from the following sources: from the 180, 18 officials will be elected to represent the people. Each of the oil companies will send an official, bringing the numbers to nine. The

central government will nominate two officials, and the NDDC two officials, and one each from the security services army, police, navy, air force and police.

6.71 HUMAN RESOUCES DEVELOPMENT

To be able to govern the rural dwellers in the Niger Delta (the majority whom are still illiterate), and help them to do better than what they are doing, calls for huge investment in human resource development. Ti particularly places emphasis on capacity building, Retraining, skill acquisition, and self actualization. This is the primary objective of this project.

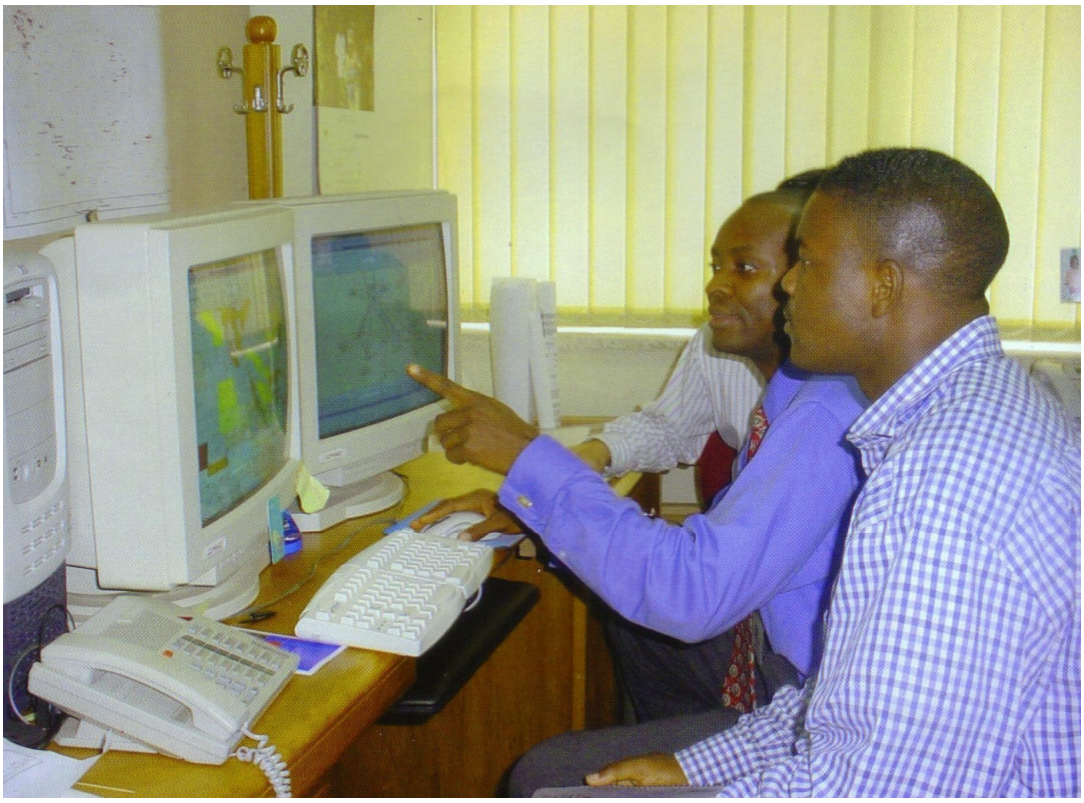


Figure 6.6.1 computer training toward self development



Figure 6.6.2 environmental Researcher taken water samples at a Community pond near company operation area.
Source (chevron Texaco)

CHAPTER SEVEN

DESIGN CONSIDERATION

7.1 SITE CONSIDERATIONS

The site exists naturally, but the conscious efforts of man to made use of this natural environment causes interference. That is modifying some elements like trees and site topography.

During this design, some of the few trees have to be removed and new ones planted.

The site has almost flat land as indicated by only three contour lines on the site plan. All this factors were put into consideration during the design.

The Niger Delta Complex will consist essentially the Administrative Block, training centre, Research Section, Auditorium, Conference hall, Meeting room, Restaurant, lounge and other supporting facilities (business Centres) Exhibition Space.

7.2 Office Layouts

Background knowledge of the elements of an office building is necessary to understand the type of office layout that is available. These elements are categorised into four each having different life spans.

i) The shell:

This is made up of the structure, the core and the skin which are intended to last as long as the building is useful perhaps up to fifty years.

ii) The scenery:

The scenery is made up of partitions furniture and furnishing related to the life of a tenancy or a particular stage of an organisation's developments, lasting up to ten years in most cases.

iii) The set:

This refers to the constant rearrangement of office scenery to met changing short-term needs with the time scale measured in weeks.

iv) The services:

Services have to do with basic installations such as lifts and other mechanical services which normally last up to twenty five years. The services on a small scale such as light fittings and electrical points will change with the scenery and must be capable of accommodating the shortest term requirements of he set.

Office layout is classified into two categories. First, there are office layout based on the location of the service core(s) which usually contain staircases, lifts, toilet and the like. Secondly, there are those based on depth of space measured from the external shell to the primary circulation corridor across uninterrupted office space.

Box type offices has greatest opportunities for arranging surroundings, easy to effect ventilation and lighting and are easier to protect from noise and distortion of individuals field of vision. They are however inflexible and can lead to wasted space. Communication and supervision can also be difficult. Open plan offices are however such that equipment and working materials are within

easy reach. People who have to be in contact with each other often are placed near each other and social intercourse is improved. Furthermore, since some people can see each other, fruitless visits are cut down. This is a flexible arrangement with no walls to hem people in. However, artificial light and ventilation would have to be done with. Concentration can also be jeopardised are noise and other disturbances will prevail. The ease of locating people as well as status-quo might also be a problem.

7.3 STRUCTURAL SYSTEMS

Choice of structural system is affected by height and dimensions of space. This choice comes under two main groups:

i) Load bearing walls of masonry

ii) Skeletal structures which may also provide a platform support for load bearing walls.

The skeletal type is favoured in high rise structures. They consist of solid rigid elements in predominantly vertical extension, secured against lateral stresses and firmly anchored to the ground. They collect loads from horizontal planes in high altitudes above the ground transferring them to the foundations.

In order to provide suitable conditions for a flexible floor plan and good possibilities for later reorganisation of individual rooms in each floor. The design of this vertical structure system aims at the greatest possible reduction of load transmitting vertical elements that are necessary for the function of the high-rise building are potential structural section to stiffen against lateral stresses as well

as collect and redirect loads. Example: staircases, elevator shafts, installation ducts and the exterior skins.

7.4 CURTAIN WALLING

Advance building technology has incorporated glass into its system due to strength and beauty. In today's architecture, façade design presents architects and engineers with perplexing range of options.

7.4.1 Challenges

i) Minimisation of air conditioning cost

ii) Protection against excessive direct sunlight

iii) Prevention of noise

iv) Aesthetic value.

The assembling of curtain walls involves metal frames (Aluminium), glass with much interrelationship and interdependence of elements. The use of finishes like sealant problems associated with curtain walls are leakage if not well treated, staining of glass and breakage which with new innovation of aggressive resistant glass also act to deter burglars and protect you.

7.4.2 Fabrication Design and installation

Adequate consideration should be taken when designing curtain walls manufacturers are careful to manufacture in accordance with wind, thermal and construction specifications.

Architects should have first hand knowledge about sealants tolerance requirements and glass thicknesses, also during construction and instillation.

Sub-contractors must make sure everything is done to specification so as to limit future maintenance cost.

7.5 CONFERENCE HALL DESIGN

The hall will be an essentially raked one with a raised stage designed as an auditorium. It is design mainly for speech. The seating arrangement should include a writing area for notes and microphones. Rise of seating there should take cognisance of sight lines.

7.5.1 Audiovisual Equipments

These are used for recordings, announcements, public addresses e.t.c. they are usually damaged by mishandling, dust and moisture hence must be security installed in control rooms. They include microphones, tapes reproducers loud speakers and head phones. Others include television and video cassette decks as well as slide and film projectors. Modern projectors can be hanged on the conference room and be operated from the operating room.

7.6 ACOUSTIC CONSIDERATIONS

By considering broad requirement early in the design stage it will eliminate problems associated with acoustic which rectification and adjustments made later are rarely satisfactory or economical.

7.6.1 Room shape and Quality

Large auditoria, depending on the use to which it will be put, room shape can be significant speech where shorter reverberation time is required, in reflecting sound. For clarity of shapes such as horse-shoe or fan are satisfactory.

7.6.2 Internal Noise Sources

Noise generating areas should be sited away from noise sensitive areas. In modern non-industrial buildings, the mechanical plant room is likely to be the nosiest area hence buffer zones formed by corridors, storage areas or landscaped pen spaces are useful as control measures.

7.6.3 External Noise sources

External noise that affect buildings most is transport noise from road vehicles, aircraft or railways. They are not in control of those affected by their noise. it is essential to zone noise- sensitive area away from such sources. More so trees should be introduce to buffer the zone.

7.6.4 Impact Borne Noise

Noise is transmitted through the material on impact; this is affected by the density of material in question. The denser the material, the lower the transmission. For building purposes, concrete is the most suitable material against impact-borne noise.

7.6.5 Air-Borne Noise

The sound is transmitted through the air. This is generally affected by openings. Any form of opening in a partition will seriously impair sound

insulation. Consideration will hence have to be given to such openings to reduce noise

7.6.6 Structural sound Insulation

i) Floors**:**

An acoustic problem associated with floors is the direct structural excitation of a hard surface floor bear footsteps. Floating floor should be used to avoid foot step noise on the floor beneath. Suspending an impermeable ceiling below can as well help in improving sound insulation of floors due to airborne. Though, improvement is limited by structural limitations on its weight and height.

ii) Walls**:**

The materials used for the wall and its thickness are primary factors in sound insulation. Sound absorbing materials such as wood slats and thick curtains can be used in conference halls or committee rooms.

7.7 SERVICES

7.7.1 Fire Service Equipment

Modern buildings require not only means of escape, access for fire brigade and structural protection but also first aid equipment. In very high buildings expert advice on the appropriate provisions and the maintenance desirable for particular cases of special installations should be sought from local fire stations.

A number of common equipments for fighting fires include buckets with water or sand and soda-acid of foam fire extinguishers. These are placed at

strategic points and are movable. Fixed apparatus include rubber hose reels usually at entrances and at staircase landing and sprinklers fire alarms set automatically by smoke detectors or by smashing glass are also desirable.

7.7.2 Water Supply and Drainage

Water supply can be tapped from water supply pipe source and pumped into cisterns at the top of the tower block to achieve desire pressure.

Foul water will be treated in local septic tanks while surface water will be drained into street drains following the site slop. Fall pipes embedded in buttresses would be used where possible to carry water from roof tops to surface drains.

7.7.3 Maintenance

Design should take cognisance of the fact that apart from major maintenance is being carried out. Localisation of services will ease maintenance word.

7.7.4 Air conditioning

To reduce the discomfort caused during bad season, two types of air conditioning of buildings in the complex will be considered. The central system air conditioning will be use for large public rooms like restaurant, lounge, conference hall and theatres, and the unit equipment for individual offices and classrooms.

7.7.5 Flexibility

A flexible form of design is a method of design which allows easy change the use of functional space to another one without destructive to the main structural components of the building.

Changes have being occurring base on NDDC historical background from then inception of Henry's commission for the development of the region refer to 9chapter two the birth of NDDC) the commission have been given different name and it's mode of operation have slightly varied. In other to accommodate the possible change of operation in the future, flexibility within the core of the building is adapted.

Circular grid pattern

Due to the form of the complex circular grid pattern will be use which is predominant in African traditional houses. Though, partitioning in this pattern creates sharp angles except when modifications are made by introducing smaller central circles. The modifications are made by introducing smaller central circles. The module unit based on the square could be applied to circular partition.

Partition

The building is a complete framed structure on columns and beams, extensive partitioning shall be used to subdivide the internal functional spaces, which can be easily demountable when the need arises.

7.8 HIERARCHY OF SPACES

the space allocation and facilities provided for each officer must be in a hierarchical order, in other word top staffs like the directors and executives shall be provide with largest office spaces, while other low rand staffs will have lesser office spaces, because the executive and director receives dignities and more visitors and therefore requires more furniture and other conveniences. The allocation of space will decrease as the responsibility decreases.

In the area of common facilities like the auditorium and conference room, the number of users determines the area provided; hence the auditorium is larger than the conference room due to the capacity it accommodate.

7.9 SCHEDULE OF ACCOMMODATION

Unite definition	number		Areas (m^2)
	Room	individual	
Administration			
Chairman	1	1	50
Secretary/waiting	1	1	16
Managing director/CEO	1	1	45
Sec/waiting	1	1	15
Executive director, project	1	1	45
Sec/waiting	1	1	15

Executive director finance/Admin	1	1	45
Sec/waiting	1	1	15
Rep federal ministry of environment	1	1	45
Sec/waiting	1	1	15
Representatives from nine (9) states	9	9	30
Sec/waiting	9	9	15
Sokoto state, rep North West zone	1	1	30
Sec/waiting	1	1	15
Adamawa state, rep north east zone	1	1	30
Sec/ waiting	1	1	15
Plateau state, rep north central	1	1	30
Sec/waiting	1	1	15
Shell petroleum. rep The oil company	1	1	30
Sec/ waiting	1	1	15
HOD of departments	14	14	30
Sec/waiting	14	14	15
Conference/meeting room (1)	1	1	176
General office Departments	14	14	60
Personnel manager	1	1	30
Sec/waiting	1	1	15

Project architect	1	1	30
Sec/waiting	1	1	15
Quantity surveyor	1	1	30
Accountant	1	1	30
Sec/waiting	1	1	15
lettabe spaces (average)	12		30
Supply office	1	1	30
Sec/waiting	1	1	15
Supply store	2		45
Security room			30
Toilet			30
Research and training unit			
Library			
Public reading room/ book stock	1		310
Librarian office	1	1	30
Store	1	1	45
Auditorium	1		580

CHAPTER EIGHT

CONCLUSION AND RECOMMENDATIONS

8.1 DESIGN REPORT

The project shall actualize it set objectives by logical organisation of the spaces provided.

The complex building accommodates the following functional units which are categorized by the level of accessibility and the nature of activity.

8.1.1 Administrative unit

These are spaces that form the centre of co-ordinating all the activities of the commission. It is the 'strong hold' accommodating all the top executives, directors and ass administrative functions.(See figure 8.1)

Nature: semi-public, private

8.1.2 Academic/Research Area

This section includes Library, Research Area, Computer Area, Training section and lecture rooms.

Nature: private, semi-public.

8.1.3 Social Area

Auditorium, conference room, Restaurant, Internet café, Arts and craft shop, Ticket room, Bookshop**.**

Nature: public and commercial.

Organisational chart

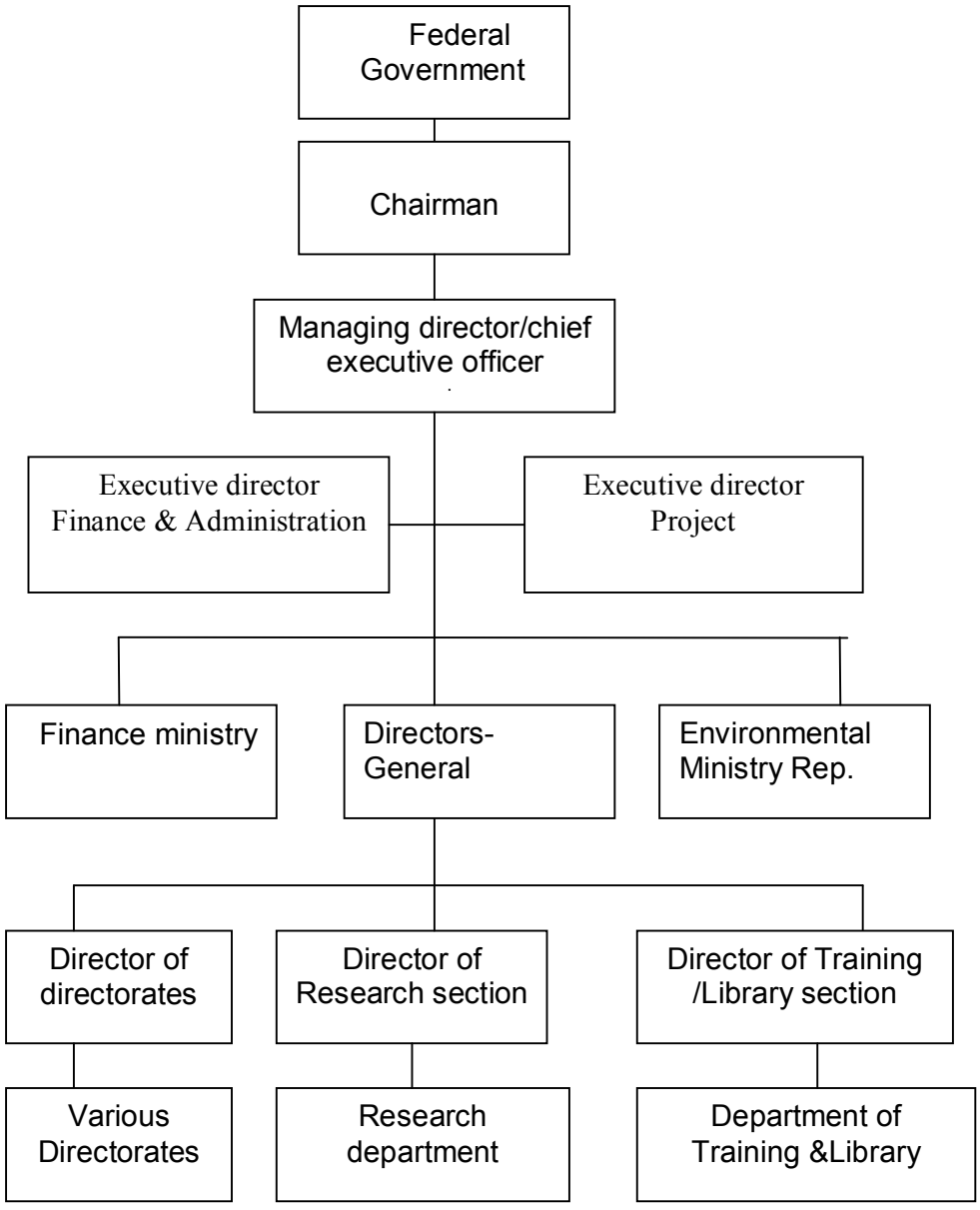


Figure 8.1 organisational chart

Auditorium:

The auditorium will serve as a lecture theatre and also rented place for performance.

Arts and Crafts shop:

This is design to be a shop devoted to selling locally made items like arts works, paintings and ceramics

Ticket Rooms:

Purchase of ticket for any function taking place in the complex building. Thus, preventing last minute rush at the entrance.

8.2 circulations

The circulation in the building can be categorized into two main groups: the vertical and horizontal circulations**.**

8.2.1 Vertical circulation

Vertical circulation is by means of stair cases and lifts, which enable the communication between different floor levels. The stairs are well distributed. That is, placed where they are very visible and at reasonable equal distance from each other, to facilitate the movement of the people at different points in the complex, especially at peak hours and emergency situations. The staircase widths and lift cage sizes should necessarily be able to cater for the maximum number of people at peak hours.

8.2.2 Horizontal circulation

Horizontal circulations in the design are through corridors, in a harmonic manner in relation to the functional spaces. The corridors are wide enough to cope with the traffic envisaged.

8.3 DESIGN CONCEPT

Niger Delta Complex, focus on developing the Niger Delta oil rich region the oil is the wealth of the nation which also contribute to the misery of the Niger Delta. A drop of oil in the barrel creates wealth while a drop in environment or natural habitat creates chaos and misery due to spillage.

The concept was conceived from a drop of oil which form a ripple as it drops, the ripple forming a circular pattern which is a perfect shape, representation of African culture, which is subject to change but still retain it identity.

8.3.1 Form concept

A cylindrical composition will be exploited in the form design of the administrative core of the complex, taking note of factors like flexibility, ventilating and efficiency, the central core which is roofed will be complimented by openings through the sides to permit air flow for ventilation, the orientation of the building will enhance it achievement.

Other supporting sections of the complex shall be incorporated with the administrative core in harmony like ripple formation.

Basically, a direct translation, adaptation and representation of the socio-cultural background of Niger delta will be exhibited. From the earlier building round huts which gradually transform (change) in to the rectangular building with a gable roof, canoe (boat) which is common in the region, combination of this element influence the conceptual elevation. The sticks (silt) which are use to support buildings on water in the riverine area is translated by the use of column on the approach elevation. The use of fluted walls common with the Edo people is used and the abstract imposing of the world most famous mask queen '*idia'* FESTAC 77 symbol which is from Niger Delta (Benin) is introduce, common elements found in the region like calabash which speak of true African identity influence the use of shell on the roof, the dominant use of horizontal element on the complex is intentional to give a psychological feeling of peace, tranquillity and harmony. Indirectly the tower of the central core (Administration) is a symbolic representation of the nine states involve. The upper and ground levels inclusive are nine floors. The central core can as well be viewed as layers of oil tanks on each other representing the growth of the economy through petroleum oil. The design seem to have two face reflecting the Cross River masquerade having two face believe to drive away evil spirit form any direction due to it advantage with face.

Generally, the concept represent the Niger Delta socio-culture, speaking at a glance their dominant occupation which is farming and fishing through the use or canoe (boat) which confers the greatest identity of the Niger Delta region and changing socio-cultural activities due to influence of oil. One of the settlement patterns notable in Port Harcourt that influence the concept is the

circular settlement pattern in the inland and the earlier building design which emerge from circular hut to rectangular building reflect changing socio-culture within the region. .

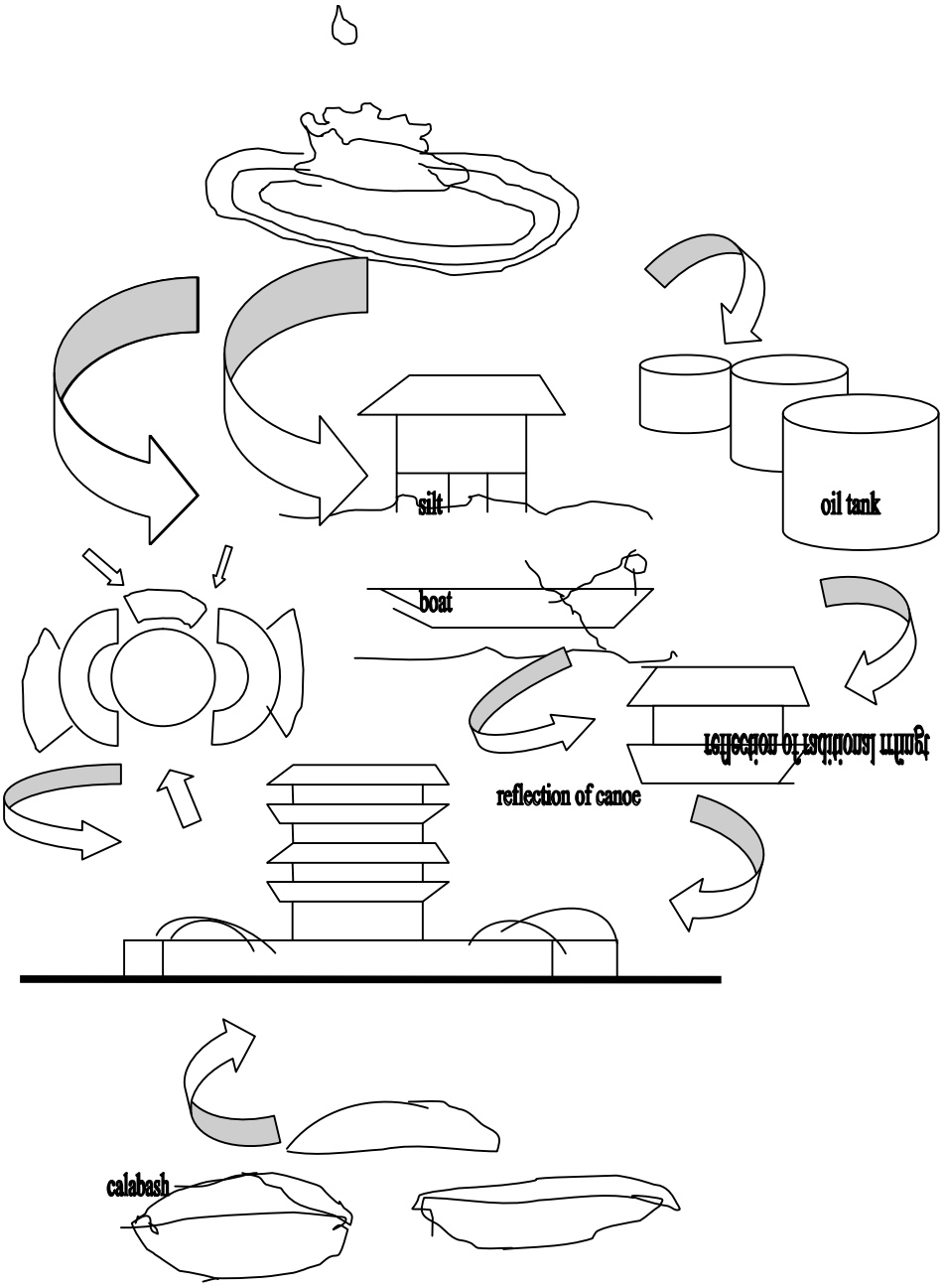


Figure 8.3.1 design concept

8.3.2 Site Concept and Site Zoning

An efficiently conceived site for prospective development would serve to promote the operations rather than creating more problems. A properly zoned site becomes cost effective and economical.

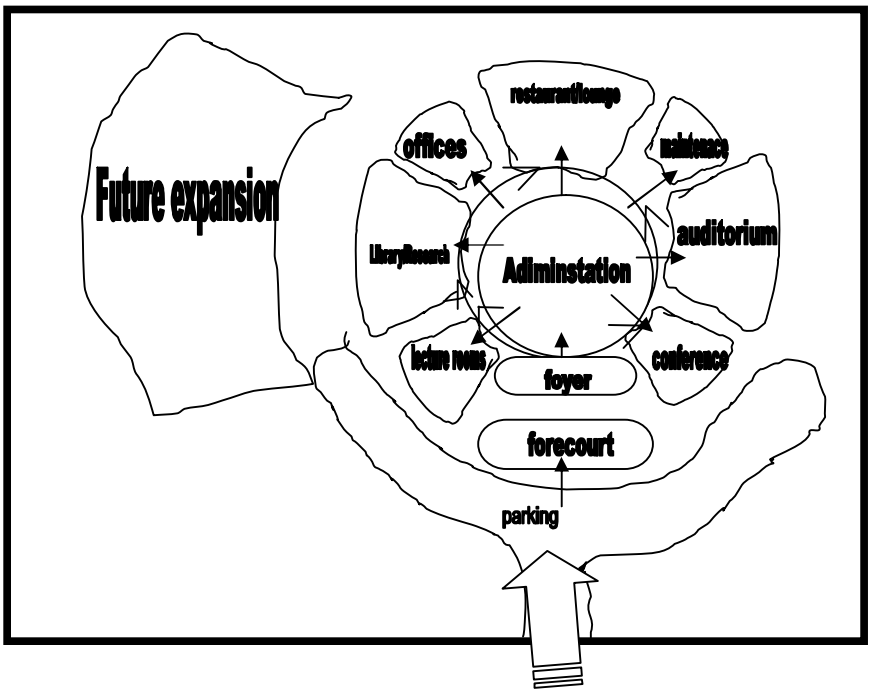


Figure 8.3.2 (i) site concept and zoning

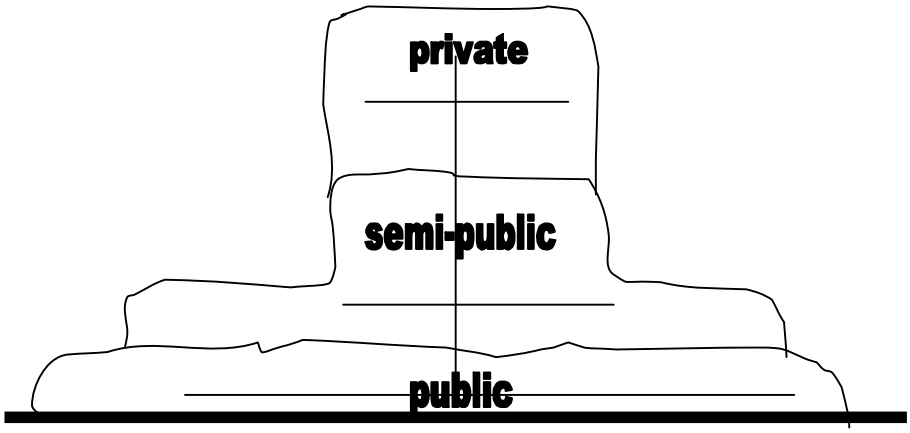


Figure 8.3. 2 (ii) vertical zoning

8.3.3 Functional Relationship

This represents the general planning layout or master plan of the complex. it worked out the modalities for the design to organise forms and functions on the site and workability.

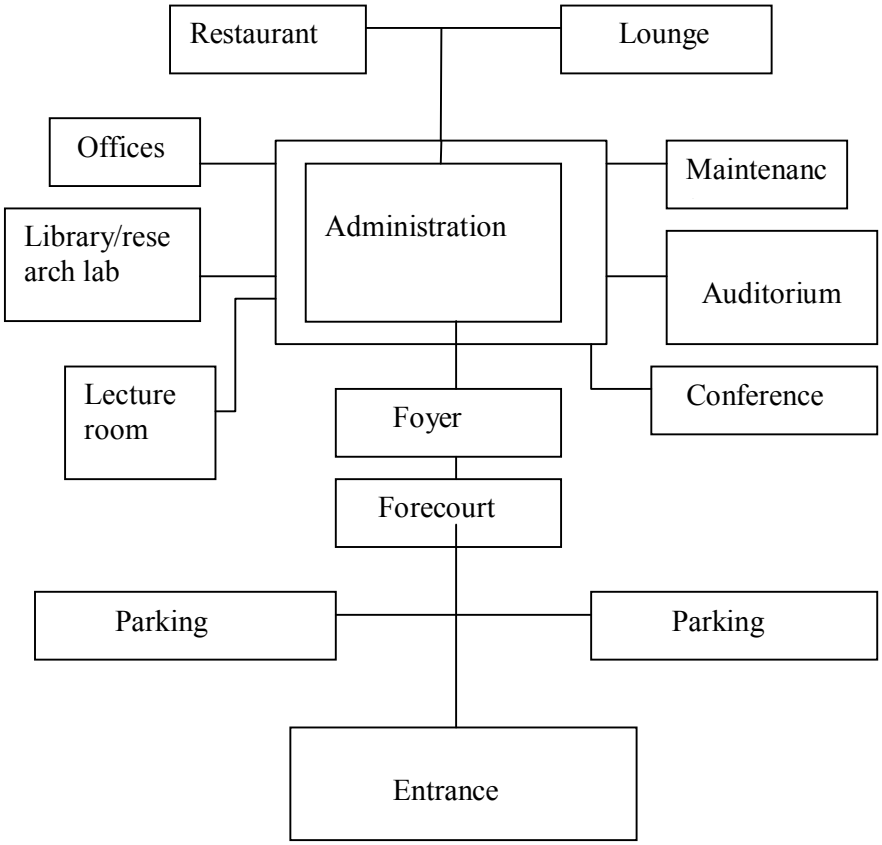


Figure 8.3.1 functional Relationship diagram

CONCLUSION

The design being proposed is intended as a physical manifestation of the author's prescribed solution to the problems facing the Niger Delta region by exploiting the factors of the diverse socio-cultural background of various ethic groups in the state.

The proposal will act as an element of socio-cultural harmony which fuels unity; progress and subsequently development in the region, through the organised ideas of this work an attempt have also been made to achieve a harmonious expression that is fully representative of culture of Niger Delta region .adequate care has also been taken to ensure that the character of the building expresses the aspect of regional culture it intended to portray by use of motif and common element (calabash)influence the use of shell roof.

If fully implemented, the complex shall be a forum for effective monitoring of project towards development and training of the youth enhancing their skills breaking idealness which is a contributing factor to crisis. The final out come of the research is a fair attempt at representing the character of socio-cultural and meeting demand of Niger Delta.

RECOMMEDATION

The need for sustainable development in the region cannot be over emphasised. The research and training section incorporated into Niger Delta complex is to enhance socio-cultural development most especially the Human Resource which is a key role to the development of the region. The Research

and training section shall have it own head or directorate under the organisation or the commission. (See organisational chart).

Based, on the Human resource development plans the Training and Research section shall concerned itself with the promotion of collective self-reliance in the development of the region issues to be addressed involves self-actualization, self-reliance, culture and development, self-employment, skill acquisition, self esteem, community development and governance. The training section will take the people as they are and empower them to meet up with changing socio-cultural demand. The nature or the programme shall involve all the marginalized groups in the states, training a particular number of people from each represented state who will in turn go into their various communities and educate the youth. (See Appendix)

APPENDIX A

SPECIAL COURSES AND CONFERENCES

From time to time the section shall participate in the organisation of special national and international conferences and symposia target to the development of the region.

VIRTUES AND VALUES: CUTURAL HERITAGE

Seminar shall be organised to explore the role of culture and tradition in the evolving changing socio-cultural demand.

ENHANCE PROJECT MONITORING

This cause shall deal with the principles behind the common arrangement and show relationship with the specification code; the drawing code and standard method of measurement the course shall be specific for the members of building team ad shall be held once every month to update their knowledge.

SPECIAL RESEARCH UNDERTAKING

In conjunction with other national and international organisation, the research section shall research on ecological and environmental problem advising the states on ways to tackle pressing environmental problems.

SKILLS ACQUISATION

This course will involve training the youth on computer appreciation and application toward self-reliance and development on socio-cultural demand.

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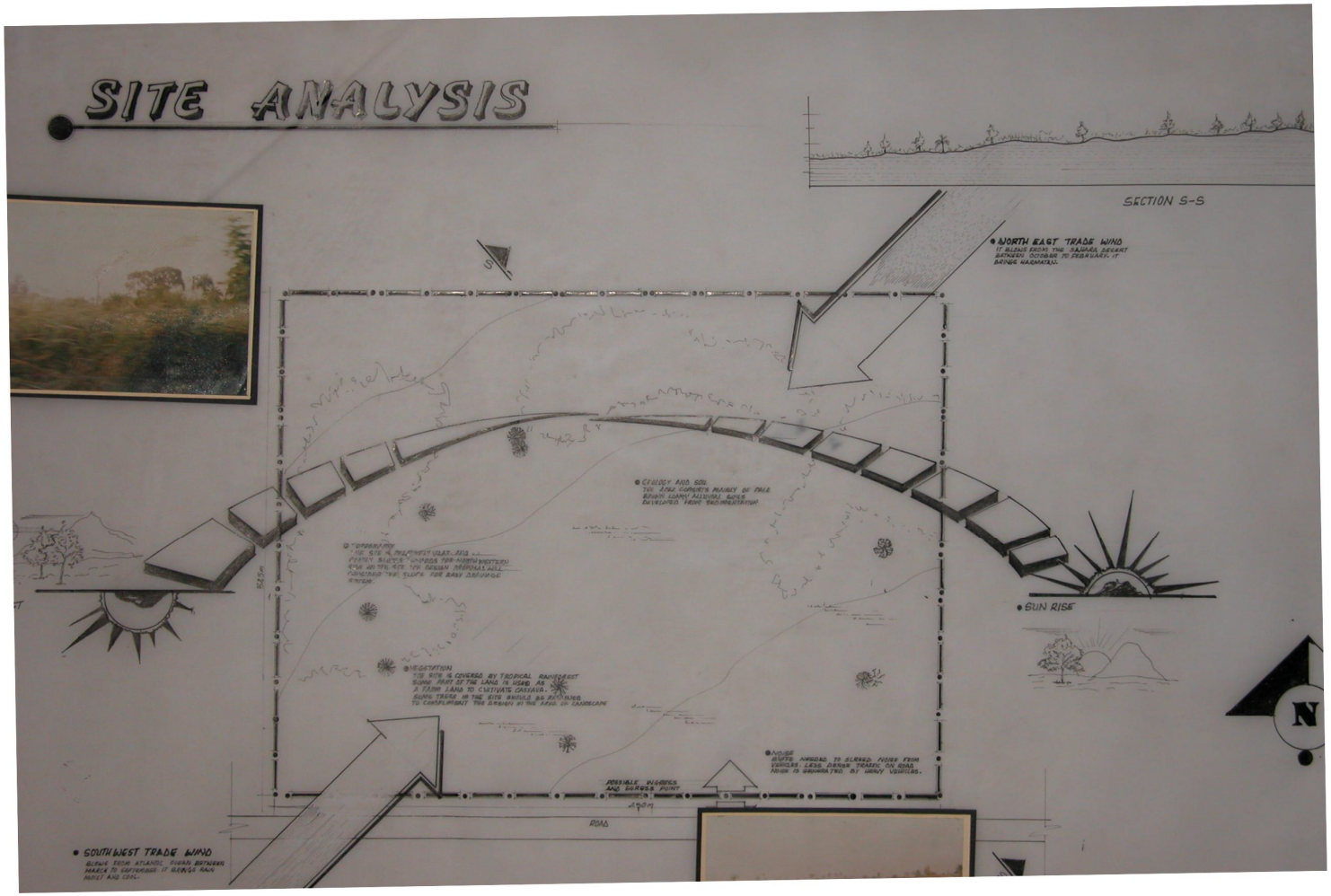
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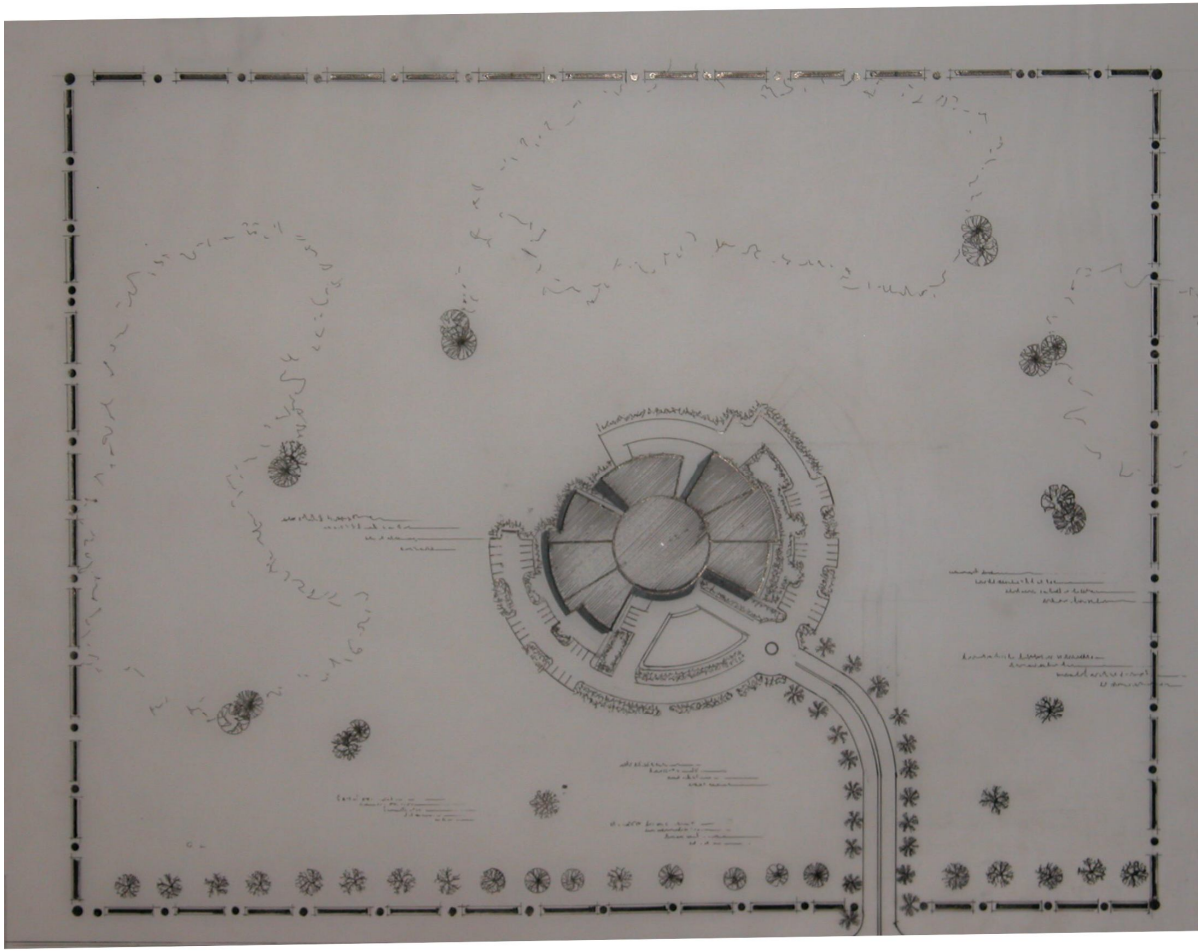
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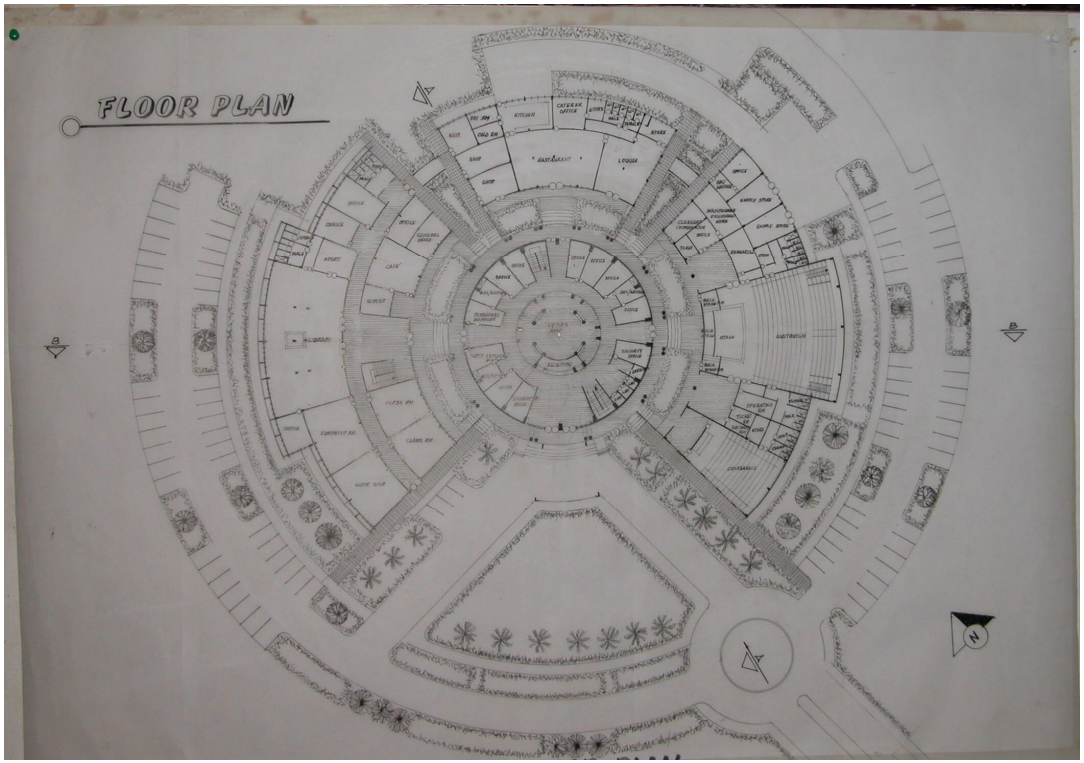
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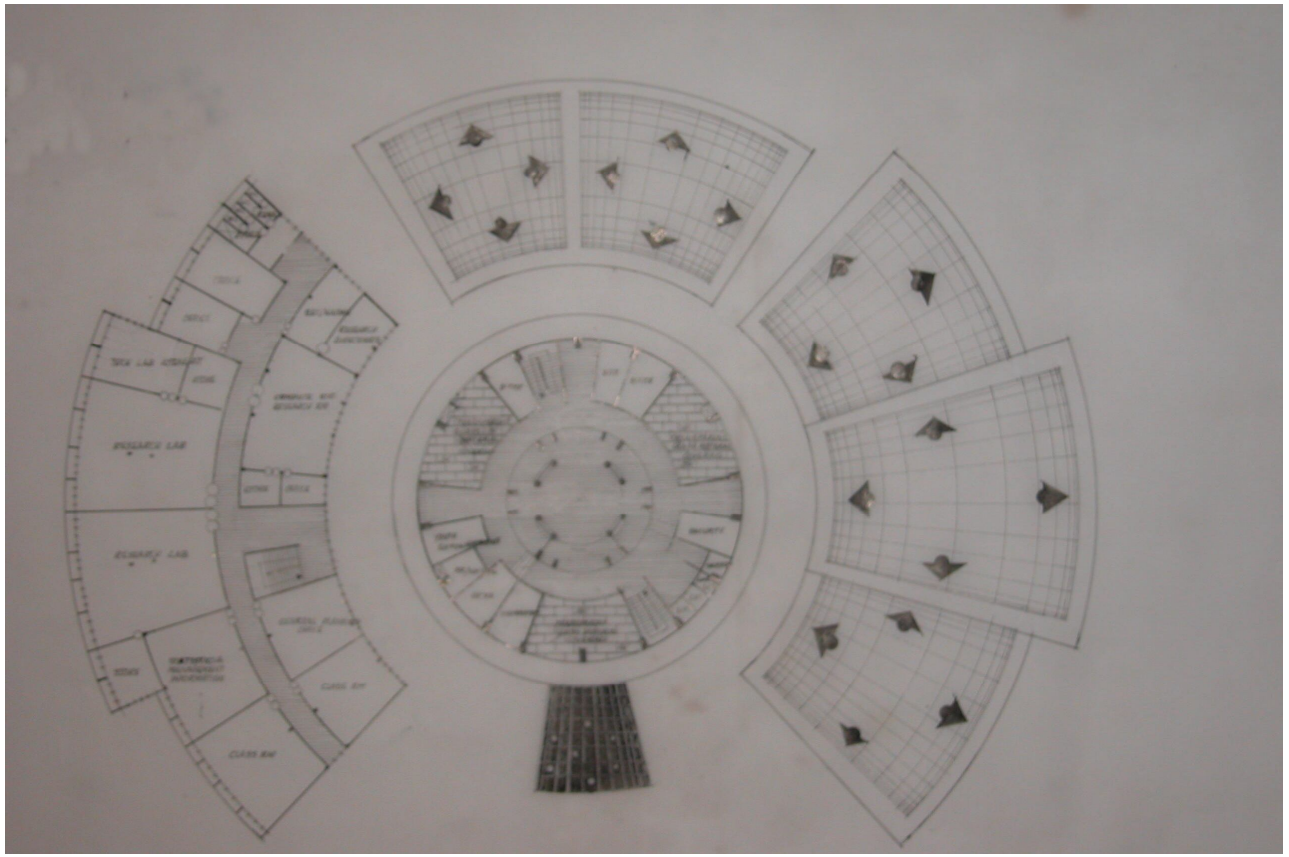
THE SITE ANALYSIS



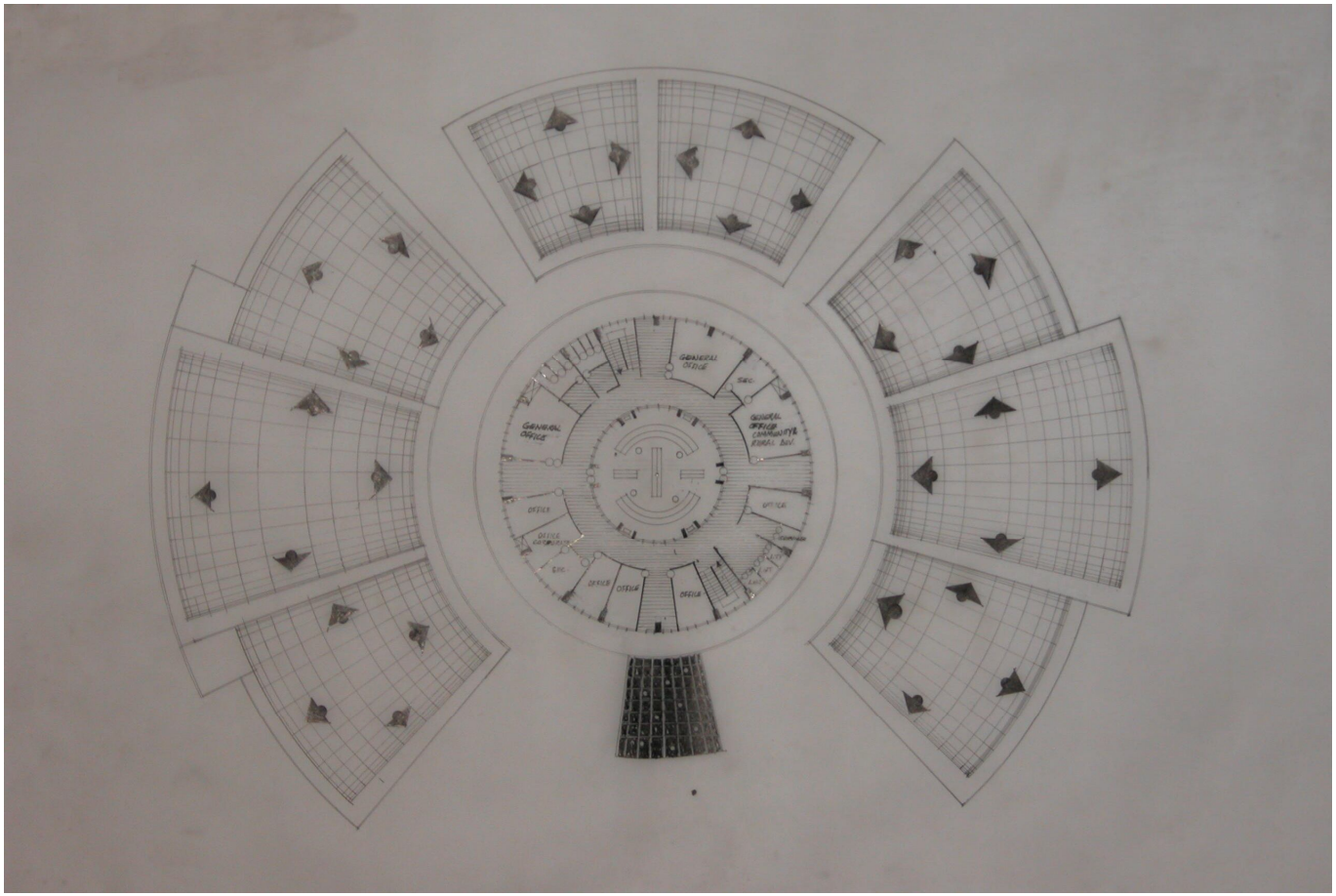
SITE PLAN



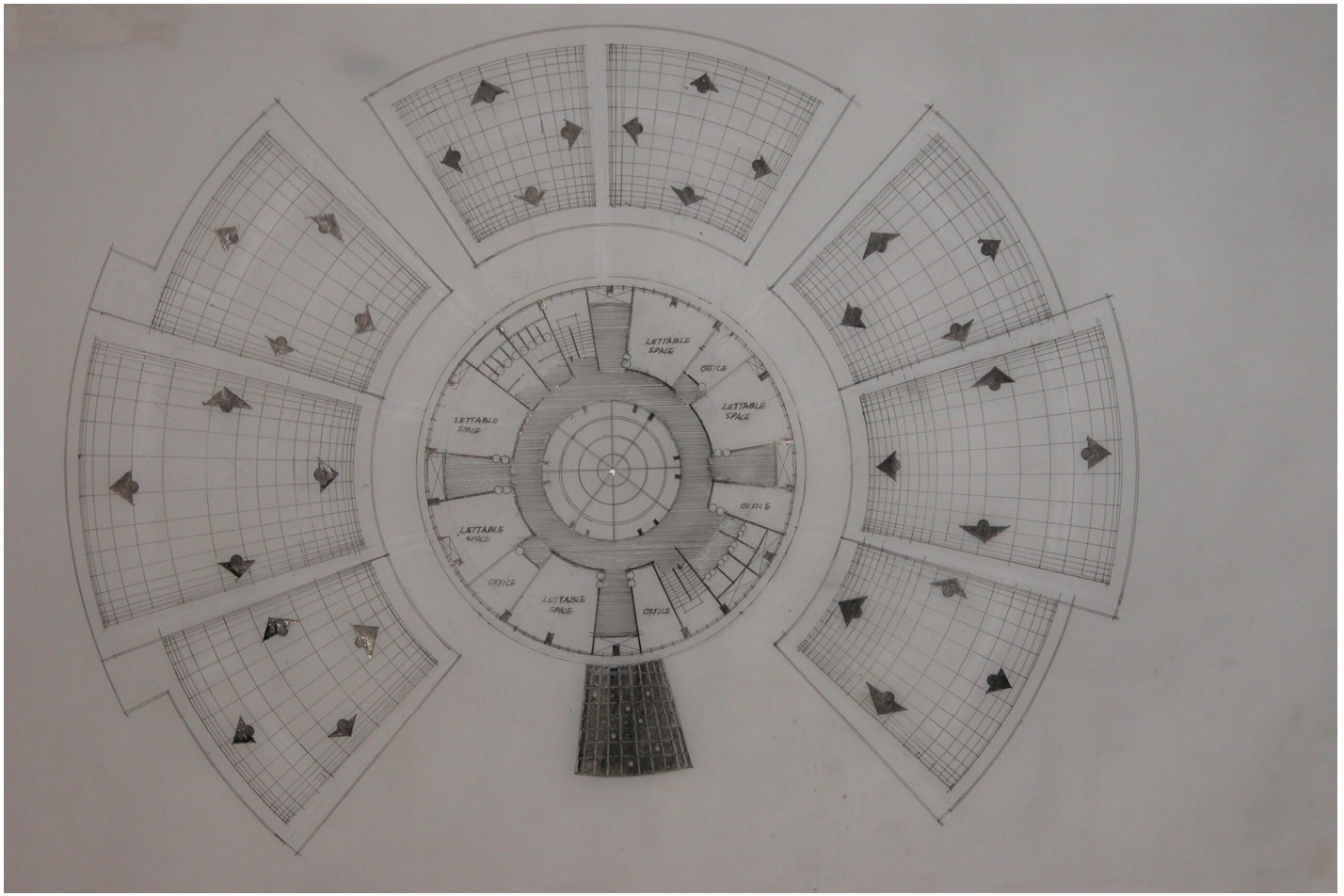
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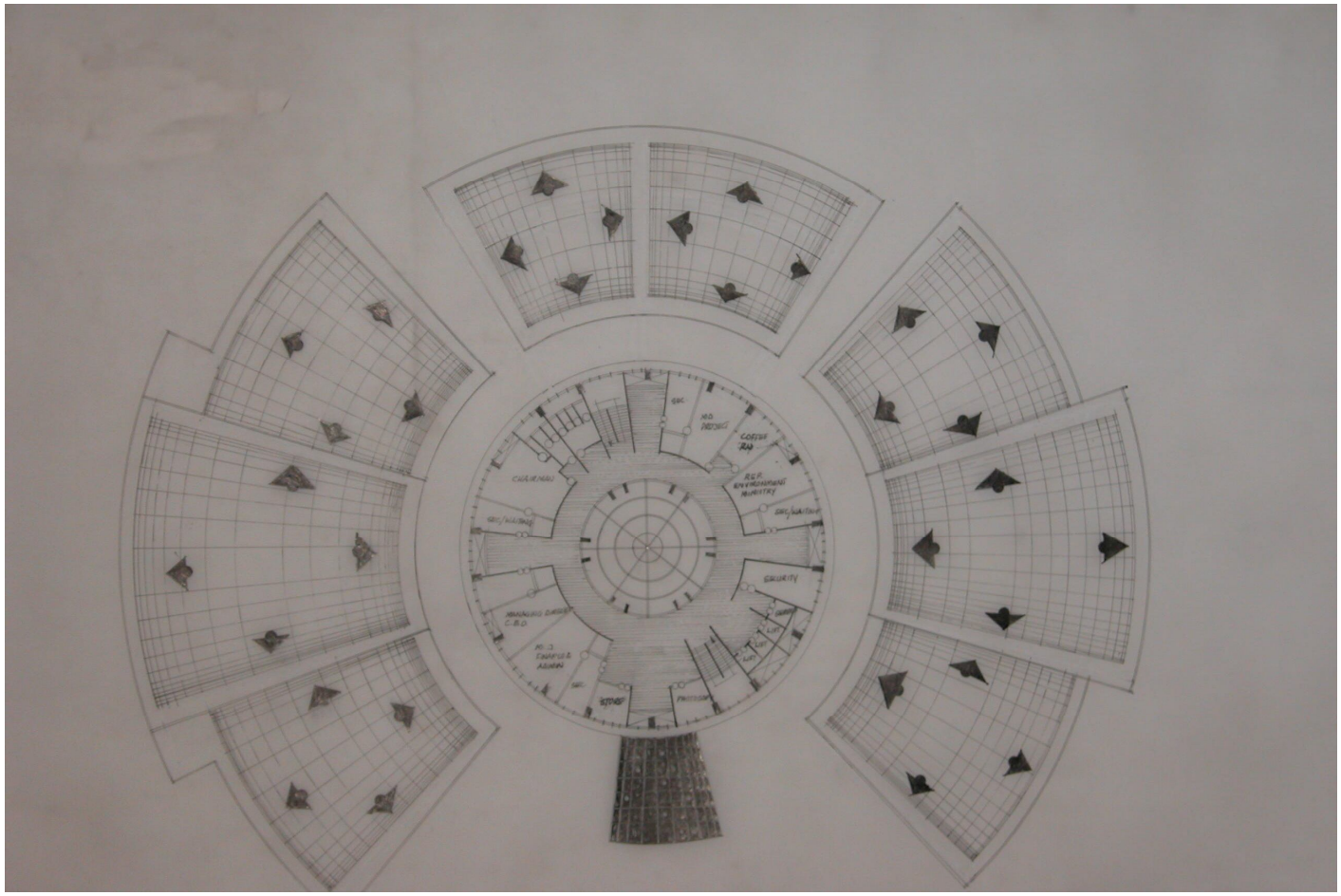
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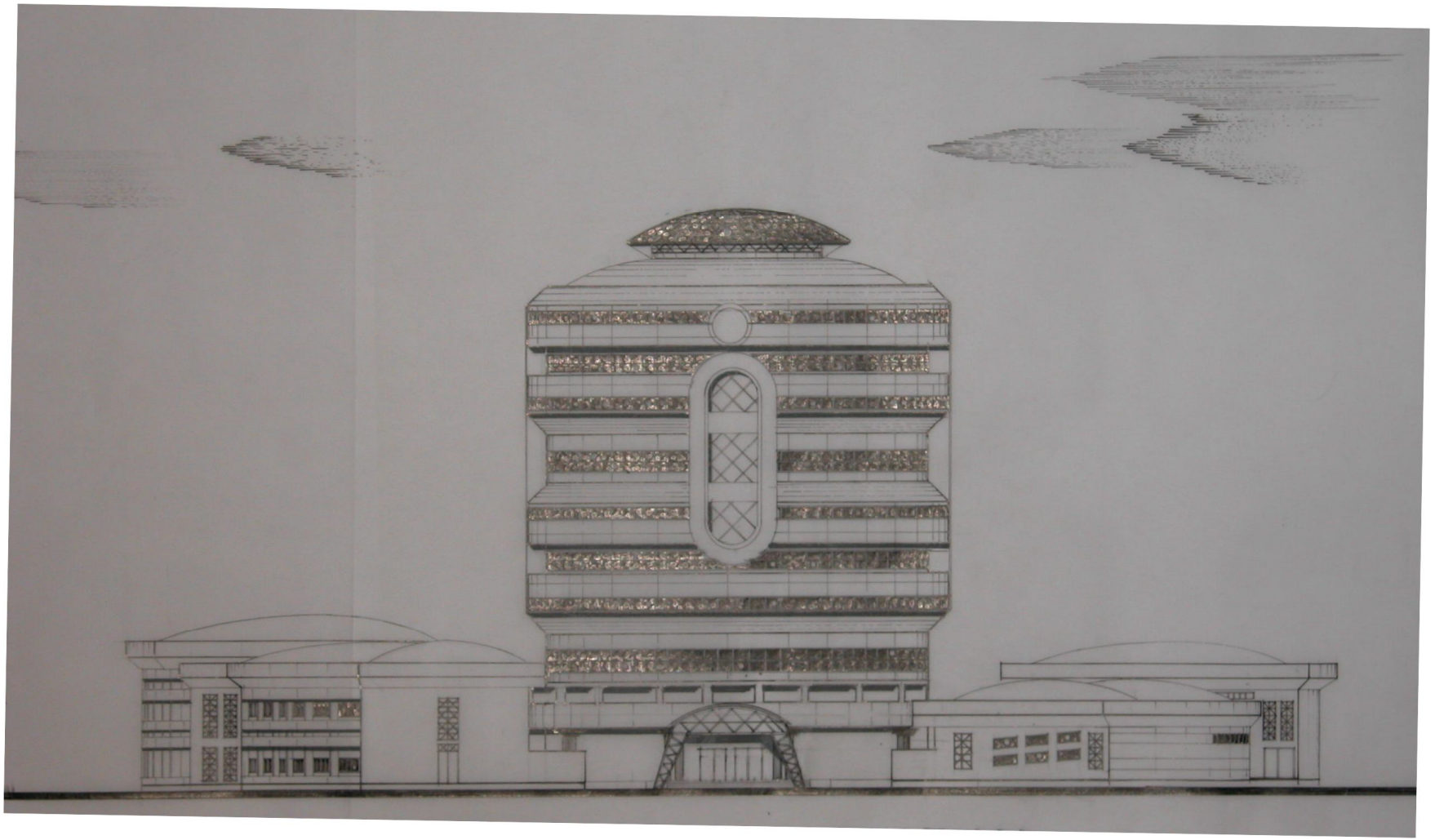
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3RD FLOOR PLAN

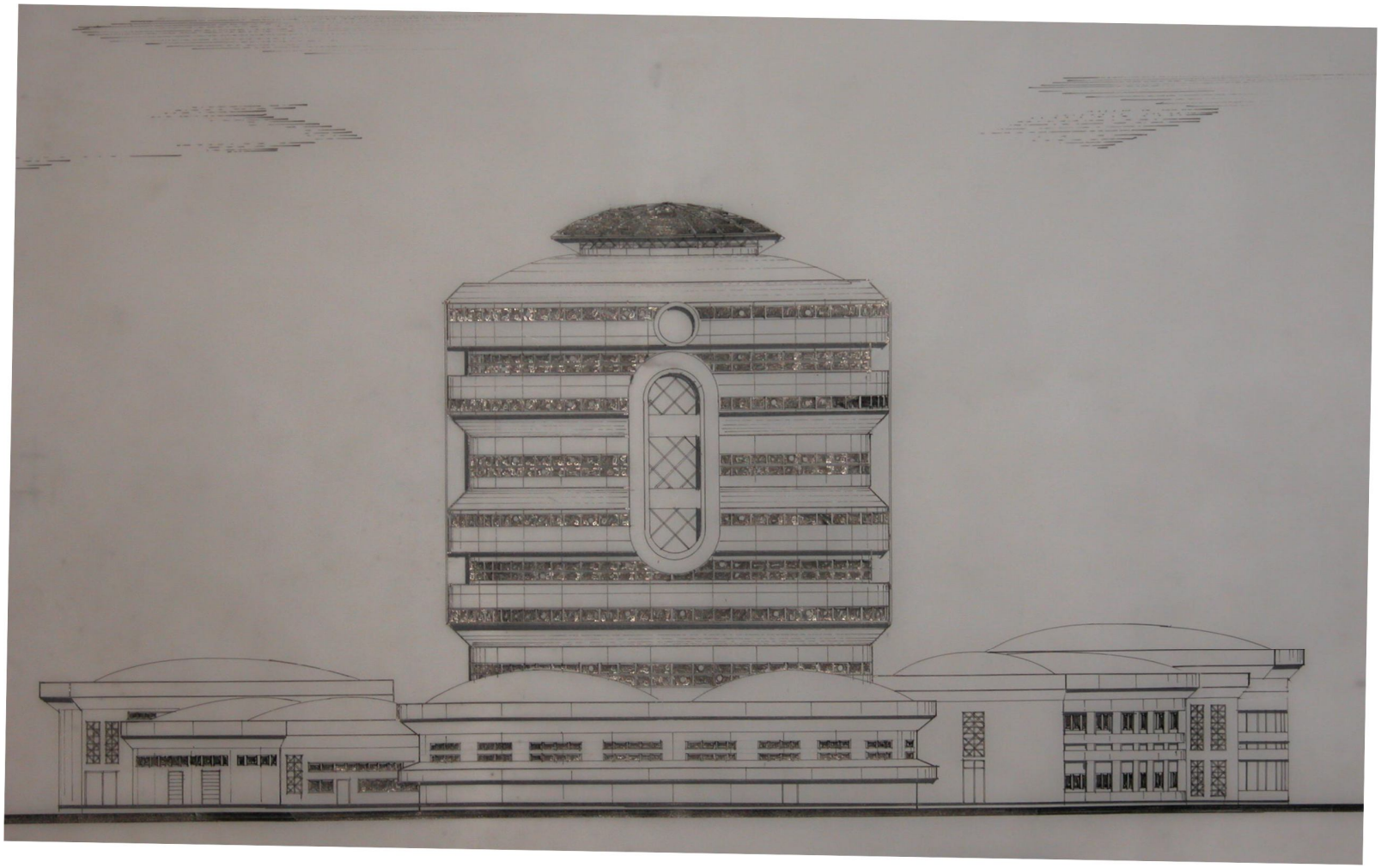


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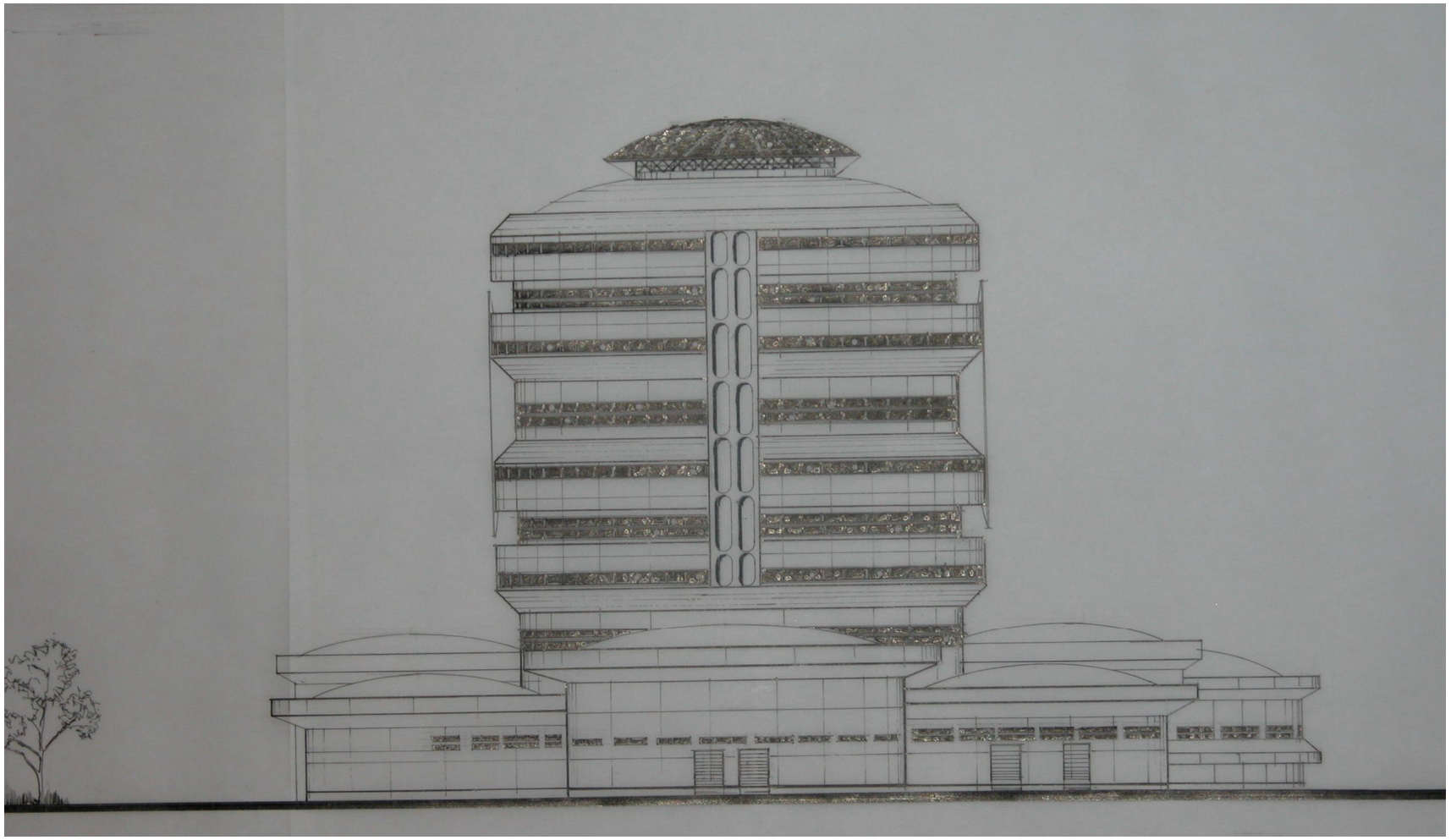


APPROACH ELEVATION

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Architectural response to changing socio-cultural demands

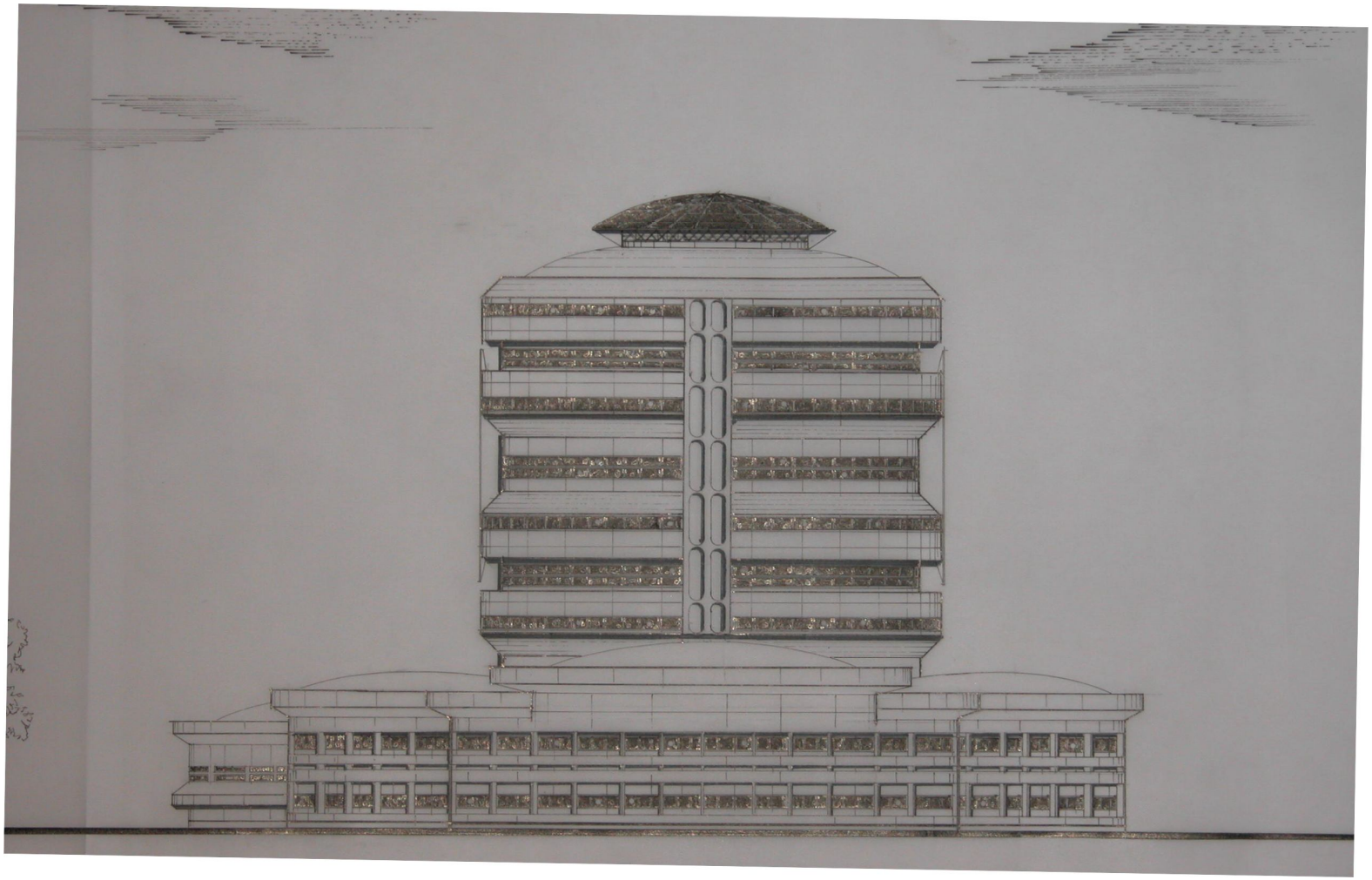


REAR ELEVATION



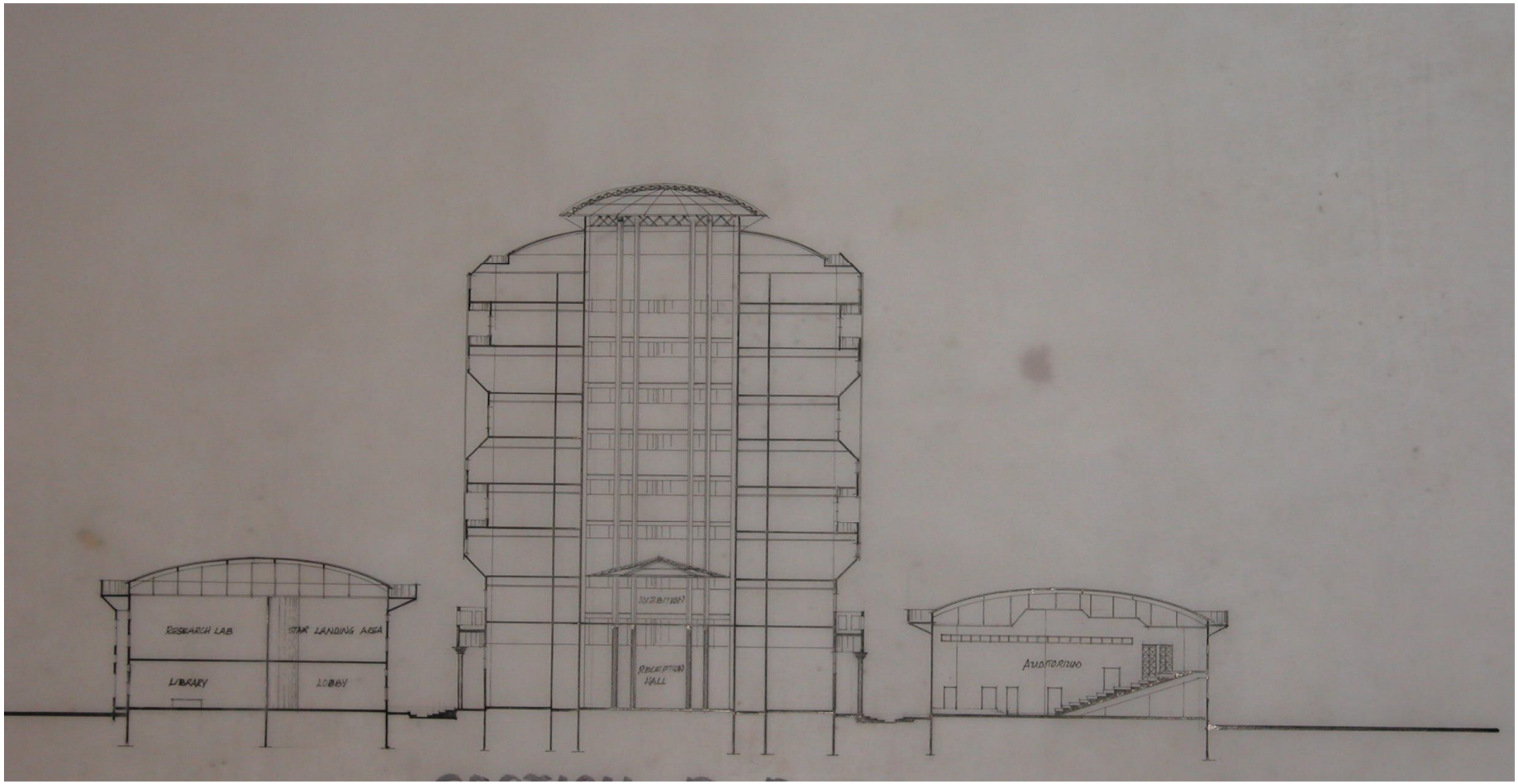
NORTH EAST ELEVATION

NIGER DELTA COMPLEX
Architectural response to changing socio-cultural demands

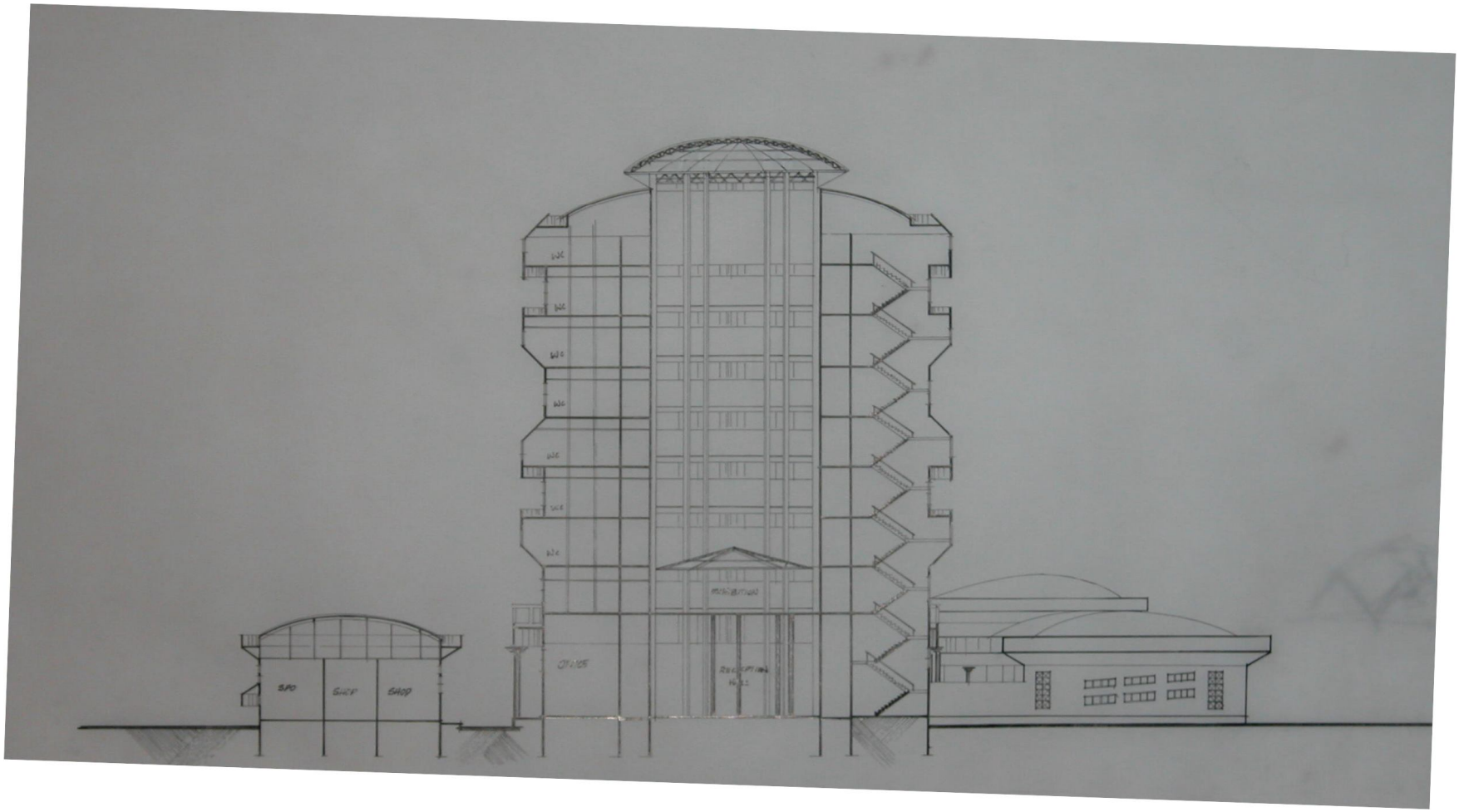


SOUTH WEST ELEVATION

NIGER DELTA COMPLEX
Architectural response to changing socio-cultural demands

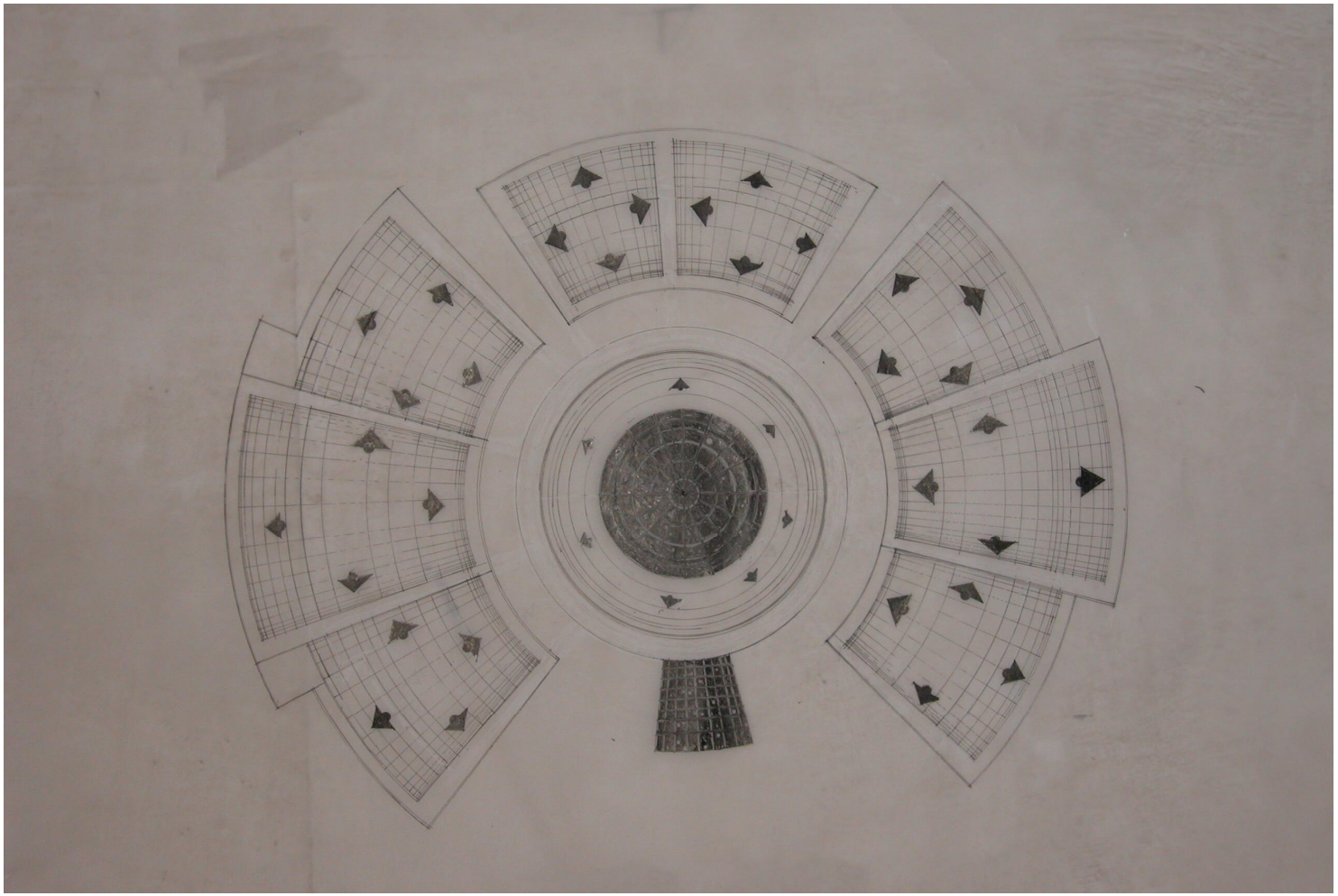

RESEARCH LAB
STAR LANDING AREA
LIBRARY
LOBBY
RECEPTION HALL
AUDITORIUM

SECTION B-B



SECTION A-A

NIGER DELTA COMPLEX
Architectural response to changing socio-cultural demands



ROOF PLAN

NIGER DELTA COMPLEX
Architectural response to changing socio-cultural demands

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