A CENTRE FOR CULTURES AND TOURISM - ARGUNGU

A THESIS SUBMITTED TO THE

DEPARTMENT OF ARCHITECTURE

AHMADU BELLO UNIVERSITY

Z A R I A

IN PARTIAL FULFILMENT FOR

TITE AWARD OF A

MASTER OF SCIENCE DEGREE IN ARCHITECTURE

BY

N. I. NDUKWE . B.Sc. (ARCH) (HONS)

JUNE 4, 1975

DEDICATED TO MY MOTHER

A C K N O W L E D G E M E N T S

I would like to express my profound gratitude to the following without whose help this work would probably have been difficult to complete:

To Mr. Steve Ehrlich, Department of Architecture A.B.U; who was my mentor and who made very useful suggestions;

To Dr. E. A. Adeyemi, Head of Department of Architecture, A.B.U; for those valuable criticisms and suggestions at the design stage;

To Mr. & Mrs. Urbanowicz, Department of Architecture, A.B.U; for their useful suggestions,

To the Entire Staff and Students of the Department of Architecture, A.B.U.

To Mallam Isa A. Dabai, Commisioner for Information, Cultural and Social Development, N.W.State, Sokoto;

To Architect S. O. Umeh, Ministry of Works and Housing, Sokoto;

To Mallam Kamba, Information Officer, Argungu Division, North West State;

To Dr. P. Wilmort, Department of Sociology, A.B.U;

To Miss Chinyere F. Arinze and Miss Anka Ejembi for all the encouragement and help;

To Mr. John Omolaiye Audu, for typing all the manuscripts;

To Mrs. N. M. Obasi, Principal, E.A.G.S.S, Abiriba

for all the financial support;

To all friends well-wishers and relations who in one way or another expressed concern over the success of this thesis.

N. I. NDUKWE.

TABLE OF CONTENTS

SECTION ONE

	PAGE
CHAPTER ONE	
GLOBAL PERSPECTIVE OF TOURISM	1
Introduction	1
Growth in Tourism	3
Tourism in Nigeria	5
Towards the Development of Tourism in Nigeria	10
CHAPTER TWO	
THE ARGUNGU FISHING FESTIVAL	16
Motivation and Response	16
Historical Brief	16
The fishing show	18
CHAPTER THREE	
A PROFILE OF NORTH-WESTERN STATE OF NIGERIA	27
Location	29
The Land	30
Communications	33
Local Crafts	37
Education	39
Places of Interest	

CHAPTER FOUR

		PAGE
	ARGUNGU TOWN	44
A	Physical Environmental Studies	44
	Physiography	44
	Chinatology	44
	Geology	44
	Pedology	45
	Hydrology	47
	Vegetation	48
B	Socio-Cultural Ecology	49
	Educational	49
	Occupation	50
	Administration	50
	Residential Planning	50
	Cooperative Unions	51
	Other Cultural Festivals	51
	The Fishing Festival	53
	Religion	53
C	Tourist/Recreational Environment	54
	Tourist Potentials of Argungu	54
	Existing Situation	55
	Identification of Market Areas	58

SECTION TWO

		PAGE
CHAPTER FIVE		
	DATA EVALUATION AND SYNTHESIS	60
A	The Cultural Complex	60
	Function	
	Traditional Dances	61
	Classification of Hausa Music	63
	Character of Hausa Dances	64
	Schedule of Facility Requirements	65
CHAPTER SIX		
	FACILITY REQUIREMENTS FOR THE MOTEL	73
	Facilities required for public use	75
	Other Spaces	75
	Artistes Village	77
	Quantification of Resources required	77
	Temporary Structures	78
SECTION THREE:	PROPOSALS AND STRATEGIES	
CHAPTER SEVEN		
	PROPOSALS AND DESIGN CONCEPTS	80
	Goals, aims and objectives	80
	Proposals	81
	Locational Criteria	81
	Space Rhythm	85

CHAPTER EIGHT

	PAGE
DESIGN CONCEPTS	86
Towards an Organic Architecture	86
Growth of Elements	86
Informality versus Formality	88
Flexibility of Volumes	88
Ecological Balance	90
Hierarchy of Courtyards	92
Visual Continuity of Volumes	93
A Structure in Transition	93
Cultural Hybridism	95
Dynamic Interrelationship of Volumes	96
Open System of Arrangement	97
Fourth Dimension in Architecture	97
Achievement of Variety within Repetitive Systems	98
Morphology - Economy and Survival	99
SECTION FOUR: THE DESIGN	
CHAPTER NINE	
DEVELOPMENT OF AN APPROPRIATE FORM	101
The Square	101
The Circle	101

PAGE

Triangle

Hexagon 103

Octagon 103

Combination of Octagon and Square 103

THE CULTURAL COMPLEX 106

Site Organisation 106

Focal Point 106

Activity Generators 107

Traffic Separation 107

SPECIAL STUDIES (LANDSCAPING) 110

SECTION FIVE CONCLUSION 113

A Synopsis 114

Conclusions 113

Bibliography 118

CHAPTER ONE

A GLOBAL PERSPECTIVE OF TOURISM

Introduction: The tremendous rise in the standard of living and continuous increase in leisure time in the worlds richer and developing countries, facilitated by cheaper, more efficient and comfortable transportation systems, have tended to make tourism a major export industry and earner of foreign exchange. Whenever man has had time and facilities he has indulged in some form of active recreation: hunting, shooting, fishing, travel, entertainment, all have been pursued. Today, with vast numbers seeking holidays and outdoor recreation, and with tourism the biggest item in international trade, the impact is phenomenal.

There are different types of Tourist Centres that can be developed and each depends on the natural environment of the area to be developed. The Tourist Centre could be either of the following:

- a lake Resort;
- a game reserve or sanctuary;
- Natural Scenery, with hills, gullies or caves;
- Sporting and Gaming Centre including hill climbing;

- Socio-cultural Centre with museum and shrines;
- a religious or pilgrimage centre.

The reason for the boost in leisure activities and Tourism are fairly obvious. All the factors determining leisure interests - population, free time, money, mobility, inclination - have grown rapidly and are still rising. The classic survey of outdoor recreation (The Report of the Outdoor Recreation Resources Review Commission, 1962 - The Rockfeller Report) predicted that the U.S.A. demand would treble by A.D. 2000. All European countries, especially the Scandinavian, report a great expansion in outdoor recreation. All the indications are that leisure pursuits - both active and passive - will treble in Britain by A.D. 2000.

Tourism is now a major industry in the world. "Britains tourist Industry now employs around 5 million people and has an annual turnover of about £1,250 million. Tourism is already the country's fourth largest export Industry and about the largest in terms of American dollars".[1] Statistics in other countries indicate a high rate of increase in the

1 Robert Arvill, Man and Environment. (Middlesex: Pengium 1973) p. 83.

Tourist Industry. Most of the developing nations of the world have tended to take advantage of the boost in Tourism and have developed beautiful Tourist sites within their countries. It is pertinent to mention the East African countries where the Safari Rally has been developed to a large extent.

GROWTH IN TOURISM

The phenomenal growth in Tourism can be explained by a number of factors:

1 There is now a greater affluence and more leisure for an increasing number of people, particularly in the developed countries.

2 Emancipation of the young and their relatively high wages when they have no family responsibilities enable them to travel;

3 Transport facilities are very much better and cheaper and there is a high rate of car ownership;

4 An enormous growth in international business necessitates travel by executives, scientists, technicians, and so on.

5 Package Tours allow people unused to making their own arrangement to travel with an ease

of mind, and are very good value because of bulk booking of transport and hotel accomodation.

6 Travel has become a status symbol, showing holiday pictures, taken at just slightly more remote place than one's friends' photos, has become a game of one - upmanship.

7 Conferences (social, political, scientific, and so on) and business meetings are proliferating and catering for them has growth into a maj major industry.

8 The popularity of new sports (skiing, sailing,) and sports events (olympics and other championships) induces millions of people annually to participate in these events, either as spectators or as performers.

9 Better education has interested a large sector of the public in cultural tourism.

10 Relief from adverse climatic conditions in the home country may be found abroad.

11 World exhibitions and trade fairs have become enormously popular, ensuring the participation of many millions of visitors.

12 Publicity becomes more and more aggressive, acting on male and female, adult and child, of all income groups and whetting the appetite of even the most timid.

13 Ideological pressure groups (political, religious, cultural, scientific, artistic) hold more and more annual rallies.

It is therefore clear why tourism has become one of the most important basic industries of any country. There is virtually no manufacturing or service industry which does not benefit in some way from Tourism.

TOURISM IN NIGERIA

It was not until July 1963 that the Nigerian Tourist Association started functioning with its headquarters in Lagos. Since its inception, its responsibility has been that of providing accurate figures regarding enterants to the country as well as help financially and otherwise in providing tourist attractions in the coutry. It was also its duty to coordinate between travel agents, airways, railways and hotels to facilitate the smooth running

of an industry such as this. Already, a few Tourist sites have been developed in the country and more are likely to be developed[1]. With the wealth of inumerable cultures giving rise to a variety of picturesque traditional dances, coupled with the beautifully coloured costumes, different local crafts and arts beautiful sceneries, a good transport system[2], Nigeria can be a fertile ground for a prosperous tourist Industry.

THE NEED FOR TOURISM IN NIGERIA

Nigeria is a vast country inhabited by well over 70 million people comprising well over 300 tribes each having different cultures and traditions. There are differences in religious inclinations - the moslems in the North and part of Western States, the Christians in the East and part of West, and a host of other pagans. It will be in the best interest of the country if Tourism is promoted and Nigerians encouraged to travel within their country, which has so much diversity in terms of customs and belief systems. By this means, there will exist greater understanding among

1 See map fig. 1 page 7
2 See map fig. 2 page 8

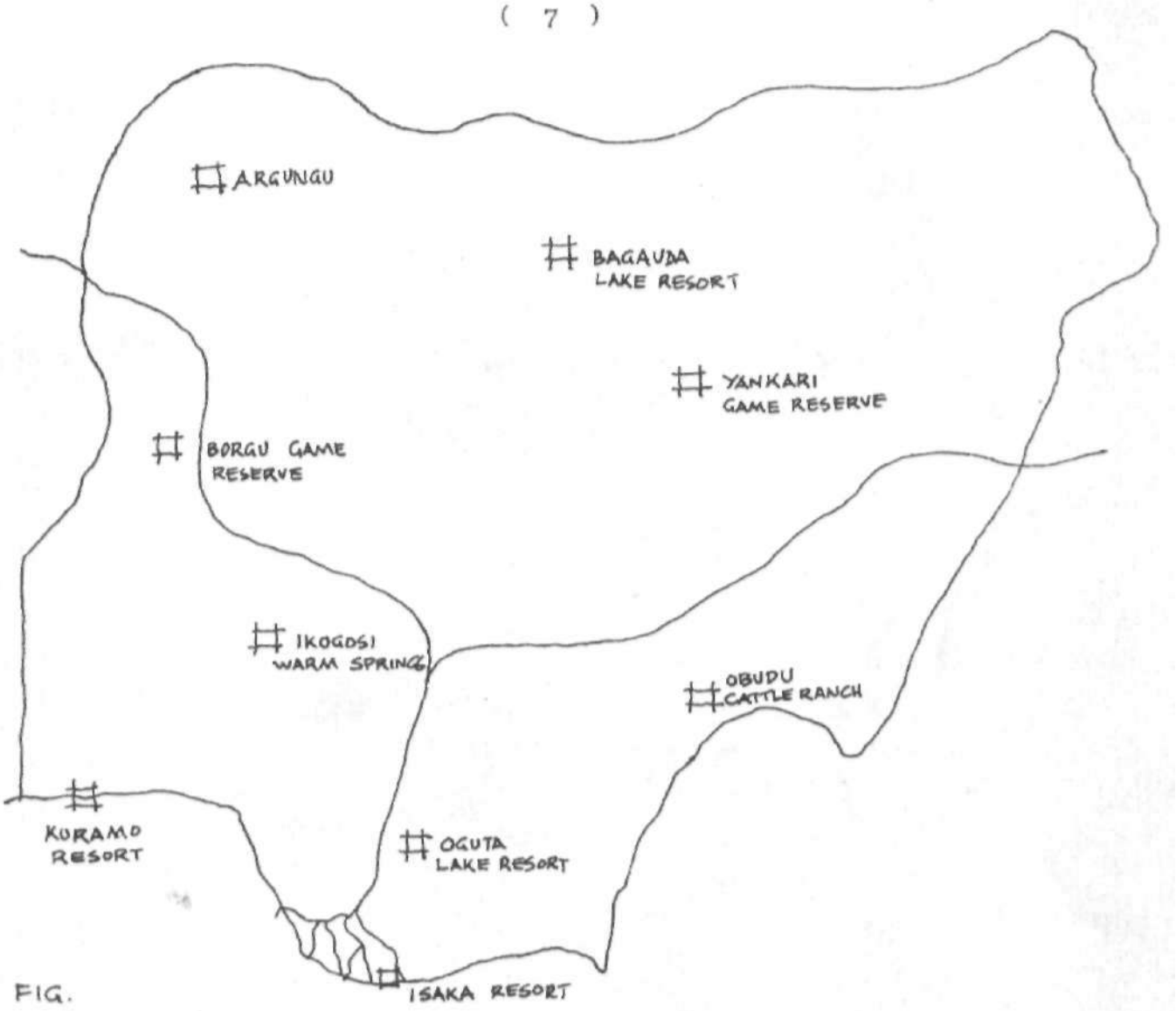


FIG.

nigeria

MAJOR TOURIST CENTRES

SCALE : 1 : 150 MLS

SOURCE : NIGERIA TOURIST ASSOCIATION

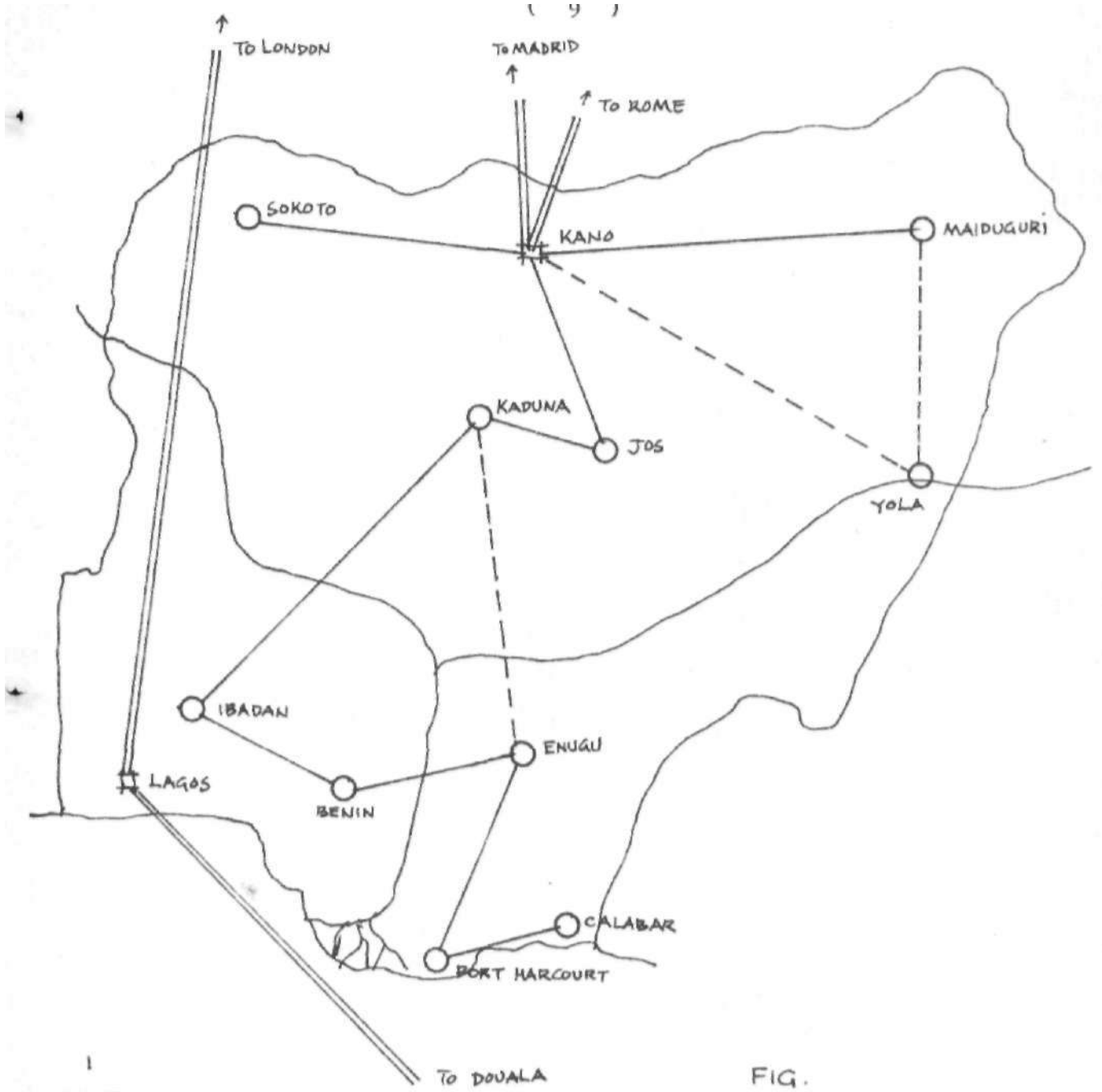
the different ethnic groups and the much desired unity of the country will have been achieved in this way. It is gratifying to note that one of the bold ventures undertaken by the Federal Government is the promulgation of a decree establishing the compulsory National Youth Service Corps in which graduates are meant by compulsion to serve for a continuous duration of 12 months in a State other than graduate's State of origin. The benefits of this N.Y.S.C. are being felt throughout the country as it is helping to promote understanding among the defferent ethnic groups.

It is worth mentioning at this juncture that it was the result of my involvement in the N.Y.S.C. in the North-Western State that I had the motivation to undertake this thesis research work.

WHY PEOPLE TRAVEL

The purpose of undertaking a journey of Tourist nature is basically to experience a different atmosphere from that to which the traveller is used. There could be many causes for such a travel:

a. recuperational - for those who want to combine



LEGEND.

- ⌗ INTERNATIONAL AIRPORTS
- ○ INTERNAL AIRPORTS
- ═══ EXTERNAL AIR ROUTES
- ——— INTERNAL DAILY ROUTES
- - - - NON-DAILY INTERNAL ROUTES.

FIG.

nigeria

AIR TRANSPORTATION

with change of place, physical and mental relaxation.

b. cultural objective - better education has interested a large sector of the public in cultural tourism;

c. Social tourism - in respect of journeys made to meet friends and acquaintances, honey moon trips, as well as journeys for reasons of social prestige;

d. Sports Tourism - for the sake of active participation in such activities as hunting, fishing, acquatic sports, mountaineering.

e. Commercial Tourism - in respect of trade fairs and exhibition.

f. Political Tourism - involving participation in big political events such as conferences.

TOWARDS THE DEVELOPMENT OF TOURISM IN NIGERIA

At this point in history when emphasis throughout the world is that of international cooperation and interdependency of nations, Nigeria should aptly create a condusive atmosphere that will generate and encourage international understanding. One of

the many ways of doing this is the development of the Country's Tourist Industry so as to attract people at international level Nigeria should be prepared to harness its vast rescurses and provide the necessary facilities. It is pertinent to point out that each Tourist site so developed must give emphasis to a particular natural resources - e.g. either a game reserve, a mountaineering resort, a lake resort, or a fishing festival such as Argungu. This will give people the opportunity of utilising whichever Tourist Centre they feel more inclined to.

Nigeria's hope in Tourism, especially in the Northern States, lies in the following:

a. The traditional festivals

b. The religious festivals

c. The game reserves

d. Arts and Culture.

Nigeria's diverse ethnic groupings makes for variety in music, dances and cultures and traditional festivals. Apart from the obvious need to revive culture that is being relegated to the background by the penetration of foreign culture, there is the

need to use our rich cultutal heritage in attracting tourists of different nationalities.

Nigeria stands a good chance of expanding tourism through wildlife conservation. Although the East African countries have so far taken the lead in the establishment of game reserves, Nigeria has managed to establish the Yankari Game Reserve, the Obudu Cattle Ranch, and the Lake Chad and Borgu Game Reserves.

The Second World Black Festival of Arts to be stage in Lagos late 1975 should provide an excellent impetus for a strong cultural resurgence in the country. In preparing the Third National Plan, efforts have been made to articulate cultural programmes that will seek to sustain this cultural renaissance.

NIGERIAS LANDSCAPE

There is a variety in the Nigerian landscape. ..... from the surging surf on the white sands and mangrove swamps of the coast, through the maze of creeks and waterways of the Niger Delta and the and the rivers, in the tall, tangled forests of the

South, on the rising hills and Savannah country of the middle areas, on the rolling plains and the rocky outcrops of the plateau and its sharp excarpment, in the gradual drift towards the long fingers of the Sahara Desert creeping over the Northern Borders from the Niger Republic.

These offer variety enough, but Nigeria's people drawn from over 25 linguistic and ethinic groups, presents an even greater variety. You find them in the crowded cities, towns and villages, in the streets, in the markets, in the shops, in the stores, in the factories, in the offices, running their own tiny stalls, running their own big business. You find them on the farms producing the crops to eat and the exports which are the nation's life blood. You find them in the villages along the rivers and creeks, along the roads, among the rocks and hills, on the open plain sheltered behind thony cactus hedges, in palatial modern houses, in mud huts, on house boats on the rivers, out at sea in frail canoes or on the navigating bridges of ocean going vessels. But seldom alone, for Nigerians

love company and even the smallest hamlet is a community.

DIVERSE TRADITIONS

Traditions, customs, dress, dancing, mascurades are interwoven into the pattern of everyday life - for birth, marriage, death, in commemoration of the remembered figures of the past, for the observance of religions festivals and ceremonies, for success in hunting, fishing, farming, opening a new house, capping a new chief and all the activities of life. The drums beat an incessant rhythm and the life of the people is expressed in the dance.

In the African context, Nigeria presents "the largest concentration of everything that is traditionally African. No other country offers this more than Nigeria where some experts in linguistic family can be found. Nigerians are conscious of this and are happy to show their cultural heritage to foreign visitors among their midst".[1]

THE ARGUNGU FISHING FESTIVAL

Argungu is a historical city about 63 miles South West of Sokoto, the capital of North Western State. The Fishing Festival is held annually between

1 The Nigeria Tourist Guide 1970/71. p. 9

February and March and provides gigantic tourist attraction. The Fishing show which is the climax of the whole festival is one of Nigerians oldest surviving festivals.

CHAPTER TWO

THE ARGUNGU FISHING FESTIVAL

MOTIVATION AND RESPONSE

The decision to undertake this thesis research was taken as a result of my participation, albeit, as a spectator in the 1974 Fishing Festival. It was then I had the opportunity to take an objective view of the events that characterised the Festival. It was discovered that no conscious effort was made at coordination of activities and at solving certain basic environmental problems.[1]

My response therefore was to try and make a thorough study of the physical and socio-cultural ecologies of Argungu and its environ and establish a framework which could lead to the development of a socio-cultural Tourist Centre at Argungu.

HISTORICAL BRIEF

More than one half of the people of Argungu emirate live along the banks of the River Rima which flows through five of the eight districts of the emirate. The people living in these districts are known as Kabawa, and their occupation appart from

1 See sketches. drwg No.

farming is fishing. Usually the fishing starts about harvest time when the water has sunk to its lowest ebb.

Initially, the village fishermen organised their fishing around their neighbourhood until a little later when it was widened to embrace the nearby villages within the district. Then inter-district fishing was organised and this continued for a number of years.

But the fishing festival as we know it today started in August 1934 when the late Sultan of Sokoto, Malam Hassan Dan Mu'azu made his first historic visit to Argungu - the first reigning Sultan to pay a frendly visit to Argungu. To commemorate the Sultan's visit a grand fishing festival at the Emirate level was organised by the Emir of Argungu, Malam Muhammadu Sama, the grand-father of the present Emire. From then onwards, the festival has become an annual affair which has grown tremendously in dimension and has attracted far more people than ever before.

THE FISHING SHOW

The fishing show has, for many years been held on the same site namely, on the northern end of the town. There the river sweeps through a large rice field, which is usually flooded during the rainy season. It is here that fishermen numbering some 2500 to 3600 and equiped with only two "handnets" each with hooks at both ends and a large round gourd with a small opening at the top assemble in the morning of the fishing day. They form a line of nearly one mile along the river bank.

The most enthraling moment of th ceremony is when the signal is given for fishing to start. Before this signal is given the fishermen who are usually kept at some distance from the river bank become tense. And when the signal does finally arrive the sea of fishermen charge into the river amidst deafening noise mingled with songs and music from canoes filled with musicians singing the praise of the fishermen. It's almost unbelievable the size of fish that gets caught[1].

1 See table of largest catches. p. 19



The great search goes on for the big fish of the year.

TABLE OF LARGEST CATCHES

Year	Weight (in Ibs)
1965	119 Ibs
1966	126
1967	94
1968	115
1974	129
1975	145

'KABANCI' DISPLAY

The 'Kabanci' Display is one of the side shows introduced into the festival when the fishing festival became an annual event and started to attract more people, especially from outside Sokoto Province.

This event takes place further down stream on the eastern end of the town. Here the river is quite broad. The displays include several acquatic sports ranging from canoe races, swimming to diving contests. The most interesting perhaps, are the bare-hand fishing and the wild duck catching.

WILD DUCK CATCHING

Argungu marshes have one of the highest concentration of wild ducks in Nigeria. Just before the festival, efforts are made to catch as many of these wild ducks as possible. These are then released just before the event starts and competitors are asked to try and catch them - with bare hands. Appart from the speed and agility of the ducks, they can be most vicious when cornered and the way competitors overpower them can be most thrilling.

BARE HAND FISHING

Equally exciting is the bare hand fishing where competitors dive into the water and within a few seconds come up with fish caught with hare hands.

AGRICULTURAL FAIR

Other events which people find interesting are the Agricultural Fair and the cultural Exhibition. The agricultural Fair was first introduced in 1970 and features, among other things, cattle show, crop exhibition and display showing some of the activities of the Minstry of Natural Resources. These include some aspects of Fisheries. Some other organizations including Commercial Firms, the Extension, Research and Liaison Services of the Ahmadu Bello University, Federal Department of Fisheries, and the UNESCO also mount exhibitions.

The cattle show normally features White Bulls, beef cattle, gudale, white Fulani, Rahaji, Azawale, Freizians, Cananas, Muturus and Santa Gertrudes.

Other livestock on show include horses, Sokoto red skin goats, sheep, poulty and camel. Livestock products and equipment and eggs usually feature too.

The crop exhibits include millet, guinea corn, rice, wheat, groundnuts, vegetables and fruits and the Ministry of Natural Resources usually has stalls for mixed farming, home economics, fishing materials and extension demonstration units. "These are designed not only to enlighten and encourage farmers but to show tourists the agricultural potentials of the State. "[1]

CULTURAL EXHIBITION

The cultural displays are very varied and exciting. The North Western State has a record as one of the Nigeria's leading states in cultural preservation and producer of handicrafts. The cultural exhibition features traditional music, dances and quite a number.

KABURU TRADITIONAL INSTRUMENTALISTS

The Kaburu traditional instrumentalists from MINNA division of the Niger Province are a very unique group of musicians who won for Nigeria her only medal in the 1969 All-African Cultural Festival held in Algiers.

Usually comprising three flute players, three

1 North Western State - Argungu Division (pamphlet) p. 26

violinists, five bass-fidlers and three "urigglers" (who tie small bells around their ankle and shake these in harmoney with the music) the Kaburu group may be rightly referred to as the African Symphony Orchestra.

Both Hadjia Lolo and her Sall group the Angale dancers are from Nupeland, also of Niger Province. Hadjia Lolo, leader of the Salla group is a formidable entertainer who has spent almost 50 years in the trade and has not lost her charm and appeal. She is reputedly versed in the history of Nupeland which she exhibits in many of her compositions.

Angale music which is aptly described as the pop music of Nupeland is another thrilling event. The young dancers who usually demonstrate the latest "angale steps" are a fantastic group.

HANDICRAFTS EXHIBITION

The crafts exhibited include several types of Abuja pottery, leather goods, Bida glass wares and brass works, carpets, rafia products like fine mats and hats; wood carving, woven sloths, embroided dresses etc.

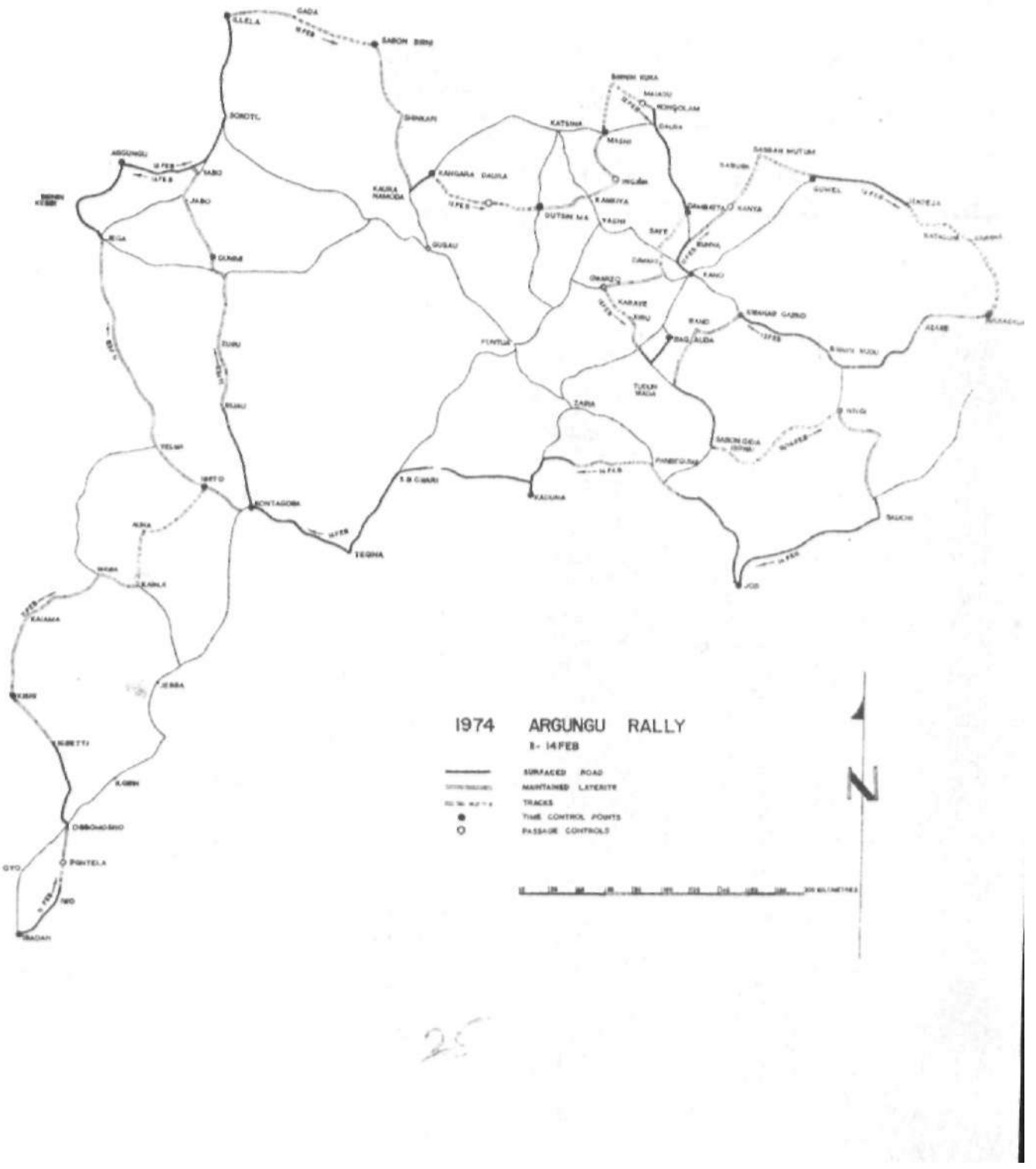
TRADITIONAL WRESTLING AND BOXING

Another aspect of the culture usually exhibited are traditional wrestling and boxing. Wrestling is not alien to Africans even though the rules of the game differ from place to place. Wrestling in Argungu is as old as the land itself. Wrestling among children and young men is a common place and is encouraged as a form of training not only for self defence and physical exercise, but also for endurance training and chilvary. Boxing is equally an age-old tradition in Argungu.

THE MOTOR RALLY

The Motor Rally is one of the newest addition to the Festival.introduced in 1973 it has generated a lot of excitement and interest both within and outside Nigeria. Spread over a period of four days the motor rally takes off at Ibadan, traversing greater part of the country and finally terminates at Argungu1. There are quite some substantial prizes for the winning cars and this particular event is encouraged and sponsored by the different motor companies in the country.as it gives them the

1 See map of route for the Motor Rally 1974. p.25


1974 ARGUNGU RALLY
8 - 14 FEB
SURFACED ROAD
MAINTAINED LATERITE
TRACKS
TIME CONTROL POINTS
PASSAGE CONTROLS
N
ARGUNGU
SOKOTO
SABON BIRNI
KATSINA
MAIDUGURI
KANO
JOS
ILORIN
IBADAN

opportunity to advertise their latest model in the automobile industry.

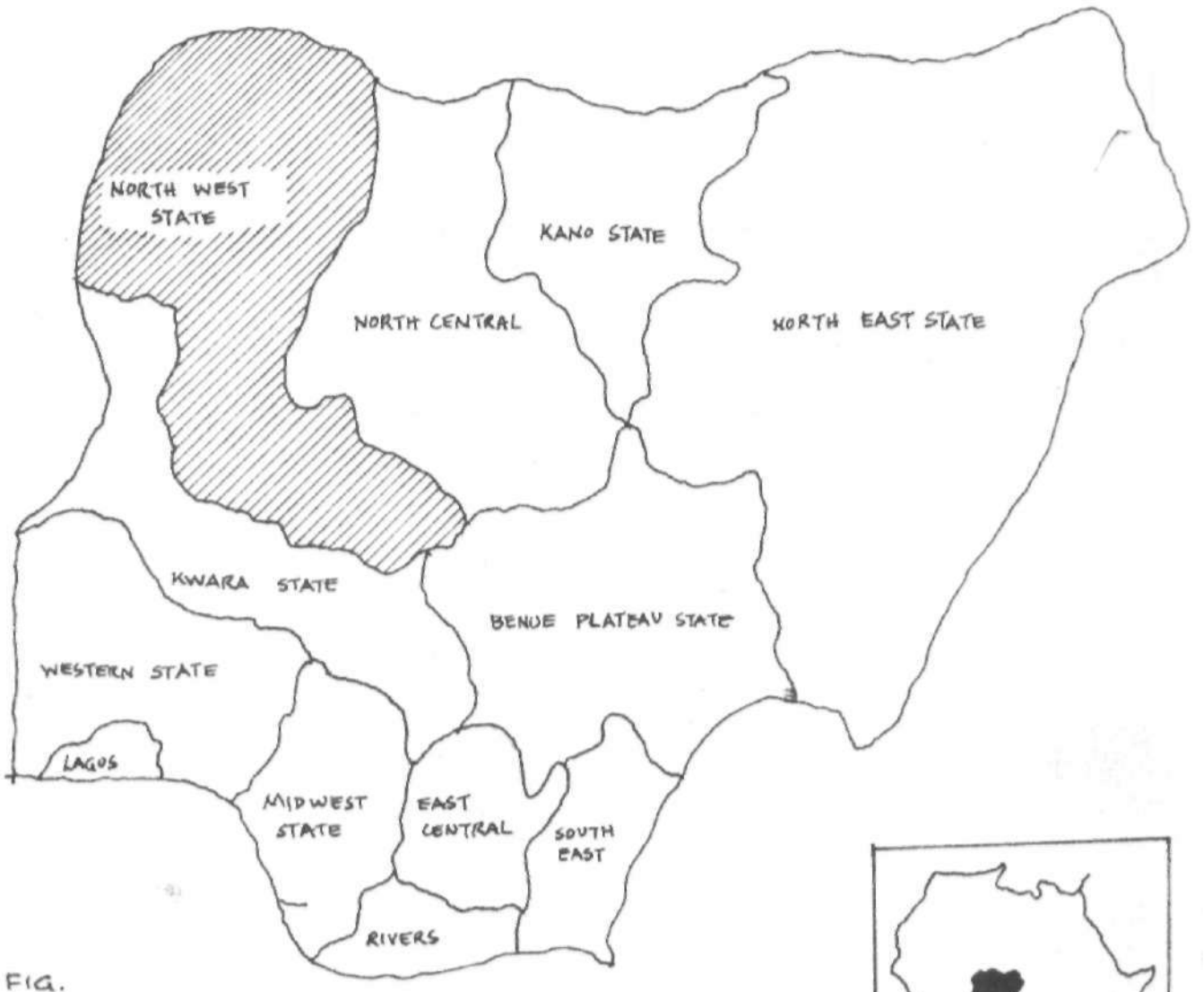
CHAPTER THREE

A PROFILE OF THE NORTH-WESTERN STATE OF NIGERIA

LOCATION: As the name implies, the North-Western State is situated on the north-western corner of Nigeria. It lies between latitude 8.9° South and 14° North, and longitude 3.8° West to 7° East. It is boundded by the Niger Republic on the north, by the North-Central and Benue Plateau States on the East and South-east respectively; and on the South by the River Niger, which separates it from Kwara State on the western fringes it shares the same boundary with Dahomey Republic[1].

Shaped like a sculptor's unfinished bust and stretching some 400 miles from the Niger basin in the South to the fringe of the Sahara Desert in the North, the North-western State is naturally characterised with varied physical, climate and geographical features all of which combine to make it one of Nigeria's most fascinating state. The state's beautiful landscapes, broad rivers and lakes, to the North, contrast very well with the green and well wooded picturesque mountain tables winding valleys

1 See map showing division by States. p. 28



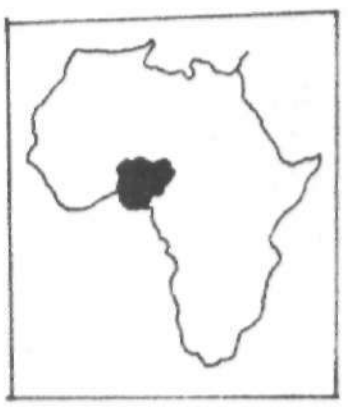


FIG.

nigeria

POLITICAL MAP.

BASED ON FEDERAL SURVEY MAP OF 1952 AS AMENDED.

and fast moving, rocky rivers and water-falls to the South.

THE LAND

The North-western State has an area of approximately 65,000 sq. miles which represents about one-fifth of the country. The mean annual rainfall varies between 20 inches in the North and 40 inches in the South. The northern part of the State has a short wet season lasting about four months from June to September and a dry season for the rest of the year although it gets very cold in the morning and at night during the Harmattan (mid-December to mid-February).

The Southern part of the State has high humidity. As a result of the physical locations, rainfall, climate and soil conditions, the States abounds in a variety of agricultural state. There are three land form regions: the Sokoto plains in the Northern part of the States, the high plains of Hausaland in the East and the NIGER trough running from North-west Rima and Sokoto rivers and the plains of Hausaland are ferruginous and light in

in texture. These soils of the lower Niger trough are red ferralsols of loose sandy sediments while the Sokoto plains have ferruginous soils.

COMMUNICATIONS

The North-western State is accessible to the rest of the country by air, road, rail and water.[1]

AIR: Sokoto, the capital of the State has the largest airport in the State, followed by Gusau. There are plans to develop the Sokoto Airport to International status. At present Nigeria airways maintains regular air services between Sokoto, Kaduna, Kano, Lagos and other principal towns of the Federation. Besides Sokoto and Gusau airports there are aerodromes or airstrips at Bida, Minna, Kontangora, Zuru, Yelwa, and Birnin Kebbi.

ROAD The main road from Lagos to Kano and Maiduguri passes through the State in addition to some other trunk 'A' roads that link the major towns of the State with other cities in the country. Sokoto is linked with Zaria via Gusau with one of the besttrunk 'A' roads in the country.

1 See communication map of N.W.S. p.31



FIG.

north western nigeria

COMMUNICATIONS.

LEGEND.

- INTERNATIONAL BOUDARY
- BITUMINOUS SURFACED ROAD
- ALL SEASON ROADS
- DRY SEASON ROADS
- RAILWAY ROUTES
- MAIN AIR FIELDS.

There are over 758 miles of bituminous surface roads in the State. A huge Federal Government Roads project is now completed along Sokoto - Ulela Road. This joins the international highway between Nigeria and Niger Republic at Kwani. This will be part of the trans-Sahara road when it is completed.

RAILWAY: The national rail-line from Lagos to the North passes through the State. It connects Jebba, Mokwa and Zungeru with Minna. At Minna it branches off to Baro on the Niger River. The line from Minna also passes through Gusau via Kaduna and Zaria in the North Central State. The railway services is an important link between the State and the rest of the country, especially as it links the state with the longer Southern markets and the country's main port in Lagos. The railway is a major means of transportation for people, livestock and export produce. Because of this economic importance, there are feasibility studies already completed to

join the major towns in the Railway Services.

WATER: A large portion of the River Niger flows through the State. With the construction of the Kainji Dam, the Niger is now navigable for a greater part of the year from the coast up to Niamey in the Niger Republic passing through the State at Yelwa. Yelwa is an inland port and sewes as a produce evacuation port for most of the States produces, as well as that of some other States.

A river transport company known as the Central Water Transport Company has been established by six States in the Federation including the North Western State with a view to navigate both Niger and Benue rivers. The company will shortly introduce barges with suitable tugs to transport goods and passengers up Niger River from Lagos and other parts of the country, through Kainji Lake to Yelwa and Niger Republic.

LOCAL CRAFTS

The North-western State is world-famous for its beautiful hand crafts and arts. These range

from locally woven cloths of different patterns from which gowns and other clothing are made, to the unique Nupe glass works as well as silver, copper, brass and aluminium works. All these are produced manually by patient craftsmen. The products of craftsmen consist of richly decorated trays, spoons and knives, ash-trays, and bowls. They also make horse briddles and stirrups and toy animals and birds made from solid copper, brass or alluminium. All these articles can easily be purchased in the markets, cooperatives stores or directly from the makers at Bida.

GLASSWORK

The glassworkers at Bida who are said to have migrated from Egypt over two centureis ago, claim that the only one area in the whole of West Africa at which the art could be carried out it at Bida town. They produce richly coloured glass bangles and toy glass snakes of different colours as well as necklaces.

MATS AND HATS

Sokoto is famous for the best locally worn

hats (Malfa) in the State. These are made from the leaves of date palms. Horse saddles and their bands fittings have been made in Sokoto and Bida for centuries. As far back as 1925, a craftsman from Bida - Malam Ndagi Kutigi was sent to the British Empire Arts exhibition in London to demonstrate African arts and culture and his entries in the exhibitions won Bida first class certificates and medals.

LEATHER WORKS AND TANNERY

For centuries, the people of the State have been engaged in all classes of leather works. These include supplying water containers and water buckets made of sheep and goat skins for carrying and drawing water. They also make horse harnesses from the same material. In the olden days shields were made from thick skins of cows, buffaloes and camels. Satchels and wallets are made of light skins. Today there is a big tannery and leather works factory in Sokoto.

WOODWORK

From local woods wood workers of the State

make canoes, doors, mortar, pestler eating bowls and stools. In some part of the State where there are pockets of forests, good timbers like Iroko and Pladaci and several white woods are available for supplying planks for roofing and house-hold furniture. Some of the doors, door posts, stools and mortars are made with interesting artistic designs and patterns.

POTTERY

Two main categories of Pottery are made in the State - the traditional, centuries - old industry which caters for the day-today needs of the people and the products of the Abuja Training Centre.

The history of the Abuja Pottery Training Centre is a recent one. It was established in 1951 and the centre has become known all over the world. It's internationally known potter, Dr. (Hon) Ladi Kwali - who is an instructor in the centre has demonstrated traditional methods and designs in Britain, Germany and the U.S.A. without the aid of the wheeling machine he has produced well-shapped water hars delicately carved with beautiful designs

that have adorned Nigerian pots for centuries.

The chief products are:- glazed stone-ware teapots, coffee pots, cups and sourcers, plates, bowls, beer mugs, jugs, casseroles, crevets and sugar casters with screww caps, ashtrays, flower vessels. Unglazed terracotta, water coolers, prayer bottles, ink pots for use in Koranic Schools, flower pots and poultry fountains.

Pottery made at Abuja has been exhibited in London (Berkeley Galleries) in 1959 and 1962; in Paris (Gallerie La Borne) in 1962; in New York (the Harmon Foundation, Permanent Collection). The folowing museum have examples of the work from Abuja: Victoria, and Albert Museums in London; Boyman's Museum in Rotherdam; the Milber White Collection in New York; the Nova Scotia in Halifax.

EDUCATION

The Government of the North Western State has as its priority the development of the educational system in the State. At the creation of States in 1967 the only six percent of the children of School age in the State were actually in School. But

since that time the Government has undertaken a bold step aimed at providing education for the masses both at primary and post primary level. This is evident from the lion share which education gets in the State development programmes.

ADULT EDUCATION

Although the focus of the States' efforts to raise the educational standard has been placed on Secondary and Teacher Training Institutions, adult education has not been neglected. The state recognises the need to increase the general awareness of the citizens in order to make them more useful not only to themselves but to the Government. An Attempt is underway to increase the relevance of education for adults. Until recently, courses in mathematics and English were central to the structure of adult education plan. This is presently giving way to newer techniques that will promote functional literacy and the individual's ability to handle a particular task. During the last year the programme has begin to take a new shape with courses now extended to nine months. The environment in

1,600 classes now stands at 21,000 with the State making a ₦7,100 contribution.

PLACES OF INTEREST IN THE STATE

There are many things of varying interests to see in the State. They range from historic places and ruins of ancient cities, sites of famous battle grounds to archeological finds and museums.

SOKOTO TOWN AND AROUND

The tombs of Shehu Usman Dan Fodio (Hubare), the great religions reformer of the nineteenth century and founder of the Fulani Empire. Shehu Usman's mosque and that of his son and successor, Sultan Bello are also in Sokoto. There is a museum kept by the Local Authority in which historic objects are preserved.

SURAME: This is the town built by Kanta, founder of Argungu Emirate in the Sixteenth century. The ruins can still be seen.

ARGUNGU AND ITS ENVIRONS

Apart from the Famous Annual Argungu Fishing Festival, there is a museum - the Kanta Museum - situated in the former Palace of the Emires of

Argungu. It contains a well-preserved collection of artifacts, weapons and other accoutrements of war, drums and other impliments recalling the ancient glory of the people of Kebbi. Among the items there are three unique water pots of fine Nupe manufacture said to have been presented to Sarkin Kebbi Kanta (1516-1554), the founder of the ruling family. They are of evident antiquity and are the only examples of this particular Nupe design to be found in any museum in the world.

GUSAU AND ITS ENVIRONS

Yandoto Daji, about nineteen miles from Gusau on the Gusau - Funtua road, is a place of historical significance. Yandoto whose ruins are still visibile was the title of the ruler of Chafe - Koforkoshi - Kogo region, now the district head of Chafe. It was claimed that it was here that eastern scholars used to go for further education from all over the western Sudan during the pre-Fulani days. It was also from Yandoto that one Korau went to Katsina and killed Danzy, King of Katsina, in a wrestling contest and established

a new dynasty.

The Kotorkoshi hills present ample opportunity for tourists interested in hill-climbing.

GWANDU EMIRATE: At Kalgo, tem miles on Birnin-Kebbi -Jega road there are dye pits and Kalgo is reputed to have the best indigo in the province. At Bakura, there is the biggest inland lake in the State- an ideal site for picnic and fishing.

KOTANGORA AREA

Between Kontagora and Mokwa, eighty miles of Savannah and sparcely populated area, roam the biggest games in the country. These range from elephants to lions, bush cows, antelopes, etc. Hunting isalowed in the area. But this could be a very nice sport for the development of a Game Reserve.

JEBBA ISLAND

The calun and the bronze statue which were brought there by Tsoede, the founder of pre-Fulani Nupe dynasty, are still kept there. There is also the Mungo Park Memorial.

BIDA TOWN

Mention has already been made of the famous

Bida glassworks. Tourists can see the glassworkers, wood carvers, silver, brass and solid copper and aluminium workers, Rafia workers who make beautiful mats and hats also abound. There are numerous sourvenir shops all over the place.

MINNA AREA

About fifty miles north of Minna on Kuta road is Shiroro Gorge and water falls.

ABUJA AND SURROUNDING

Twenty-two miles from Abuja on Abuja-Minna road is Gurara falls; and eight miles south of Abuja is the Tafa falls. Mayanka falls is inside Abuja town itself. About five miles from Abuja on the Abuja-Keffi road is a huge granite rock which looks like a kneeling elephant. There is also the Dawaki rock with a swimming pool. In Abuja there is a sur-venir shop for pottery.

POPULATION

The population of the state categosied according to the divisions is as shown in the table that follows.

DIVISION	POPULATION (1963 Census)	PRESENT POP.(PR)	POPU. IN 1980 (PRO)
ABUJA	91,3[illegible]	93623	95,964
AGIAE/LAPAI	101,973	104,522	107,135
ARGUNGU	293,986	301,336	308,869
BIDA	385,093	394,720	404,588
GWANDU	732,690	751,007	769,782
KONTANGORA	254,375	260,734	267,252
MINNA	361,761	370,805	380,075
SOKOTO	3,193,019	3,272,84	3,354,665
YAURI	115,075	117,952	120,901
ZURU	204,019	209,119	214,347
T O T A L	5,733,295	5876654	6,023578

Table: Population figures for N.W.State[1].

1 Source Federal Office of Statistics; Sokoto.
Rate of growth used for projections is 2½%.

CHAPTER FOUR

ARGUNGU TOWN

A PHYSICAL ENVIRONMENTAL STUDIES

PHYSIOGRAPHY: Argungu town and its environs is characterised by low-lying plains with a few hills - the Dan Koji hills - sparecely distributed. These plains form part of the Sokoto plains with the Rima river passing through the town. The river flows all the year round and is liable to flooding during the rainy season. It is on this river that the annual fishing festival takes place. There is a hydrological station at Argungu with bench marks. The plains are ferruginous and light intexture. Because of the low-lying nature of the land free natural drainage is possible although certain areas close to the river are susceptible to erosion.

CLIMATOLOGY: The graphs that follow illustrate the mean annual and monthly rainfalls, the mean Daily relative humidity, the mean maximum and minimum temperature variations.

GEOLOGY: Argungu and its environs has its location on an entirely sedimentary area. From available

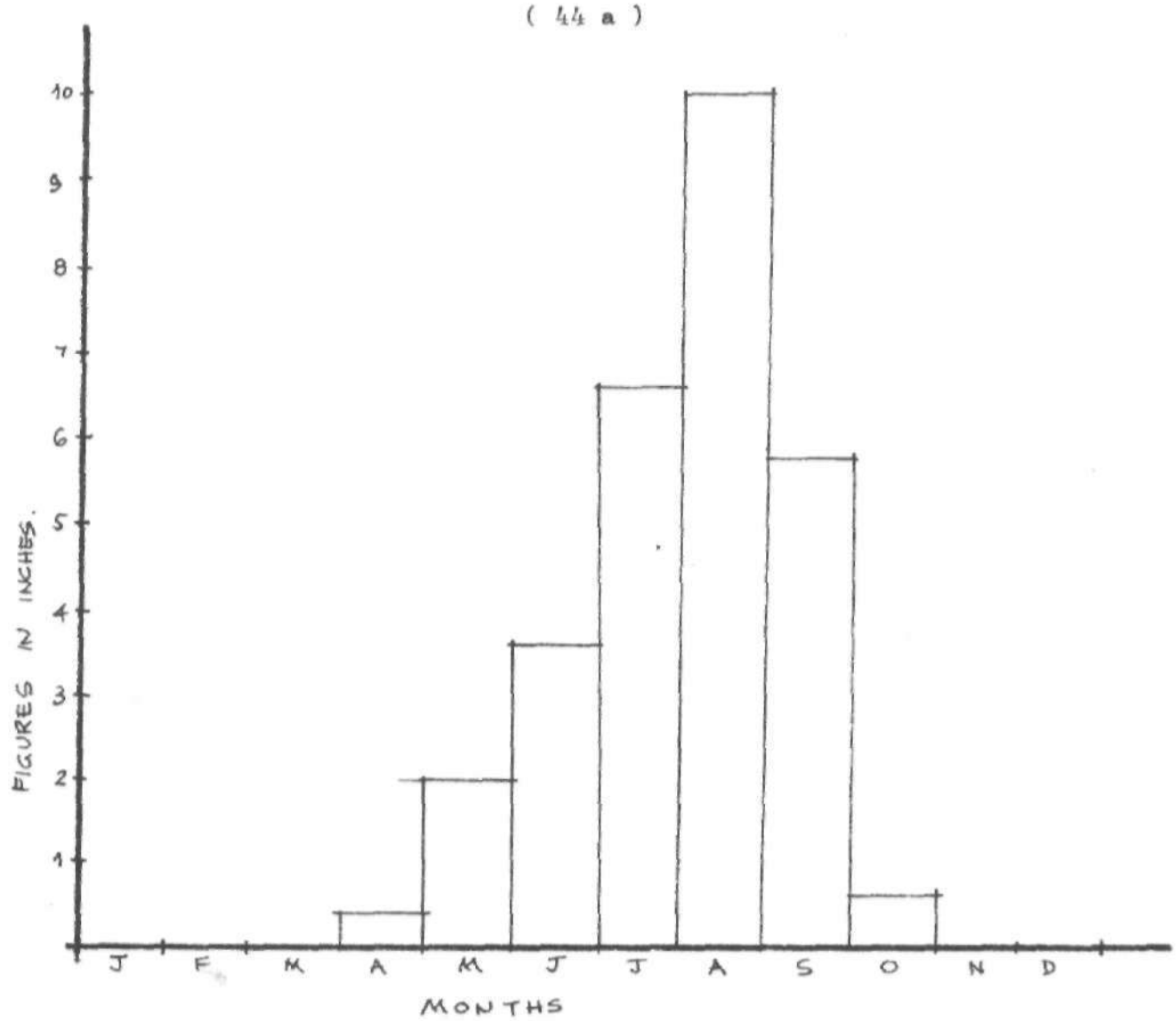


FIG.

argungu.

MEAN MONTHLY RAINFALL GRAPH (INCHES).

MEAN ANNUAL RAINFALL = 28·9 INCHES.

SOURCE : NIGERIA METEOROLOGICAL SERVICES
[redacted] SOKOTO AIRPORT

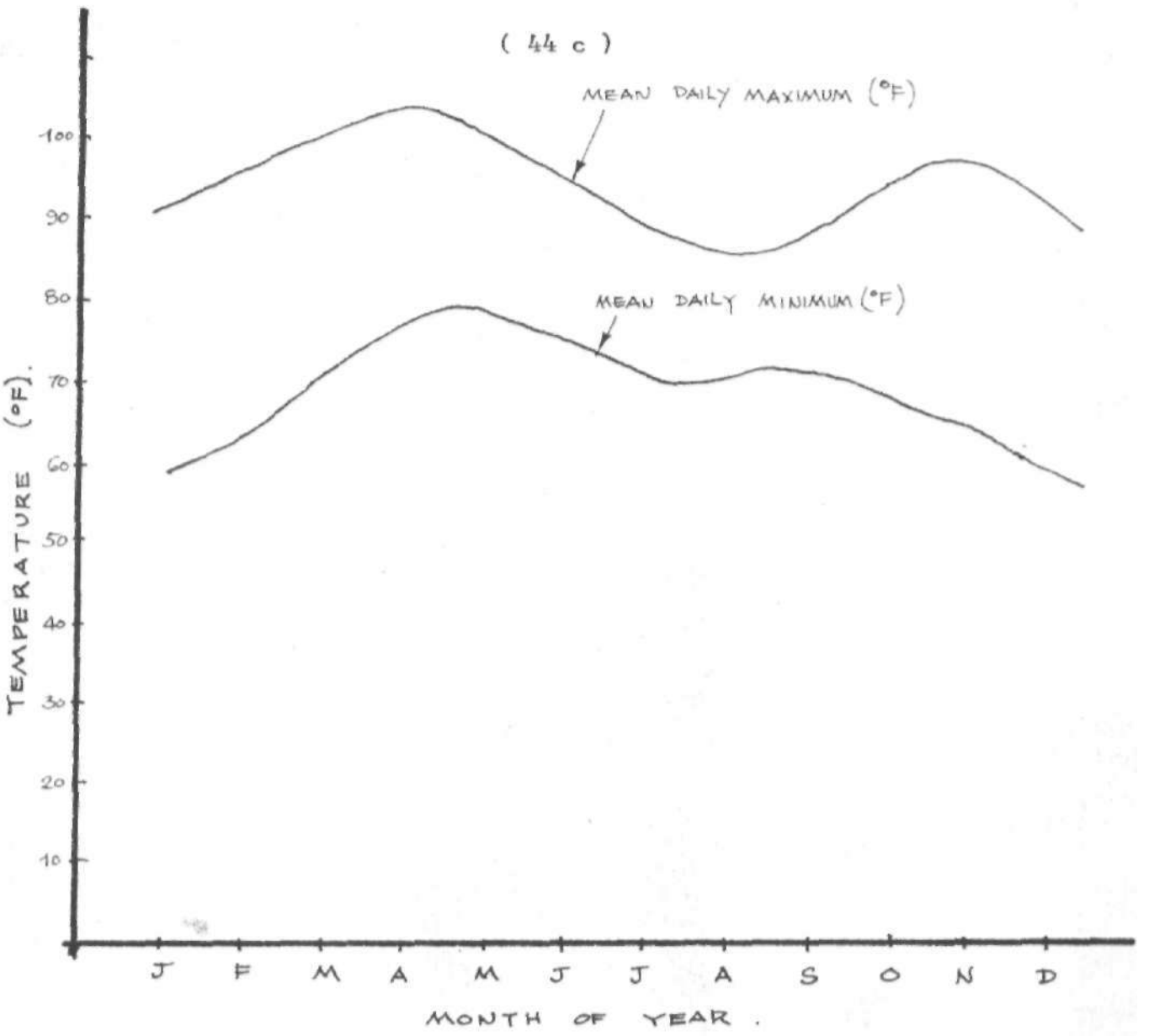


FIG.

argungu

MEAN DAILY TEMPERATURE VARIATIONS (°F).

MEAN ANNUAL = 94·0 °F (MAXIMUM)

MEAN ANNUAL = 69·2 °F (MINIMUM).

SOURCE ; NIGERIA METEOROLOGICAL SERVICES,
SOKOTO AIRPORT.

borehole records for the area (G.S.N) the basement (hand) rocks are over 910 ft. deep. Since most of the area is not under water, it is assumed that any structure built on this area cannot exceed the maximum depth of the sedimentary formations. A general survey of the surface of this area shows different types of soils. For example, around the Kanta College, medium to coarse grained sand predominate while around the Catering Rest House and the Fishing village laterite occurs.

The character of the subsurface, however is fairly regular. It consists of a geological formation called the Gwandu Formation which is made up of massive clay interbedded with medium and coarse grained sandstones, This could be described as sandy clay, since the surface drift does not extend more than one metre in most cases, the structures to be put up will primarily lie on the sandy clay formation.

PEDOLOGY: From the above, it is advisable that the structure to be constructed should exceed the surface drift and penetrate the layer of ironstone

laterite, as the surface drift is largely consolidated and will not support any huge structure. Incidentally, we are dealing with sandy clay soil type which presents a moderately coherent material building the substructure uniformly. Therefore the distribution of pressures per unit surface under the construction is such that there is greater pressure below the centre of the construction as well as its depper reach thus making for stability.

According to K'Keil, this consideration can be interpreted mathematically as:

$$P = \frac{P_o b}{b+2t}$$

where P = pressure per unit surface in the depth t;

Po = specific pressure on the construction;

b = the bredth of the construction

The following table illustrate the different layers of the subsoil[1].

1 Source: Geological Survey of Nigeria, Sokoto
By D. H. Parker, Geologist.

Depth (ft)	Description
35	Red Brown sandy clay.
65	Ironstone, Asolitic, hard.
120	Ironstone, pisolitic, sandy.
150	White grey clay with boulders.
210	Clay, Grey sandy in part.
270	Sand, Fine to medeium grained.

HYDROLOGY

As mentioned earlier the River Rima is perennial and is liable to flooding during the rainy season. There are a few make-shift commercial craft that convey passengers from Argungu town to several other villages beyond the marshy rice field. There are at present no pleasure craft except someused for ceremonial purposes, (for example during the Argungu Fishing Festival). There is no form of organised recreation by use of boat on this part of the river since part of the river should not be entered except during the fishing ceremony. But active recreation by use of boats can be developed on the tributary of the river further down.

The water supply for the town is from deep well, sucked by mechanical means, treated and distributed. But the water has some iron content and the quantity is rather insufficient about 40,000 gallons per day especially when the town is fully developed as a tourist centre. Therefore the need to construct a dam on the tributary and increasing the quantity of water supply to the town.

VEGETATION

Argungu town falls within the Savannah grassland with parches of tree here and there. But studies made in the Federal Ministry of Natural Resources reveal that certain types of tropical trees can be planted and can give good shade as they hardly shed their leaves throughout the year. These, together with the climate which is a compromise between the sweltiering heat of the NOrthern parts of the Sahel region and the cool, humane c climate of the Southern fringes, promise will for the development of a manmade environment conducive to relaxation and recreation. Details of the types of trees that could be effectively used for landscaping are given later in (chapter 9).

B SOCIO-CULTURAL ECOLOGY

EDUCATIONAL

Argungu town has three primary schools and two post primary institutions - one Secondary School and one Teacher Training College (the Kanta College). A cultural complex pllanned for Argungu will give the students the opportunity to rediscover their past cultures and enable them help in the preservation of culture. A study in the existing facilities in the schools reveals that they don't have auditorium in which they can act modern drama or any play that depicts the culture of the people. Hence there is the need to incorporate such a facility in the cultural conplex to be designed. More so they don't have any form of facilities for the recreation of the body in the form of gymnasium etc. It is therefore recommended that a centre be created - the Sports Centre - for the recreation of the body not only by the students but by adults as well. In this regard the formation of a Youth Club becomes paramount.

OCCUPATION

Besides farming (rice in the marshy fields and corn) the other occupation of the people is fishing. Apart from these people engage in different typess of handcraft production as a means of sustaining livelihood. These range from pot making to cloth weaving and mat weaving.

ADMINISTRATION

Two systems of administration exist and run parallel to each other; these are the government agencies (both State and Federal) as well as the local authority. The Emir is the traditional ruler of the people to whom they pay allegiance. He is assisted in the running of the affairs by a council of 'Ministers' but the government is represented by the Divisional Secretary.

RESIDENTIAL PLANNING

The residential planning group form is organic in layout, plastic in texture. A compound consists of the main entry point (Zaure) with areas of main activities like living, sleeping and cooking aranged further in. Normally there is a wall all-around a

residential compound. So much importance is attached to privacy. These areas of main activities are punctuated and emphasised by being higher in volume than the walls which merely indicate the confines of a compound[1].

The Emir's Palace is the most imposing piece of architenture around and is given more significance by separating it physically from the other residential areas. Because of the importance of the Emir as the tradional ruler, his palace should have some relationship with the cultural complex about to be designed.

CO-OPERATIVE UNIONS

At the present time there is the Yakubu Nabame Craft School - a kind of cooperative society which helps in training people on local craft production. It is a voluntary organization. It is recommended that a strong cooperative union be formed which will help in the general community development. This can be done by giving loans to farmers, cooperative consumer shops.

OTHER CULTURAL FESTIVALS

Besides the Annual Fishing Festival there are

---

1 See sketches of traditional building types P. 105

other cultural festivals that feature in Argungu and each of these has its own significance.

GYANRAN RUWA (Purification of Water)

The 'Gyaran Ruwa' is a rainy season festival and literally means the purification of water. During the rainy season the river gets flooded and must therefore be purified before people drink from it. The festival is a kind of ritual performed by a 'Magajiya' (head of the women) who is the elder sister or daughter of the Emir.

'SHAN FURA' (DRINKING OF 'FURA')

This usually takes place in the hot season - around March and usually on a Sunday. The significance of this ritual is to drive away any evils in the town. In the olden days this use to take the form of Sallah and people appear in their best dresses. A special drum ('Dundufa') is used for this occasion and the ritual is also performed by women.

'SHAN KUBEWA' (Purification of Food)

This happens usually on the Sunday after the 'Shan Fura' and the ritual is performed with the

aim of driving away illness, accident, fire and all forms of evil from the town.

THE FISHING FESTIVAL

The Fishing Festival marks the end of the planting season. Before the fishing starts, the 'Sarkin Ruwa' (Chief of water) performs some rituals in order to pacify the crocodiles that inhabit the bed of the water. The 'Sarkin Ruwa' is the sole caretaker ofsthe part of the river where fishing takes place. Nobody dares enter the water at any other time than the fishing festival without his permission. It is a kind of unpaid job for him which was handed down by his grand fathers.

RELIGION

Argungu town is virtually a moslem community. The Holy Koran is the main book of instruction to all Moslems all the world and like other religions, Islam governs the daily life of the people. The instructions in the Holy Koran embrace the five principles of Islam which is ordained to all moslems. These are:

1 Belief in the existence of ONE eternal God

known as 'Allah' - an Hausa word derived from Arabic and that Mohammed was his messeangor 'Khahmatil Saadati'.

2. Observation of the five daily prayers.
3. 'Zakat' - giving alms to the poor.
4. Fasting the month of Ramadan.
5. Hajji - Pilgrimage to the holy lands Mecca and Medina.

Point no. 2 is directly imbibbed in the people's lives. Prayer is often mixed with work. There is therefore the need to incorporate a mosque close to areas of daily work to give the people the opportunity of exercising this basically strong religions right.

C TOURIST/RECREATIONAL ENVIRONMENT

TOURIST POTENTIALS OF ARGUNGU

Argungu is a historic town which requires revival. The beautiful and varied landscape makes it an ideal place for the development of tourism. The town is peaceful and quiet and affords people the opportunity "to get away from it all". The rich cultural heritage of the town offer an opportunity for people to learn about these cultures and will

increase human understanding. The town is well situated as a transit point for long distance travellers using the Lagos - Niamey international highway. With an appropriate information bureau and advertisement, the demand by tourists will increase and the present number of chalets might be too small to cope with the demand.

EXISTING SITUATION

A survery of the existing facilities in terms of accommodation reveal the following categorisation:

NO	TYPES OF ACCOMMODATION	CHARGE PER BED NIGHT
42	Double self contained	₦10.00
38	Single round huts	₦ 4.00
20	Airconditioned chalets	₦20.00
12	Suites	₦10.00
15	Caravans	₦ 4.00
100	Tents	₦ 3.00
327	T O T A L	

Table - showing categories ofaccomodation in Argungu [1].

1 Source: Ministry of Information & Social Development.

DEMAND - OCCUPANCY RATE

A study was also made on the total demand for accommodation at pead period for the last five years and the following was found.

YEAR'	INVITED GUESTS	PAYING GUESTS
1970	130	156
1971	130	165
1972	140	170
1973	150	200
1974	150	210

Table - showing demand for accommodation at pead period.

IMPLICATIONS

A graph[2] of demand against the year shows a steady increase in demand over the years. A projection for a five-year period has been made on this graph to indicate the number to be planned for.

Available statistics indicate that in 1974 there were 540 artistes expected from different parts of the Federation while in 1975 about 750 were expected. And there is increasing demand by

2 See graph. page 57

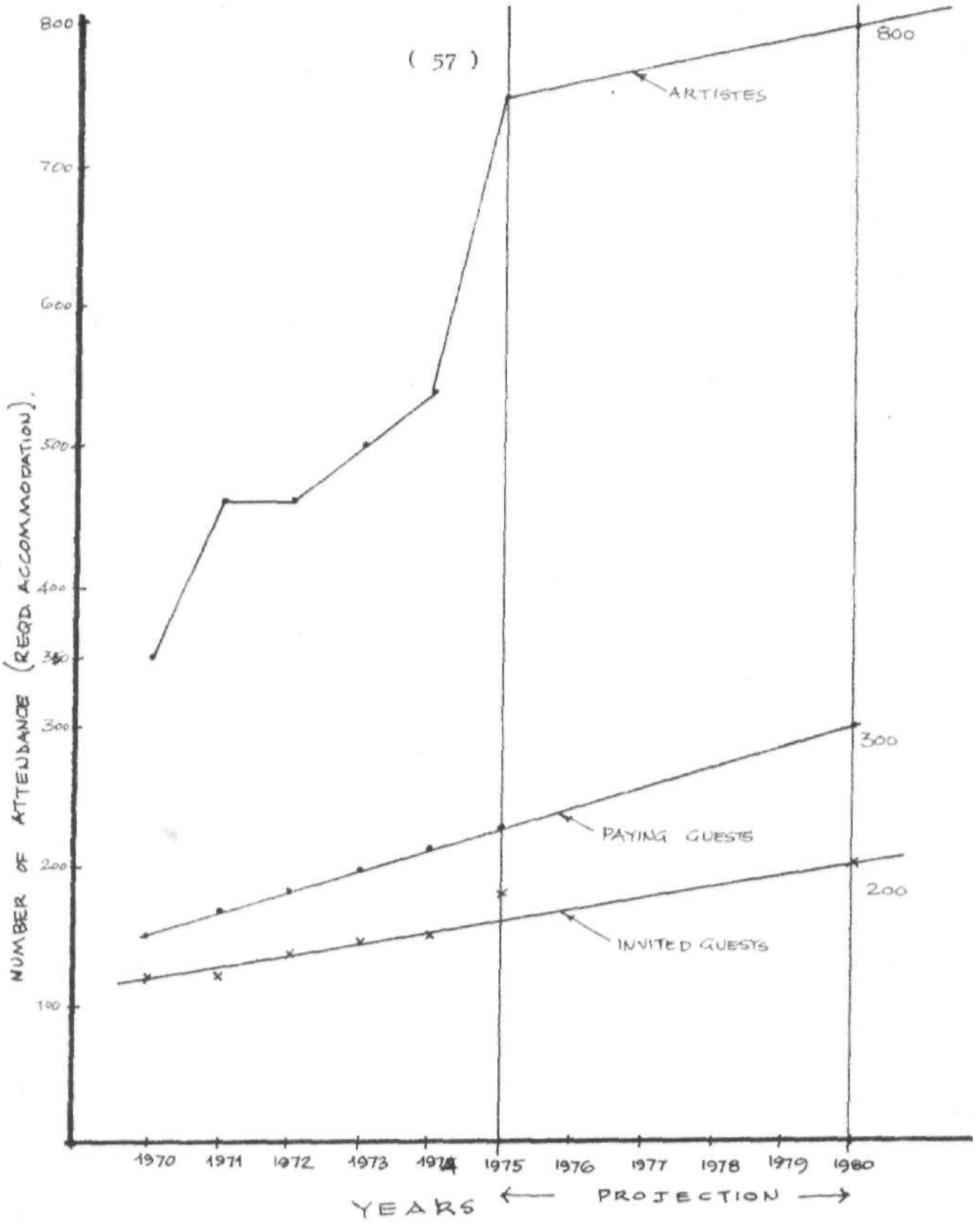


FIG.

GRAPH SHOWING CATEGORIE OF ATTENDANCE TO ARGUNGU FISHING FESTIVAL.

SOURCE : MINISTRY OF INFORMATION AND SOCIAL DEVELOPMENT, N.W.S. SOKOTO.

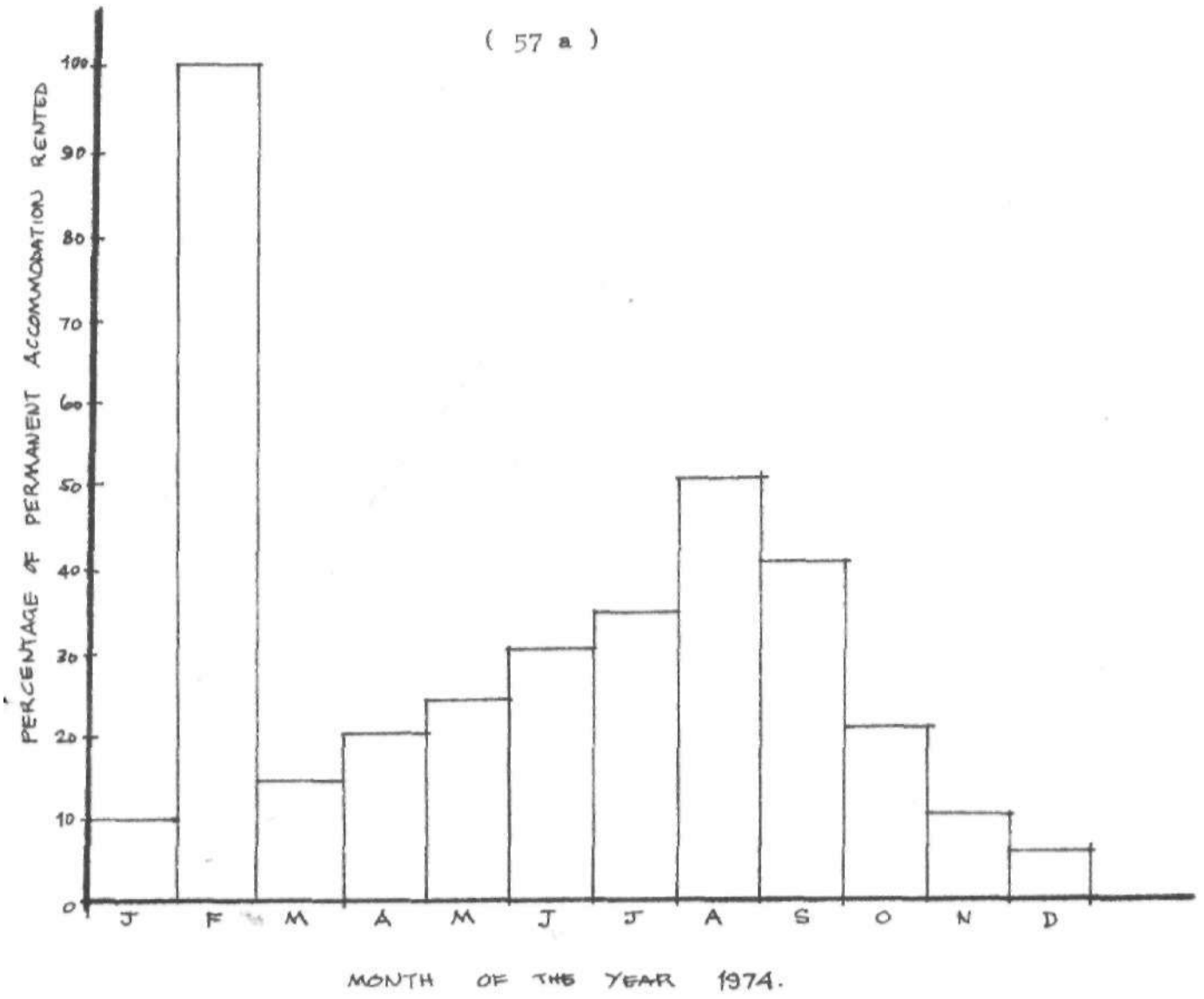


FIG.
GRAPH SHOWING TYPICAL
OCCUPANCY RATE AT ARGUNGU.

SOURCE : CATERING OFFICER, ARGUNGU
FESTIVAL VILLAGE, ARGUNGU

different states in the country to participate in the Argungu Festival.

Most of the tourists came with their cars, but some fly into Sokoto and travel to Argungu with hired vehicles. This implies that the types of tourist resort to be recommended should be a motel. The occupancy rate will obviously increase as the public gets more aware of the facilities.

SOCIAL CAPACITY

This refers to the residents' tolerance of tourism. Tourism is usually seasonal and people (residents) are willing to withstand some discomfort from noise and delay in the knowledge that undisturbed solitude returns in the close season. Added to this is the attractionn that tourists normally have a higher spending capacity while on tourist sites.

IDENTIFICATION OF MARKET AREAS

The catchment area for local tourists would encompass the state as a whole as well as adjoining states where there are institutions of high learning. For example staff and students of Ahmadu Bello University could spend week-ends at Argungu. Infact

most respondents in the questionair indicate the desire to spend week-ends in Argungu when fully developed. Tourists could also came from industrial centres such as Gusau in the North West State which is virtually the industraial town of the State.

CHAPTER FIVE

DATA EVALUATION AND SYNTHESIS

The studies made regarding the physical environment, socio-cultural environment and Tourist/ Recreational environment therefore enable the data to be evaluated and synthesised.

A THE CULTURAL COMPLEX

DEFINITION: Sociologists define culture as the way of life of a people, the characteristic values of the people; socially, spiritually and materially:-

Socially ;- ie. the way they live,

Spiritually;- ie. what religion they profess and what Gods they worship.

Materially:- ie. what their earthly possessions are in terms of dress, implements of war, music, arts and crafts.

Thus, to preserve and promote African cultural heritage, the cultural complex should perform the following functions:

1. EDUCATION

This will be in the form of seminars, public

Lectures, symposia etc; education of the public to increase their general awareness; education in the production of the traditional handicrafts.

2. INFORMATION

The complex should provide facilities for exhibition of the works of art and the crafts that abound in the North Western State as well as that of other states in the Federation. But emphasis is on the crafts and cultures of the North West State.

3. ENTERTAINEMENT

The complex should also provide facilites for the performance of traditional dances of the State, their music, drama etc.

TRADITIONAL DANCES

Traditional dances in their natural setting were performed usually,

(a) in a village square or market square;

(b) in a Chief's Compound;

(c) in the compound of the dancing team's host

(d) on religious festival grounds.

There were no formal arenas as such and normally not many people involved as spectators. If the spectators

happened to be many they normally looked through each other's shoulders trying to get a glimpse of the dancers who are normally at the centre of a circle formed by spectators. There was, for one thing, the audience/actor inter-relationship and involvement - intimacy.

Therefore any modern arena design would aim at accommodating the maximum number of spectators and every spectator has the right to direct view of the arena without straining his neck. These two considerations imply the design of kind of open-air theatre in which the actors perform at the centre and are surrounded by the spectators

Traditional dancers among the Hausa society are regarded as 'beggars' or 'entertainers', unlike dancers among the Ibos and Yorubas where every able-bodied individual wants to acquaint himself with a particular kind of dance with dignity. Thus most Hausa audiences want to sit around and watch dancers and musicians praise them in their music. They are therefore regarded as 'professionals' who travel around the community to entertain the audience who are usually

eminent personalities like the Emir, and individual families during festivals and ceremonies. They normally get compensated generously by way of tips by the eminent group.

CLASSIFICATION OF HAUSA MUSIC

Hausa music can be classified into three broad categories:

(a) Royalty Music:

This kind of music is reserved for such occasions as: (i) the installation of a new ruler or Emir;

(ii) Sallah days - religions festival such as Idel Fitr, Idel Kabir etc.

(iii) On Thursdays marking the coming of Friday - a Jummaat Festival day for the moslems.

People hardly dance to the tune of this type of music except the people for whom it is meant - the Emir.

(b) Festival Music;

(i) This is usually played on specific ceremonies such as Death rite.

(ii) Also played during initiation ceremonies

(iii) Harvest ceremonies especially among farmers; the music of the hunters, fishermen and butchers fall in this group.

Dancing, ritualistic ceremonies accompany this type of music.

(c) General Music:

This is usually played for entertainment and relaxation. They could be played during marriages and naming ceremonies or during moon-light night and often accompanied by folk lores.

CHARACTER OF HAUSA DANCES

Usually the performances dance in front of the musicians while the audience form themselves into a ring around the performers. In almost all cases, the dance movement of the men are fast, vigorous, elaborate and exhausting while that of the women is gentle and is characterised by graceful movement of the arms, the swaying of the body and the rhythmic thrusting foward and backwards of the burst and the abdomen. The movement pattern may be circular or linear.

Examples of these dances are the 'Goge' music dance, and the 'Kalangu' dance.

SCHEDULE OF FACILITY REQUIREMENTS

The various studies conducted regarding the physical, cultural and tourist/revreational environment of Argungu directly led to the establishment of a schedule of facility requirements.

A Facilities for diaplay of the music and dance of the North Western State - The Amphitheatre

B Facilities for the exhibition of methods of craft production - The Craft workshops.

C Facilities for drama performance, cinema conferences etc. - The Auditotium.

D Welfare Facilities - Refreshment centre- Canteen, Restaurant.

E Multipurpose block where different types of activity can take place.

F Facilities for increasing the people's general awareness and understanding - the library.

G Facilities for the preservation of antiquities - The Museum.

H Facilities for administrative control of the entire complex - The Administrative block.

I Facilities for the sale of produced handicrafts - The Boutique.

J Adequate car parking spaces.

Functional Analysis of Facilities and space Requirements

A Performing Arts Centre

For the display of traditional music and Dances and Drama.

i. Performance Space;

A large open space surrounded by the audience seats. Minimum wideth of performance space should be 15 metres.

ii. Changing Facilities:

Should lead directly to the performance space. should be provided with W.Cs, wash hand basins, showers. Provision should be made for both men and women. Maximum capacity should be for 12 artistes. Changing facilities should be common to both amphi-theatre and auditorium.

iii. Rehearsal Space:

Could be open or semi open space, to enable performers assemble before coming out to stage.

iv. Audience Seating Accommodation:

Capacity should be 1,000 spectators (maximum), seating round a centrally placed performance core.

Seating arrangements should enhance physical, visual and vocal contact between the performers and the audience.

v. Public Toilets:

Public toilets should be provided for both male and female at places easily accessible from their seats.

B CRAFT WORKSHOPS

For the exhibition of the process of making traditional crfts and the display of finished products, viz: Pottery, Leather works, metal works, wood carving, cloth weaving and cloth printing.

A typical workshop should be capable of accommodating about 8 craftsmen.

Area required by one craftsman = $4m^2$

$\therefore$ Total area for workplace = $32m^2$

percentage area reauired for equipment = 40%

Percentage area required for circulation = 30%

Percentage area required by 8 craftsmen = 30%

Ratio is 3 : 3 :4

Sum of ratio = 10

$\therefore$ 3/10 represents 32 m^2

∴ 3 represents 320 m^2

1 " 320/3

4 " 320/3 x 4 = 42.7 m^2 of workplace

Total area = 32+32+42.7m^2

= 106.7 m^2

Area required for storage and display = 100 m^2

Grand total of area = 206.7 m^2

∴ One module of the workshop should be about

206.7 m^2

C AUDITORIUM

Should be able to seat about 500 spectators. Changing facilities are common to both auditorium and amphitheatre.

Stage - minimum width = 12 metres.

Lighting

Seeing requisite determine the shape of the building and to some extent its size.

Three basic requisites for lighting are:

i. Visibility - concealed lighting, low brightness sources; perforated or louvred openings. Even distribution at moderate intensity (15 foot candles) is desirable.

ii. Decoration;

iii. Mood.

All door must have exit lights over them. Most regulations require the use of blue light.

Acoustics

To ensure perfect audibility of the show and to protect the audience from distracting sounds:

1. eliminate from the audience area all unwanted sound (noise, that which is not part of the show.
2. assume audibility for all sound which is part of the show.

Average noise level should be 30 decibels at mid frequencies.

To reinforce sound from the source at the stage, the ceiling of the auditorium should be specially designed.

To absorb or reflect sound, the walls of the auditorium should be padded with appropriate materials.

MUSEUM

From the studies made on the existing Kanta Museum and the types of exhibits it is thought that four modules should be okay for the museum.

Ensure logical circulation in the museum so that visitors should be able to see most of all the exhibits if not all.

Lighting: Indirect lighting is required in the Museum to remove discomfort cause by glare. Roof lighting should be introduced in cases where special exhibits are kept.

MULTI=PURPOSE BLOCK

Ensure adequate flexibility to enhance multiplicity of use of the multipurpose block. The multi-purpose block contains eight modules on two levels above the ground level. These two levels should stand pilotis so that the space below can be partitioned and four modules got out of them. At full capacity during the festival the multipurpose block therefore becomes twelve modules which corresponds to the twelve states of the Federation. Each modules can therefore be utilised by each state for the purpose of exhibiting the crafts perculiar to its cultural milieu.

At other times after the festival this multi-purpose block can be used for educational purposes - adult education.

WELFARE BLOCK

Canteen facilities should be fairly single in nature equiped with combined kitchen - servery.

The bar and drinking area should be separated from the dining area but adequate connection of the two areas should be made.

Four modules should be used for the welfare block.

LIBRARY

Ensure proper circulation pattern for both personnel (staff) public, and the books.

Four modules should be used for the library.

[illegible]:- Ensure adequate control for entry and exit of readers.

[illegible]:- Avoid openings at eye level so as to ensure no distraction of readers by elements of outside the library. For this purpose low level and high level windows are thought adequate.

Lighting:

Ensure adequate natural lighting in the Library.

ADMINISTRATIVE BUILDING

The administrative facility requirements should include accommodation for

1. Public waiting space and entrance hall;
2. Enquiry space
3. General office
4. Accounts division
5. Offices for six administrative heads, and their assistants, and secretaries.
6. Staff toilets.
7. 3 No, cleaners and 2No. security offices.

CHAPTER SIX

FACILITY REQUIREMENTS FOR THE MOTEL

The studies made regarding the demand and supply of accommodation led to the establishment of the number of chalets required for the motel. The total number of chalets (permanent structures) is 185. Added to this is about 100 tents and Safari huts plus 50 caravans which will be deployed at peak period.

FACILITIES REQUIRED FOR PUBLIC USE

FOOD AND BEVERAGE AREAS

	NO OF SEATS	SPACE REQUIREMENT PER SEAT (M^2)	TOTAL AREA
Dining Rooms	100	1.8 m^2	180 m^2
Coffee Shops	40	1.3	52.0
Restaurant	100	1.3	130 m^2
Lounge	80	1.2	96.0
Bar	50	1.2	60.0
Banquet	40	1.0	40.0
Staff Canteen	20	0.8	16.0
Grand Total Area			574 m^2

SERVICE FACILITIES

Kitchen for Dining Room

+ Coffee shop (60% of dining room) = 108 m^2

Food and Liquor + China storage

(45% of Coffee shop) = 23.4 m^2

Kitchen or pantry to banquet rooms

(20% of banquet) = 8 m^2

Banquet storage (8% of banquet = 4 m^2

ROOMS AND SERVICE DEPTS

Guests - Number of guestrooms = 185

Bedrooms - Single = 6.0 m^2

Double = 10.0 m^2

Bathrooms = 4 m^2

OFFICES

Administrative:

Manager = 10 m^2

Executive assitant = 8 m^2

Secretaries' Offices = 8 m^2

General Office = 16 m^2

Food and Beverage:

Food and beverage Manager = 8 m^2

Housekeeper = 8 m^2

Receiving clerk timekeeper = 8 m^2

SERVICE AREAS REQUIRED ACCORDING TO NUMBER OF GUEST ROOMS

House Keeping + all general storage = 1.04x185

= 192.4 m^2

Administration department = 0.46x185 m^2

= 85.1 m^2

OTHER SPACES

Public Assemblies

Conference (0.5 m^2 per person)

= 0.5 x 50

=. 25 m^2

Dances (0.8 m^2 per person excluding bed space)

= 0.8 x 500

= 400.0 m^2

Band space = 12 m^2 for six-price band.

Swimming Pool:

Can be any size or shape.

For senous swimming,

Minimum Pool size = 25 m x 12.5 x

= 312 m^2

Depth varies between 0.9 m to 2 m

for diving depth = 3 m.

CIRCULATION AND RECEPTION AREAS

Overall allowance for general circulation areas

(2.5 m^2 per person) = 2.5 x 20

= 50 m^2

Waiting area (1.0 m^2 per person)

= 1.0 x 20

= 20 m^2

TOILETS

FITMENT	PUBLIC		STAFF	
	MALE	FEMALE	MALE	FEMALE
W.C's	4	6	2	3
Urinals	4 (in rest)	-	2	-
Lavatory basins	6	6	2	2

PARKING

Provide one car parking space for every 2 bedrooms in the residential area. Provide one car parking space for every 10 m^2 in the public rooms; or one car parking space for every 10 persons using public rooms.

ARTISTE'S VILLAGE

The sleeping accommodation should be a temporary structure since it is an annual event.

Tents or Safari huts should be used; each tent should be such a size as to accommodate about 10 artists. Caravans should be used for group leaders.

QUANTIFICATION OF RESOURCES REQUIRED

A selection of formulae derived includes the following estimates of resources:

Total day resources: $J = 5/4(A + B + C/4)$

Evening facilities; $M = A/3 + B/8 + C/4$

Water Supply:

$N = 70A+10B+100C$ gallons per day

Leisure trip road capacity;

$P = 1/3(A/2 + 2B + C/3)$ pcu's

Employment in tourism:

T = A/3 + M/10

Where A = average visitors staying overnight throughout the season;

B = Average day visitors during season;

C = Average population at home in season;

M = seats or places in cinemas, theatres;

pcu = passenger car unit.

TEMPORARY STRUCTURES

FISHING ARENA REQUIREMENTS

Provide seating accommodation for 2,000 spectators

Make optimum use of terrain to ensure raked seating.

Structure must be capable of being demounted after fishing ceremony and be used again.

∴ Most appropriate material to ensure used and re-use in extruded steel. Design of this must ensure demountability. Provide on area for wrighing fish and for the award of prizes.

The idea of demountability is because of the fact that the river is liable to flooding since it

is not logical to provide a permanent structure for an event which takes place only once a year in a flooded area.

COMMERCIAL AND AGRICULTURAL FAIR PAVILIONS

Structure should also be demountable and capable of being re-used.

Steel should be used for main supports and traditionally woven mat used for partitioning.

The roofing material should be tapauline with cables supporting them on steel masts which should be firmly anchored at appropriate places and angles.

CHAPTER SEVEN

PROPOSALS AND DESIGN CONCEPTS

GOALS, AIMS AND OBJECTIVES

Before going to design stage it will be necessary to establish the framework on which the design is based by way of goals, aim and objectives as these will act as the guidelines.

The following are the goals aims and objectives.

1. A program should be established to follow a possible evolutionary process;
2. To maintain the socio-cultural ecology as much as possible;
3. Ensure a reasonable coefficient of flexibility
4. Structure should be adaptable since culture is in a state of flux at this point in time;
5 Complete separation of vehicular and pedestrian traffic;
6. Create an environment which enhances tourist/ resident interaction for foster better human understanding.
7. Adaptation of traditional architecture where possible especially regarding form, layout and texture.

8. To provide comfortable accommodation for tourists and sufficient facilities to attract them;
9. Establish an indoor environment which most nearly approaches comfort conditions in the climatic setting;
10. Establich an appropriate management technique.

PROPOSALS

LOCATIONAL CRITERIA

The river is liable to flooding during the rainy season and this game rise to catergorization of types of structure to be put - temporary structures in the flooded areas and permanent structures in the non-flooded areas. For cultural reasons the fishing and 'Kabanci' display arenas must be located in their normal locations. This is also in agrre-ment with the overall philosophy of the thesis - maintaining the ecology as much as possible.

The agricultural fair ground and commercial pavilions form part of the temporary structures since they take place only once a year. Their structures are demountable and can be re-used.

The cultural complex is located in a fairly

central position between the town fabric and the proposed Tourist village and is joined with the Tourist village by an amusement Park which culminates into a proposed Forest Reserve - intimacy with nature. The cultural complex is a structure used throughout the year - a kind of community centre and is therefore more related to the town fabric and is designed in such a way as to fit into the town fabric logically.

In order to give Tourists/Residents the opportunity for boating and therefore more intimacy with nature, the tributary of the river Rima is dammed to create an artificial lake. The creation of such a lake is not possible in the main river (Rima) which would have been ideal for boating on account of its proximity to the Tourist Village. This impossibility is obvious, because the river should be tampered with at any other time of the year except during the fishing festival period.

From this artificial lake water can be sucked up, treated, and conserved in the proposed water tank which is located at the highest point with the

vicinity. This will increase the water supply in Argungu town to a level commensurate to an envisaged increase in demand. This demand will increase because of tourists that will obvioulsy increase the number of users. Around the water tank a picnic/camping site has been proposed so that people can have a bird's eye view of the surrounding townscape. The landscaping of this picnic site should be able to create such an environment to enhance relaxation of the mind and body. Water from the lake can also be used for irrigation purposes on the rice fields - multiplicity of use resulting from a natural evolutionary process. A Yacht Club is proposed at the artificial lake to provide such facilities as changing and entertainment.

Thus, there are four main activity generators in the townscape; vis, the Tourist village, the water tank picnic site, the Yacht Club by the Artificial lake, the cultural complex, and there becomes the need to develop a road net-work to connect them on which a public transportation system could be developed. This becomes the more

so necessary since it creates variety in things to be seen by tourists.

The sports centre is located near the Kanta College so that students and staff f.om that College can use this facility with ease. The sports centre can also be used. The students and staff off the Secondary School and hospital located further down since the public transportation system envisage will reduce their travelling time. The fuel and service station is located at the juction of the road leading to the tourist village and the main road so that both tourists and people using the main road can use its facilities. The Artiste's village is located in such a position that it is related to the residential area, so that the artistes will be able to use the facilities like public Toilets and baths located in these areas. These public toilets will be used by residents at off-peak periods. The structure of the artiste's village is a temporary structure - can be demounted and re-used, because its use is only once in a year.

It will be the most arduous task within the

limited time to undertake the architentural design of all these proposals, if proper justice is to be done to architectural design. Therefore it has been considered sufficient to choose one of these proposals and give a detailed architectural treatment and solution to it. This consideration lead to the choise of the CULTURAL COMPLEX for more detailed design. This is because it is within this complex that the culture of the people are most eloquently expressed and felt. As a community center, it has the added importance of providing some of the public facilities that are lacking in the town as of now.

SPACE RHYTHM: The space rhythm adopted in the location of the permanent structures around the ce central core is a chess-board system , in which there is an alternating placement of built-up and open spaces. This is basically to allow for maximum view of the river landscape beyond.

CHAPTER EIGHT

DESIGN CONCEPTS:

TOWARDS AN ORGANIC ARCHITECTURE

In trying to achieve some of the goals, aims and object established earlier on in this thesis, it becomes necessary to establish some points of view and my reaction to the design problems.. These are elaborated in the Design Concepts and sketches have been included to expatiate these concepts. The overall concept is based on organic architecture.

GROWTH OF ELEMENTS (See fig. 3)

One of the most relevant characteristic of organic structures is their self-generating characteristic. They are capable of growing and are competitive, interacting and evolving. Decay, waste. entropy and change are all part of the natural order. As a community centre, the cultural complex is conceived of as an element that can grow with the community, untill ultimate dynamic equilibrum is reached and maintained.

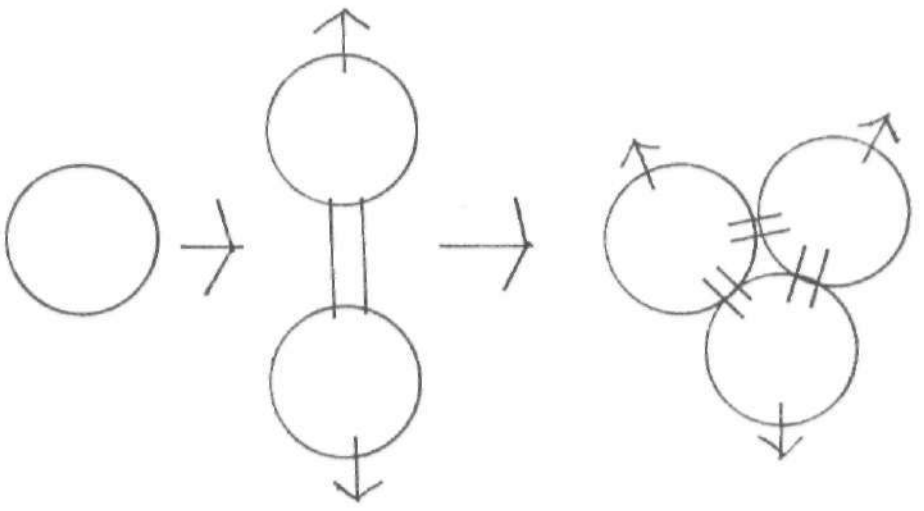


FIG. 3

SELFREGENERATION OF VOLUMES (GROWTH)

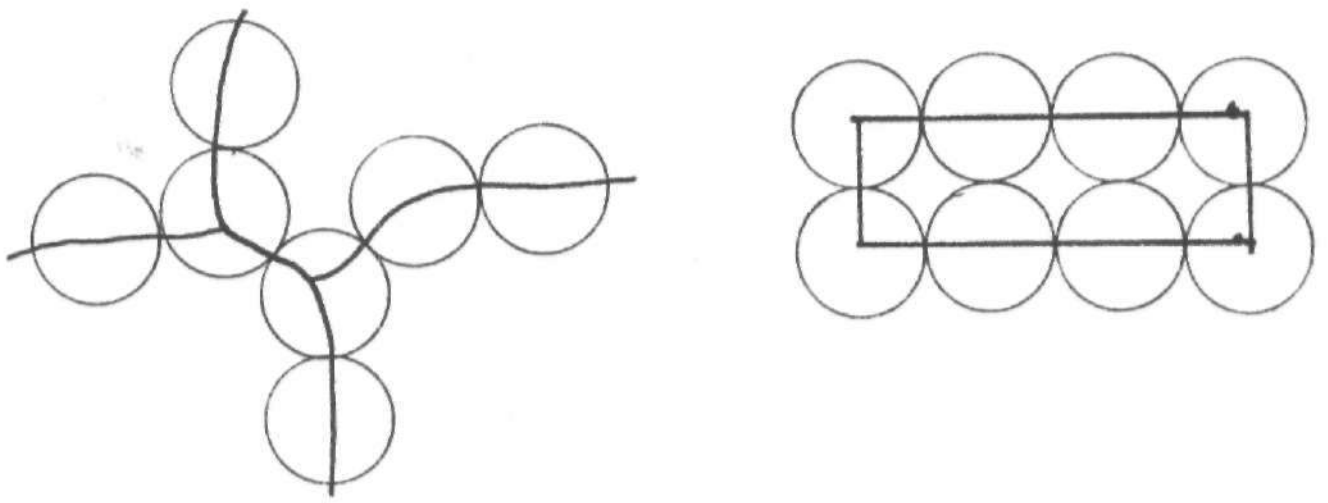


FIG. 4

INFORMALITY OF LAYOUT VERSUS FORMALITY

INFORMALITY VERSUS FORMALITY (fig 4)

A study of the socio-environmental ecology of Argungu revealed a kind of informal organisation of space and compound layout. This is basically characteristic of African traditional architecture and I believe this aspect of our traditional building system should be adopted and maintained.

Informality of arrangement of group forms looks more natural which is related to the first concept established above. Informality ensures variety; it is pleasant and creates, positive spaces. On the other hand, strict formality can lead to rigidity and often creates negative spaces.

FLEXIBILITY OF VOLUMES (fig 5)

Since at this point in time culture is in a state of flux, the cultural complex should ensure a reasonable coefficient of flexibility in order to be able to accommodate these cultural variations. Flexibility of volumes ensures multiplicity of use - similar spaces can be used for various activities. Perhaps the most appropriate illustration of this point of view is that by Moshe Safdie;1

---

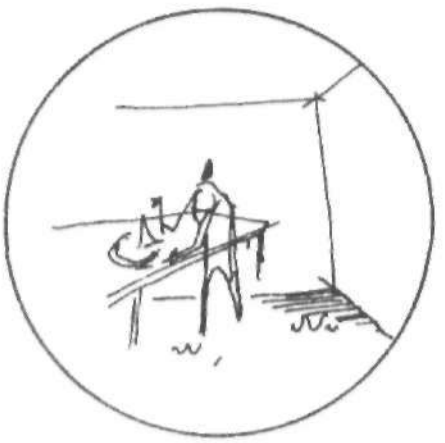
1 Moshe Safdie: Beyond Habitat, New York, P. 147



EDUCATIONAL



MUSEUM



WORKSHOP

FIG. 5

FLEXIBILITY IN THE USE OF SIMILAR VOLUMES

"The eye is a complex mechanism; it changes with light conditions, the pupil expanding or shrinking, the eye rotating in different directions, or focussing to different distances. Compare this to a window in a structure; a fixed pare of transparent material in wall. Yet what we ideally require of a window is not unlike what the eye provides. The window should shrink or expand according to the quality of light and the time of the day and season. It should move in and out of the wall in response to the sun's penetration and the direction in which we are looking through it. Its tranparency should vary, sometimes allowing all light through, sometimes very little. It should have the quality of becoming instantly opague. It should expand and shrink like the shutter of a camera".

ECOLOGICAL BALANCE (fig.6)

Man, shell, nature (water and vegetation) and animals are interrelated in a mutual symbiosis and it is my belief that this symbiosis should be maintained as much as possible.

"The relationship between man and his environ-

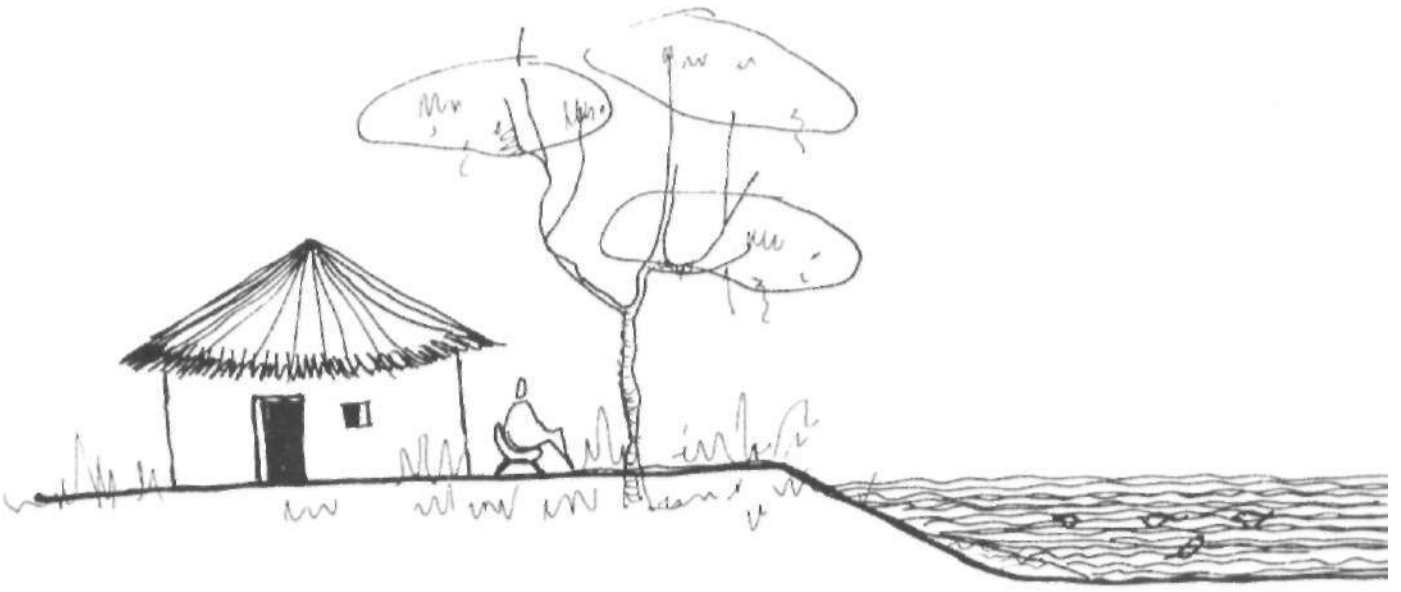


FIG. 6 ECOLOGICAL BALANCE TO BE MAINTAINED.

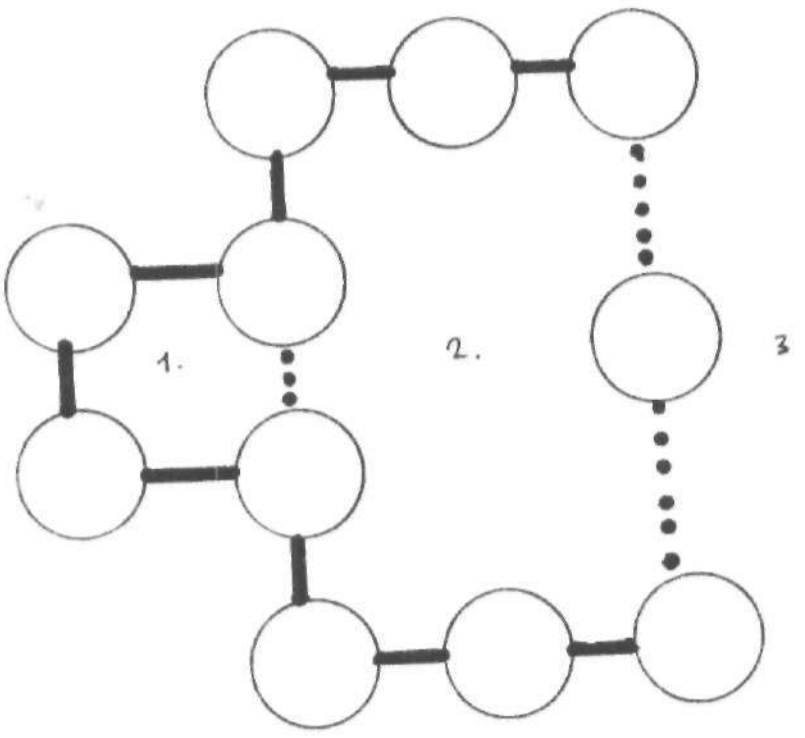


FIG. 7 HIERARCHY OF COURTYARDS:
1 = SMALL ; 2 = MEDIUM ; 3 = LARGE.

rent is mutual, complex and subtle. Each shapes and is shaped by the other; man depends for his ultimate survival on the quality and quantity of the elements which make up his environment, but in the course of drawing upon them for his support he changes them and the natural relationship between them".[1]

The human settlement is a complex organism composed of many man-made elements performing comples functions and set within the natural environment. "Man-made and natural elements together comprise the territorial habitat within which man lives, works, raises his family and seeks his physical, spiritual and intellectual well-being. The quality of both the natural and man-made elements in its environment are crucial to all aspects of human life and to the ability of the settlement itself to function effectively."[2]

HIERARCHY OF COURTYARDS (fig. 7)

Use of courtyards is a basic characteristic of African architecture especially that of Argungu. It is therefore partinent to incorporate this aspect

---

1 Human Settlements: Man and his environment. P. 3

2 Op cit; P. 9.

of African architecture in the design. Progression of sizes of courtyards from small to medium to large, makes for variety the feeling of spaces. Variety in the shape of courtyards is very stimulating.

VISUAL CONTINUITY OF VOLUMES (fig. 8)

In space organisation there should be a reasonable degree of visual continuity. The use of connectors can often ensure visual continuity which enhances circulation pattern at the same time.

A STRUCTURE IN TRANSITION (fig. 9)

Today, architectural activity is in transition - trying to adapt what traditional method can be adapted, combine this with modern methods, materials and technology and project for the future. This transition has been largely due to such forces as; population explosion, rapid rate of economic development, greater degree of socialization, perfection in modern means of transport and communication systems, as well as industrialisation. According to Doxiadis;

"Our transition is a transition from old to new, from traditional to modern, from the concepts

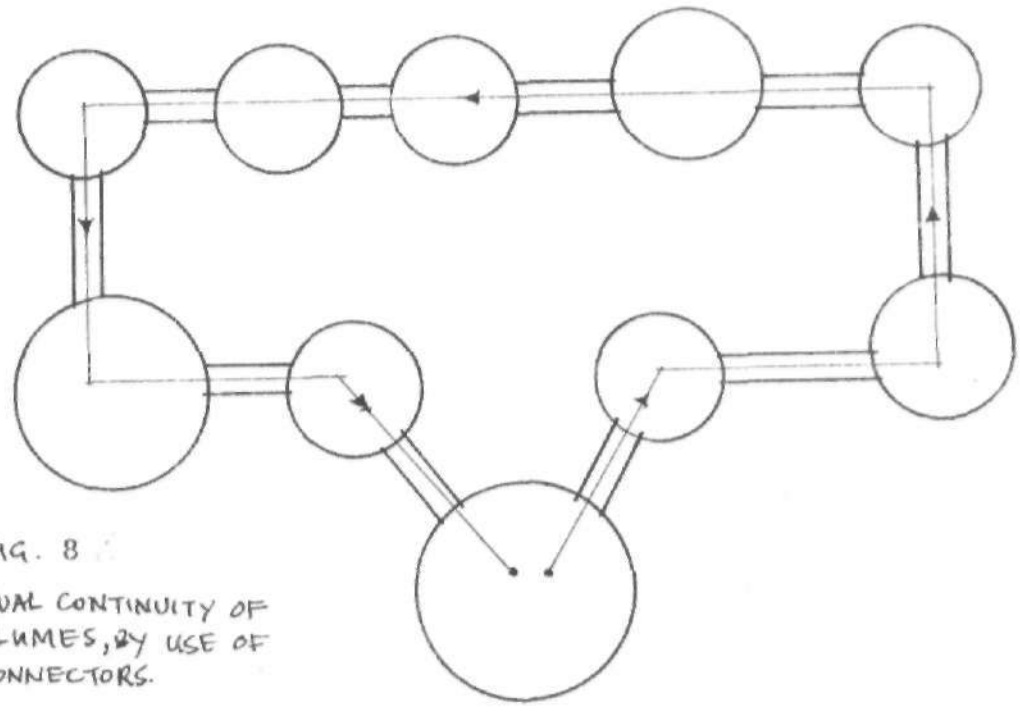


FIG. 8
VISUAL CONTINUITY OF VOLUMES, BY USE OF CONNECTORS.

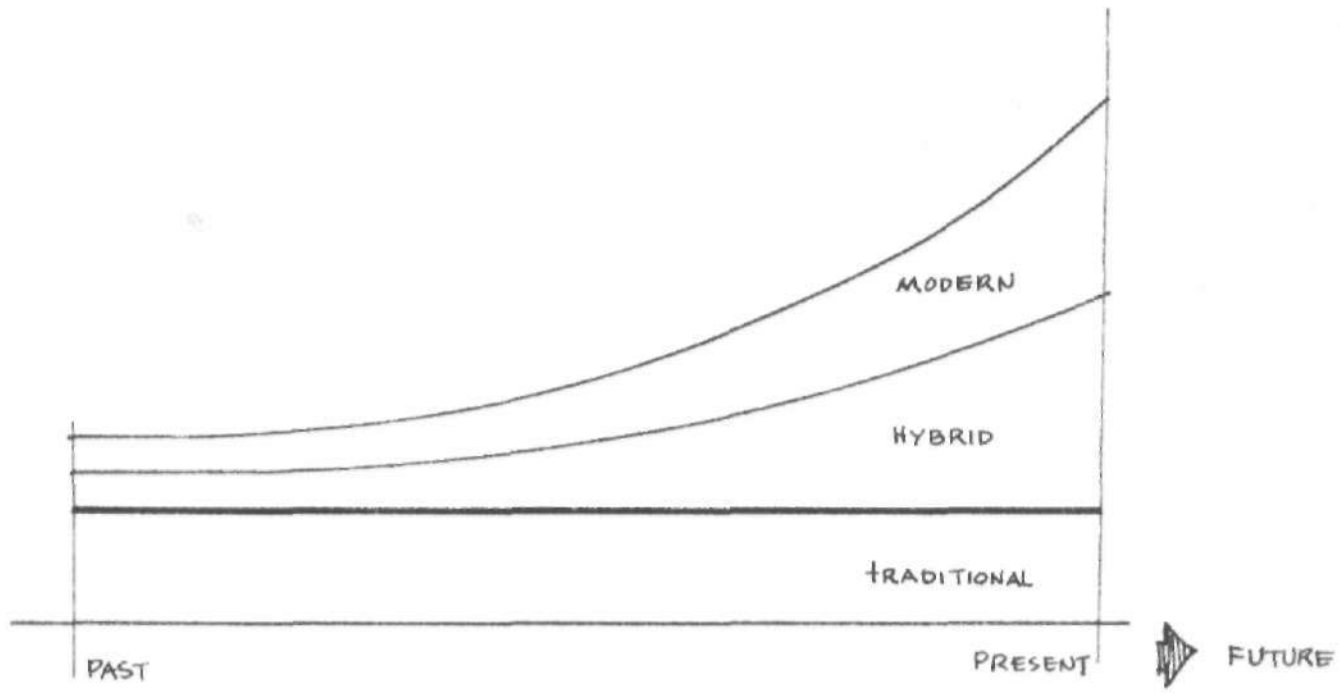


FIG. 9 A STRUCTURE IN TRANSITION.

of the past to the concepts of the future, and so from the problems of the past to the problems of the future."[1]

We are thus obliged to create the new while living in the midst of the old which is still in existence and the old which is again being initiated. According to Sir. Winston Churchill: "We shape our buildings, thereafter they shape us."[1]

CULTURAL HYBRIDISM

Sociologists have often asserted the inherent characterist of culture that should be taken rather seriously. That is, that culture is always in a state of diffussion. There is a tendency towards international culture. This tendency has been occasioned by international travels and contacts. Because of the evident fantastic development in modern means of travels, the world is contracting and people can mix up more freely, leading to a process of aculturation. This interrelationship of nations is very vital because no nation can survive on its own - there must be this symbiosis which makes for economic survival.

---

1 Constantinous A. Doxiadis, Architecture in Transition (London: Hutchinson, 1963) Page 23.
1 Op cit, Page 25.
2. George Banz:. Elements of Urban Form, (New York 1970) Page 11.

According to George Banz: "As we enter the postliterate phase of human development, there is a growing awareness of universal membership in one single human community."[2] And according to S Stephenson and Neligan "More and more 'travel' today means international travel. Whatever their reasons for travelling, people have come to expect two things of hotels wherever they go, international standards of comfort and services, and some kind of individual flavour that will feel sufficiently 'foreign' to have made the travelling worthwhile."[1]

DYNAMIC INTERRELATIONSHIP OF VOLUMES

It is my belief that present day architectural activity and the organisation of space should be dynamic rather than static. This can be achieve through a judicious combination of volumes to create a dynamic balance and elegance. Such a combination is stimulating and makes our environment more worth while. Variety also helps in achieving this - variety in shape and form, solid and void as well as texture, of surfaces and architectural scale.

---

2 George Banz: Elements of Urban Form, (New York 1970) Page. 11.

1 Stephenson S. and Neligan J: 'Hotels':Architectural Design: Volume XLIV 1974, Page 640.

The most appropriate thing in modern architecture is appropriatemess and it is only in this way can we produce a dynamic physical environment.

OPEN SYSTEM OF ARRANGEMENT.

The organisation of the cultural complex is viewed from the context of the town fabric. It is seen as an open system in which entry can be make from different activity generators within its immediate vicinity. This also is agreement with the overall concept of ecology - the trend towards a natural order: where are people coming from? where are they going to? what is their aim and objective? By the time these questions are answered and the implications of the answers incorporated in the organisation of the space, a natural order must have been followed which results in an open system of arrangement.

FOURTH DIMENSION IN ARCHITECTURE

Architectural organisation of spaces that does not take into consideration the future needs of the people for whom structures are meant, is a dead architecture. It is most pertinent at this point in

time when the world is witnessing an unprecedented rate of change. In the earlier Chapter of this thesis, am attempt has been made to quantify the future needs in terms of number of user of facilities, especially the five-year projection made to establish the number to be planned for. A thorough understanding of the past trends, coupled with an understanding of present tendencies will always give an indication as to the future trend.

ACHIEVEMENT OF VARIETY WITHIN REPETITIVE SYSTEMS

It is considered quite an exciting approach to try and explore means of achieving a variety with repetitive elements. This can be achieved from the consideration of functional diversity versus spatial uniformity. For example a workshop can take a similar shape as a library on plan but the elevations might be different because of differences necessited by function. In the case of a library there is the need not to distract peoples attention from outside hence the use of low and high level windows whereas in a workshop this need may not be of priority. Therefore there will be a difference

in elevational treatment of the two volumes even though they are similar on plan.

MORPHOLOGY - ECONOMY AND SURVIVAL

It is my point of view that forms in nature are not arbitrary. Therefore in trying to emulate nature and creating man-made structure we should strive for appropriateness - economy and survival which is termed collectively as morphology. According to Moshe Safdie:

"Economy and survival are interacting forces. Beauty as we understand it and as we admire it in nature, is never arbitrary. It is a by-product of this complex interaction; the colour and shape of flowers directly relate to their ability to attract insects; the colour and formation of insects relate to their ability to camouflage themselves against the background of flowers. Form and pattern are constantly related to the needs of survival..... Architecture should be thought of in terms of the Morphology of living organisms."[1]

In traditional African architecture, man has built structures not arbitrarily but following the

---

1 Moshe Safdie: Beyond Habitat Page 147

natural forces - trying to protect himself from the elements. Each time man builds he tries to create an environment that responds to the basis human requirements of comfort, using whatever materials are available within the locale - hence the use of thick mud-walls in the arid north to guard against the intensive heat.

"Native makes form; form is a by-product of evolution, The science of morphology deals with the reasons for the evolution of particular forms. One can study plant and animal life, rock and crystal formations, and discover the reasons for their particular form. That helps us to understand what mans' form-making process could and should be."[1]

Perhaps the science of morphology is best expressed by the bee in the development of space pattern." One of the bee's problems of survival is to store honey and so through evolution they produced a space pattern that stores a maximum of honey using the least possible wax. Their three-dimensional system of space packing is a very efficient way of storing fluid. Economy and survival are the two key words in nature."[2]

---

1 op cit. Page 146
2 ibid.

CHAPTER NINE

DEVELOPMENT OF AN APPROPRIATE FORM

In the development of an appropriate form that will best express these comcepts it was thought necessary to explore different possibilities before arriving at conclusions.

THE SQUARE: The first possibility was a square. It was found that the combination of squares to form a pattern could give courtyards but there was the problem of joints at the edges. Growth was thus hampered. (See fig. 8)

THE CIRCLE: (See fig. 9)

The circular forms (volumes of main activity) were considered. This gave rise to continous growth in different direations but possibilities for courtyards was hampered by too much regularity.

TRIANGLE: (See fig. 10)

The triangle was considered and found to give courtyards but the sharp edges characteristic of a combination of trinagular patterns made this shape unappropriate.

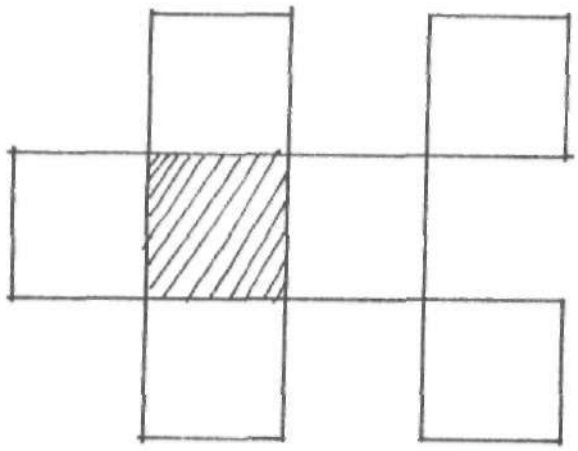


FIG. 8
USE OF SQUARE MODULES.

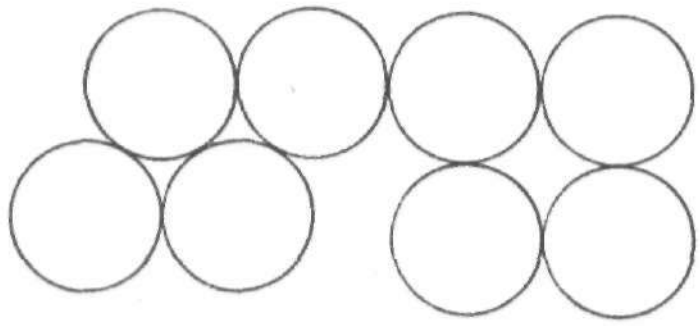


FIG. 9
CIRCULAR MODULES

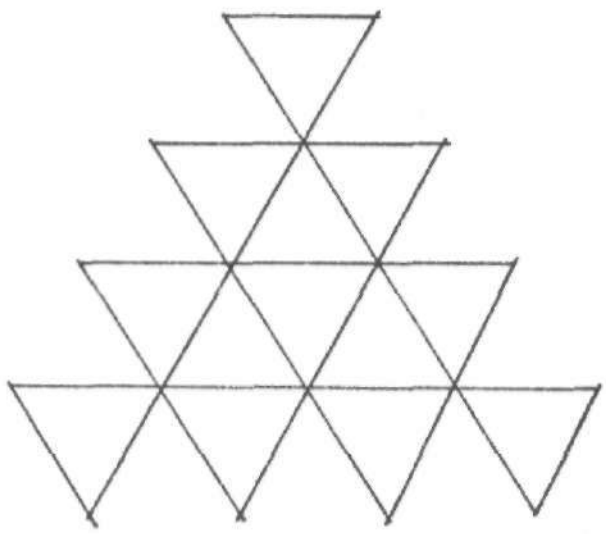


FIG. 10
TRIANGULAR MODULES.

THE HEXAGON: (See fig. 11)

This gave rise to growth (unlimited growth); possibilities for courtyards existed but the shape and size of courtyards were too regular to make the adoption of this shape appropriate.

OCTAGON: (See fig. 12)

Courtyards not sizeable; growth possible in four different directions; courtyards too regular and restricted, its size too small compared to the volumes of activity.

COMBINATION OF OCTAGON AND SQUARE

This combination gave a size of courtyard that is most appropriate to the size of the volumes. Use has been made of the octagon as the main volume of activity and the square as mere connectors--element of growth in four different directions on a horizontal plane. This combination gave rise to an appropriate hierarchy of courtyards in terms of size and shape. No sharp edges; it was found that this combination further corresponded to the traditional building type in which areas of main activity are connected with connectors. (See fig. 13)

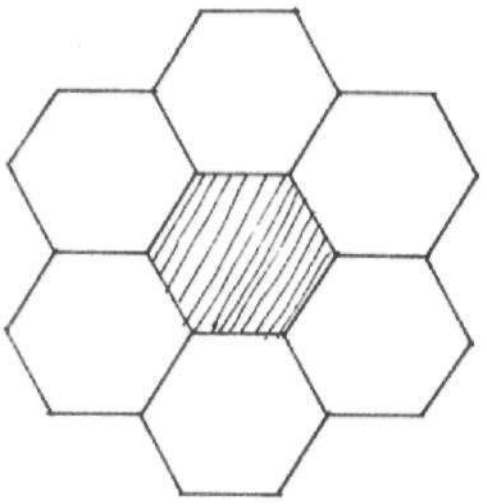


FIG. 11

HEXAGONAL MODULES.

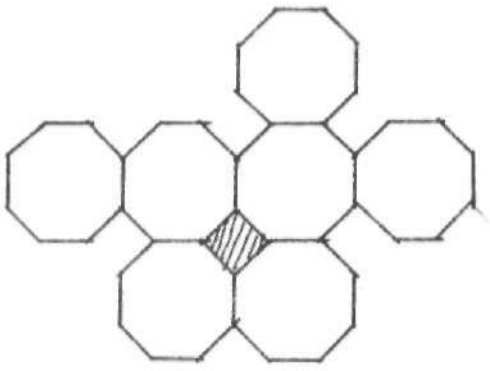


FIG. 12

USE OF OCTAGONAL MODULES.

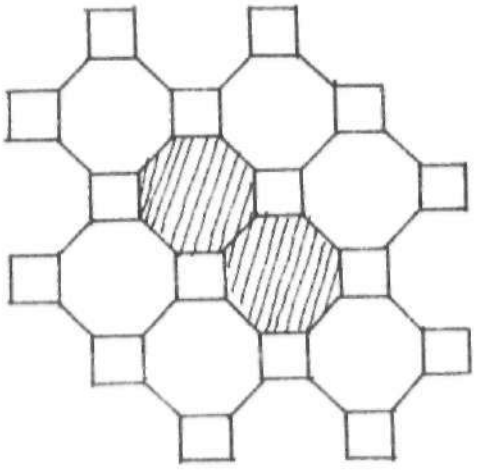
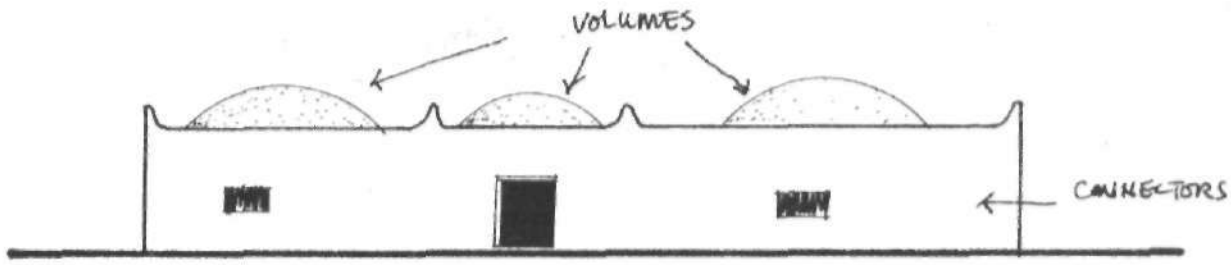


FIG. 13

COMBINATION OF OCTAGONAL AND SQUARE MODULES.



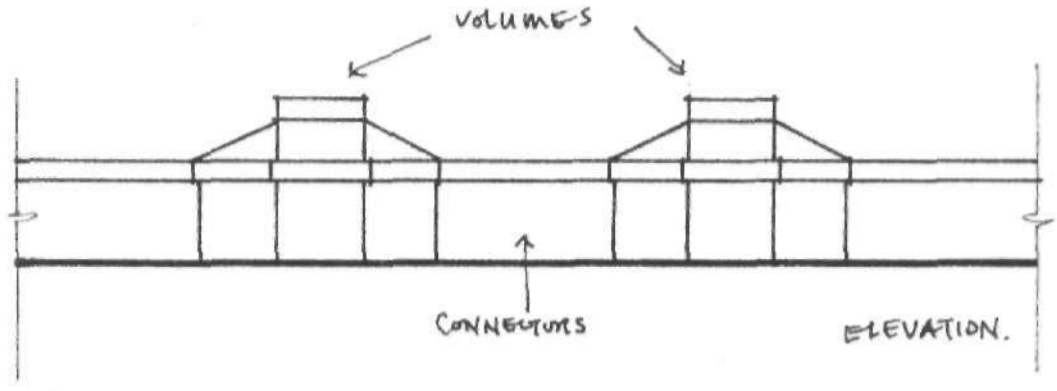


FIG. 14 MORPHOLOGY OF FORM.
RELATION OF FORM TO EXISTING TRADITIONAL ARCHITECTURE.

THE CULTURAL COMPLEX

SITE ORGANISATION: (See fig. 15)

In the organisation of the site for the Cultural Complex it is necessary to establish a set of criteria.

1. A focal point
2. frequency of use
3. Intensity/capacity of users
4. Levels of structures
5. Noise prodicing activities
6. Aspect, view
7. Movement to activity generators.

FOCAL POINT

It is considered most appropriate to make the performance arts complex the focal point in this design. The auditorium and the amphitheatre are therefore separated from the other activity areas which form a ring round the focal point. Thus a hierarchy of courtyards is maintained, as each activity area has its own small or medium courtyard while all activity areas share a common large courtyard. This common courtyard becomes the elements of pedestrian movement. The amphitheatre is directly connected to the Emir's Palace to emphasise the

importance the people attach to the traditional ruler. The crafts workshops are related to the residential areas since the craftsmen live within these areas. In the overall layout of the complex care is taken to allow a movement of pedestrians right through.

ACTIVITY GENERATORS

The main activity generators within the immediate environment of the complex are: The Fishing Ground and 'Kabanci' Display arena; the residential areas; The agricultural Fair and commercial pavilions; The amusement park within which the sports centre has been proposed. In order to follow the natural movement order, it has been thought necessary to allow pedestrians to move right through the complex into all these activity generators.

TRAFFIC SEPARATION

An attempt has been made to segrate the vehicular traffic from pedestrian traffic by letting these into the complex at various points that ensure their complete separation, thus reducing the point

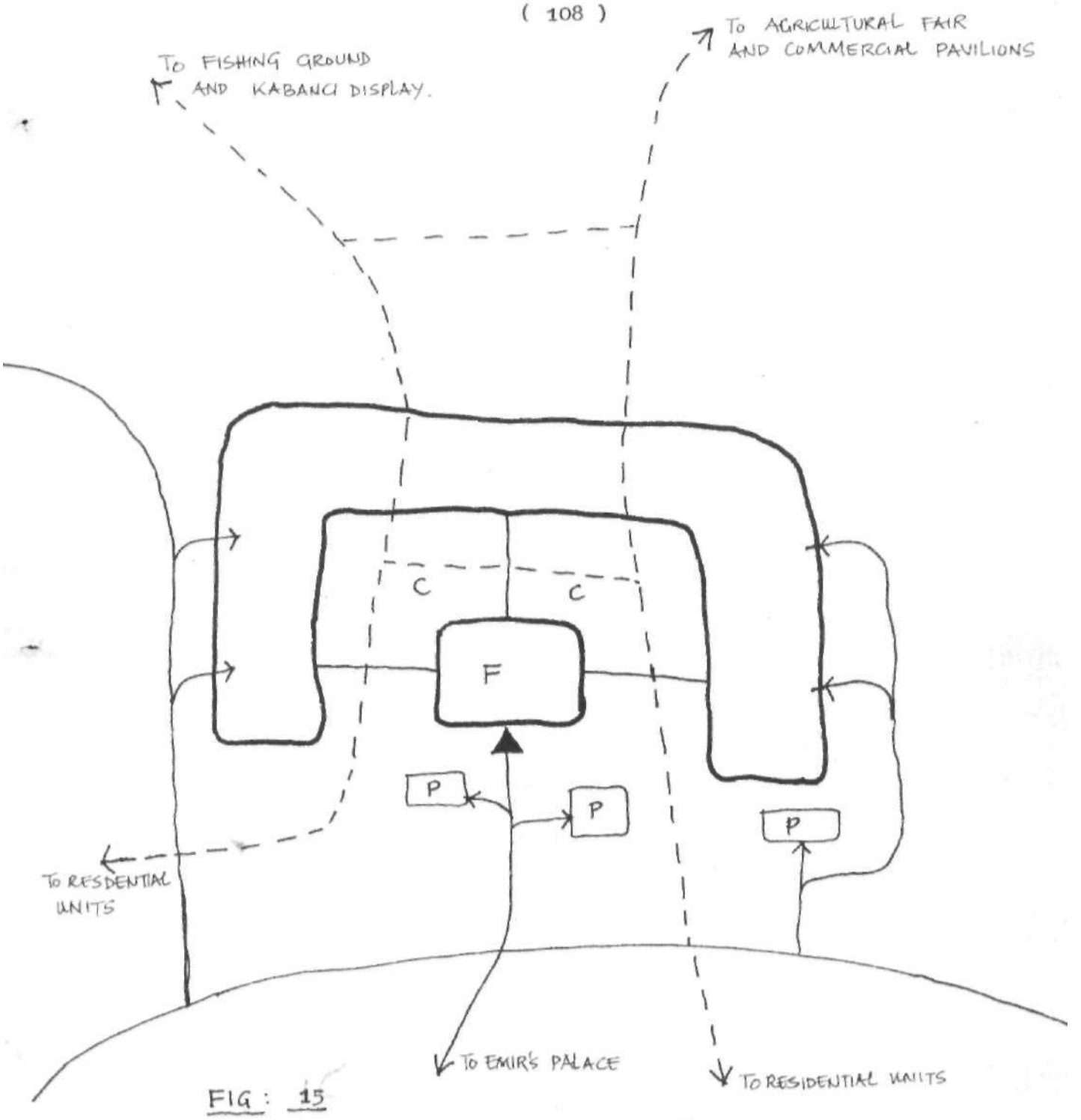


FIG : 15

SITE ORGANISATION OF CULTURAL COMPLEX

LEGEND :

F = FOCAL POINT
P = VEHICULAR PARKING
——— VEHICULAR TRAFFIC
- - - - - PEDESTRIAN TRAFFIC
C = COMMON COURTYARD.

of overlap of these movement systems to a minimum. At the points of entry of pedestrian movement system into the complex sculptural pieces have been introduced to indicate these entry points. All facilities that require service (vehicular) have been located at the sides for easy access from the rear.

SPECIAL STUDIES

LANDSCAPING

An interview was made with the divisional Forest Officer in the Ministry of Natural Resources, Forestry Division, in Sokoto, in order to find the appropriate trees that can be planted for shade and to enhance the environment. The following were the studies:

NEEM (AZADIRACHTA INDICA)

Mahogany family; dense wide-spread crown

Girth = 5.3 metres

Always green - hardly sheds leaves and therefore suitable for shade. Takes about three years to maturity and average height is 16 metres.

'MADACI' (KHAYA SENEGALENSIS)

LOCAL NAME = SAVANAH MAHOGANY.

Slow growing , where water table is high up, valley and low-lying area.

Requires plenty of water for growth.

Girth = 5.3 metres and above.

Characteristics: Profuse heavy branches, sheds leaves during the dry season.

DALBERGIA SISSOO

Suitable for Argungu; crown formation, in terms of shed not so good; can only be added as variety.

Girth = 2 metres

Height = under 10 metres

EUCALYPTUS CAMAL DULENSIS

Crown vertical, slow growth, does not provide shade as such.

WHISTLING PINES: CAN BE ADDED AS VARIETY.

SHRUBS FOR PARK

PRIDE OF BARBADOS

Yellow and red flowers, small leaves

Height up to 2 metres, Must be trimmed.

TECOMA

Yellow flowers, fairly large leaves

Height up to 2 metres and must be trimmed.

HIBISCUS

Red or Pink flowers, large leaves;

height up to 2 metres.

ORLEANDA

Red and white flowers, small and narrow leaves;

Height = 2 metres.

BOURGAINVILLEA

Both shrub and climber.

Pink and red flowers.

Fairly small leaves.

As shrub, can grow up to 2 metres.

As climber, can grow more than 2 metres.

FLOWERING TREES

DELONIX (flame of the Forest)

Bright red flowers.

Tall trees up to 14 metres or more

JACARANDA

Blue flowers tall trees (up to 14 metres).

SPATHODEA

Red flowers.

SECTION 5: CONCLUSIONS

A A SYNOPSIS

B CONCLUSIONS

It can be said that this thesis has been quite exhaustive in data finding, synthesis and evaluation, and application. A set of goals have been established, concepts enumerated and an attempt made in transforming these into physical reality. Guidelines have been established for the realisation of the proposals which, due to short time at my disposal, have not been given an architectural treatment.

"If we let architecture develop properly it will almost naturally be led towards a new ecumenic style the architect of which will be the whole of humanity..... It is only by thinking in these terms, by getting our role into its proper perspective, that we can justify our present creation and play our proper role as the agents of the human civilization and culture which is developing."[1]

---

1 Doxiadis: Architecture in transition. Page 193

A CENTRE FOR CULTURES AND TOURISM - ARGUNGU

AN M.Sc (Arch) THESIS BY N. I. NDUKWE

A S.Y N O P S I S

INTRODUCTION:

This thesis research is divided into five broad sections. The first part deals with the general background Information Studies regarding such items as the environmental and socio-cultural Ecology as well as the tourist/Recreational requirements; the second part deals with data evaluation and synthesis; the third part with proposals and stragegies; the fourth part with the Design while the last part deals conclusions.

SCOPE:

The scope of the work is limited to the cultures of the North West State of Nigeria with emphasis on the activities that characterise the Annual Argungu Fishing Festival. The main theme of the thesis is an effort in trying to maintain the socio-cultural ecology as well as establishing a program that follows a possible evolutionary process. An attempt is also made at the adaptation of the traditional

architecture characteristic of the cultural milieu, especially regarding form, layout and texture.

DESIGN CONCEPT

In trying to achieve some of the goals, it becomes necessary to establish the Design concepts. The cultural complex is conceived of as a community centre which should grow with the community. This conception led to the choise of an appropriate form - the octagon, which represents volumes of main activities, and the square which merely acts as a connector and the elememt of growth in four directions on a horizontal plane. A combination of these elements results in an informal, organic layout with an appropriate hierarchy of courtyards which typifies African architecture. Hierarchy of courtyards is in terms of size and shapes.

PROPOSALS: Locational Criteria

The river is liable to flooding and this gave rise to categorisation of types of structure to be put up - temporary structures in the flooded areas and permanent structures in the non-flooded areas. For culture reasons the fishing and 'Kabanci' Arenas

must be located where they are. The cultural complex is located in a fairly central position between the town fabric and the proposed Tourist Village and is joined with the Tourist Village by an amusement park which culminates into a proposed Forest Reserve. In order to give Trouist/Residents the opportunity for boating and more intimacy with nature, the tributary of the river Sokoto is dammed to create an artificial lake since the creation of such a lake is not possible in the main river for obvious reasons. From this lake water can be sucked up, treated, and conserved in the propsed water tank w which is located at the highest point within the vicinity. This will increase the water supply in Argungu town to a level commensurate to an envisaged increase in demand. Around this water tank a picnic/camping site has been proposed so that people can have a bird's eye view of the surrounding towns cape. Water from the lake can also be used for irrigation purposes on the rice fields. Thus, there appear to be four main activity generators; vis, the Tourist Village, the water tank picnic site,

the Yacht Club by the Artificial lake, and the cultural complex and there becomes the need to plan a road net-work to connect them, on which a public transportation system could be developed.

SITE ORGANISATION

In the site planning of the cultural complex it was necessary to identify a focal point - the performance arts core and arrange the other activity areas around it with a courtyard all round. To give further significance to this focal point, it has a direct connection with the Emir's Palace. The craft workshops are located near the redential area and, since it is the people's culture to pray at intervals during work period, a mosque is located quite close to the workshops. The museum/multipurpose block are raised on pilotis to have a visual connection between the main plaza and the river landscape. The overall layour is an attempt at allowing a natural movement pattern from residential areas, through the complex, to either the Fishing ground or the pavilions and general landscape. Two sculptural pieces are located at the main entry points into the complex.

C BIBLIOGRAPHY

TOURISM

1. Henry End: Hotels and Motor Hotels
2. The Architects Journal: Principles of Hotel Design.
3. Geoffrey Baker and Bruno Furano: Motels
4. Herbert Weisskamp: Hotels: an international Survey.
5. Motels, Hotels, Restaurants and Bars
   Second Edition;
6. Abraden, E. Resort Hotels: Planning and Management.

RECREATION

1. Rutledge, A. J: Anatomy of a Park, The Essentials of recreation area and Planning Design
2. Burton, T. L: Planning for Tourism: Recreation Research and Planning.
3. Ledermann, A. and Trachsel, A: Playground and Recreational Spaces.

CULTURES

1. George Banz: Elements of Urban Form.
2. Human Settlements: Man and his environment.
3. Auden, W. H: Culture and Leisure.
4. Jefferson, L. E: The Decorative Arts of Africa

PERIODICALS

1. Progressive Architecture - July 1974
2. Built Environment - August 1974
3. Nigeria Magazine No. 103 - Dec.1969/Feb.1970
4. Environment and Planning Volume 6 No, 1 1974
5. Architectural Design Volume XLIV; 1974
6. Architectural Design - July 1968
   Architectural Record - August 1966.

GENERAL

1. Robert Arvil: Man and Environment
2. Doxiadis, C. A: Architecture in Transition
3. Safdie, M: Beyond Habitat
4. Callender, J. H: Time Saver Standards for Architectural Design Data
5. Burris-Meyer, H. and Edward C. Cole: Theatres and Auditoriums.