# TOURIST RESORT FOR ARGUNGU

BY

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A thesis submitted to the postgraduate School, Ahmadu Bello University, Zaria. In partial fulfilment of the requirements for the degree of Master of Science (Architecture).

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JULY, 1987

## Declaration

I, MOHAMMAD KABIR NABADE of the Department of Architecture, Ahmadu Bello University, Zaria, do hereby solemnly declare that this thesis has been the fruit of my own research and to the best of my knowledge has not been presented anywhere for any form of examination.

I also declare that all relevant material and informations in the form of quotations, modified sentences or paragraphs are meticulously acknowledged.

M. K. NABADE

CERTIFICATION

This project thesis entitled: TOURIST RESORT FOR ARGUNGU by Mohammad Kabir Nahade, meets the regulations governing the award of the degree of M.Sc. Architecture of Ahmadu Bello University, Zaria, and is approved for its contribution to knowledge and litrary presentation.

Chairman, Supervisory Committee Date:----------

Member, Supervisory Committee Date:----------

Member, Supervisory Committee Date:----------

Head of Department

Dean, Postgraduate School Date:----------

## DEDICATION

This piece of work is dedicated in loving Memory of Halir Sarki Isah (N.Y.S.C. Lagos, 1986) who gave up the ghost in the Service of this nation.

It is also hope to be accepted as a token to my family for their moral and financial support.

ACKNOWLEDGEMENT

"Life is not so short but that there is always time enough for courtesy".

It is a common practice for authors to acknowledge sources, and in one or another individuals who directly or indirectly help them in accomplishing their works. Also in writing such as with this project thesis, one must have scanned through so many books, magazines, Journals, periodicals, Daily papers, etc. The aim is to Extract what is relevant as Secondary Sources of information, reflect on some material, accept or reject some, all in the spirit of the need of the research. No doubt this thesis has gone through this process of development.

Although all debts cannot be acknowledged, I am grateful to all those who by the gracious gift of their time thought, council and advice have contributed to the realisation of this thesis. I am particularly indebted to my thesis supervisor Arc. M. D. Folabit, whose effort, mature and tactful guidance resulted in valuable suggestions that gave shape to this thesis. Principal mention must be made of the head of Department of Architecture, Dr. Hamman Tukur Sa'ad for his inspirations.

I am also indebted to the initial encouragement of Sardauna Yahaya Bawa, the general Manager, Hotels management and Tourism Board, Sokoto. Also thanks to Abubakar Atiku of the graphic arts division, for some of the photographs used in the plates.

Among friends, Salawu Yakeen olagoke will continue to be remembered for his valuable contribution throughout my association with him. My heartfelt thanks to Abubakar A. Umar for his generous assistance and suggestions. I am also indebted to Arc. Ahmed Shehu Idris of the Nomad Associates his useful comments are sure to be reckoned with.

Finally, I would like to record my appreciation to the following; Akilu Moh'd, Salisu Bungudu, Engr. Suleiman Isiaka, Dr. Bala Kakale, Faruk Nabade, and a host of others too numerious to be mentioned here. I shall not conclude without expressing my special thanks to Collegues all and Sundry, with whom I shared the years in the department of Architecture. It was indeed a great experiance, the memory of which shall be with me for many years to come.

My vote of thanks to Hassan S. Mijinyawa for carefully typing the manuscripts. Except for typographical, all errors are of course, entirely my responsibility.

Wishing you all Allah's blessing.

## ABSTRACT

In modern times, tourism has become one of the most important means of cultural exchange between countries in addition to providing a very substantial source of revenue. Normally water sites provides the most ideal locations for the development of such resorts. The historic town of Argungu is nationaly famous for its annual fishing festival held around February - March every year. The events attracts visitors from all over the nation and in the last decade from neighbouring African Cuuntries and abroad, giving it an international status.

The lack of supporting and appropriate exploitation of the tourist resource in Argungu has made the attraction at other times of the year to the barest minimum. Increasingly, government persistent interest in the place leave much to be desired in the form of hopes and dreams for the area. More so, infrastructural development in the existing festival village is an effort that need to be uphold to take a more proper course Or bearing. Hence the idea of a tourist resort for the town of Argungu. Resorts of this nature are known to vary according to resource available for utilization. The problems raised in the existing festival village is that of function and inorganic nature of its setting.

The resort from the stand of the scope will provide for recreational, socio-cultural, Educational and Economic benefits.

Landscaping will also be given emphasis. The goal of the submission, among other things, is to Encourage the development of tourism in the state and thus Create a better understanding with the rest of the populace. It is also hope to he used as an avenue for exploding the myth of self-reliance.

The specific objective however, shall be to provide adequate community facilities in the resort to promote presentation and appreciation of intrinsic cultural values of the area and the nation. The thesis will also seek to create a resort that reflects the need of the overall development of the area as regards tourism.

It is hope that the thesis will open up possibilities for exploitating our resources to favour much needed development.

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CHAPTER 1

# PROJECT DEFINATION

## 1.1 Philosophy

Tourism denotes the temporary short-term movement of people to destination outside the places where they formally live and work and then activities during their stay at these destinations. Nigeria is a vast country with a population of eighty million people comprising of more than two hundred and fifty Ethnic groups with varied cultures and traditions. There is therefore a vital need in view of these differences to encourage tourism development to help in diffusing information and influencing attitude. with better standard of living,improved communications, greater leisure time and higher incomes and spending power there is a steady increase in tourist traffic in Nigeria.

Tourism has significant cultural and aesthetic implication, the restoration of ancient monuments and the preservation of beauties of landscape. A tourist resort must thereiore complement the natural beauty of the tourist destination. The most intrisic and critical aspects of the natural setting - its essence must be identiiied and related logically to the design problems. It should be possible for an individual or groups to achieve a visual,physical, psychological and spiritual contact with nature. Should enjoy

quietness, privacy, recreation and rejuvenation as desired. Overall, it should derive some economic benefit by generating revenue in both foreign exchange and local Curracy.

1.2 Introduction:

Tourism is the sum of the phenomena and relationships arising from the travel and stay of non-residents, in so far as they do not lead to permanent residence, and are not connected with any earning activity (Hunzikor and Krapf, 1925) much of tourism is international in character and much of it is a leisure activity. For countries, regions, towns and villages which attracts tourist in large numbers, tourism can be a significant element in their development. The idea is that tourism is an economic activity and has the same kind of spatial expression as do other goods and services. Amount of the rich potentials of the physical and human resources of the country for recreation and tourism, both state and federal governments have undertaken many steps to give recreational and tourist industry some impetus. The Nigerian tourist Board has drawn up a master plan for the development of countries tourist potentials.

However, despite this attractions there are several major problems to be faced. The first is to decide whether the tourist potential is worth exploiting from an Economic, Social and political stand points.

Secondly, what type of tourism is to be encouraged, is it mass, low spending but high gross income and therefore also high investment tourism or the small scale, specialised, high consumer cost tourism. Indeed many small countries of the world are beginning to reach this stage of decision.

A tourist resort in the view of 'Abert Rutledge ', shall be a place that provides users with an Environment in which they can achieve their purpose of visiting, leisure, recreation, rest repose, rejuvenation, etc. It will provide facilities for both active and passive recreational use for people of varying groups and sex nationality and creed. The average disabled person shall be catered for by removing barriers that may prevent their using the facilities. It shall provide aphysical Environment where people are expressed to a maximum of clean air, water, aesthetically designed and constructed buildings, freedom from noise, proximities to amenities, hazardless place and sufficient open space to permit solitary enjoyment if so desired. . Tropical factors shall be behind the mind of the author so as to achieve maximum comfort for the users.

1.3 Goals, Aims and objectives:

Goals: The thesis is intended to meet the following

(i) To encourage the development of tourism in Sokoto and create a better understanding with the rest of the country.

(ii) To provide a forum for exchange of cultural and educational thoughts.

(iii) To encourage, presentation, promotion, and appreciation of culture among the inhabitants and other populace.

Aims and Objectives:

The specific aims and objectives are however, as follows:

(i) To enhance or increase the attraction to Argungu, through careful exploitation of its available resource.

(ii) Promote or Explode the myth of self reliance by demonstrating necessary fools and avenues for developing our tourist and Economic potentials.

(iii) Create a unique opportunity for bridging the cultural gap through contact with other social groups, especially for non-indigenes to meet and interact socially and commercially with indigenes

(iv) To provide adequate community facilities in the centre for social interaction which will act as a vehicle for expressing unity.

1.4 Defination of Problem:

The problem of resort development in Argungu, may be identified from the short comings of the festival village. which perhaps, explain why the occupancy rate is very low apart from the fishing time. The major constraints observed are as follows:

a. Utility

b. Attraction

c. landscape

Utility here as it applies to provision of facilities and general relationship of Units and spaces, the facilities available are not designed to attract visitors per se. Rather it followed some kind of organic growth which was born out of a government rest house. The problem is further compounded by the site due to lack of any scenic natural or man made attraction - Infact there is no intresting feature. It is located miles away from the fishing lake. The need for site attraction is critical in any resort planning.

Another problem is absence of good landscape the ground is bare, dusty , with serious erosion problems. The thrust of the thesis will be felt in this areas highlighted so far.

1.5 Architectural Significance:

Architecture is a complex undertaking, involving technical, Social, Utilitarian and cultural problems, which are key elements in any tourism development. Architucture consists of systematic ordering of knowledge. It involve the creation of beautiful forms that meet primary function, ordering space in a coherent manner, use of material in a functional and knowledgeable way and providing comfort and convenience of its clients and

other activities. It is a great challenge to achieve such an architecture indesigning of resorts, not withstanding, the architect must be able to manipulate these diverse elements in a manner which will produce a balanced and ordered whole.

1.6 Client and Sponsor:

The clientele here is the Person or body responsible for financing the project. The financier is no other than the Sokoto State Hotels Management and Tourism Board, which was Established by Edict in 1978. The board is responsible for the development of tourism in the state. It is concerned with establishing a frame work within which the tourist industry can function and develop, including provision and improvement of appropriate tourist amenities and facilities. The board is also to ensure that future demand and supply in the tourist industry are kept in balance.

The ways and means of meeting this finance is entirely left to the arms of the government. But it is understood that it is hope to be derived from grants and subventions from both the state government who is the sole financier, the Federal Government and other Federal agencies such as the Nigerian Tourism Board. Contributions may also be expected from public cooperations, organisations and individuals. In the last few years the state government's share in the financing of

the festival and its infrastructures was about 90 percent.

1.6.1 Building Owner:

The Complex shall be owned by Sokoto state government, the custodianship will however, be entrusted to the Hotel Management and Tourism Board who is to be responsible for its successful running, upkeep and maintainnance. Further developments in the future or expansin provision will primarily depend on its performance and assessment.

1.7 The Users:

The resort shall be used by both domestic and foreign visitors to the state and Argungu inparticular, It will therefore meet their primary needs of accomodation and recreation. The Complex shall be used by group of all theatrical arts periormers, musician, dramatists and players for the entertainment of visitors. It will be used partially by holiday makers, with its supporting facilities and other attractions. Users may also include those who wish to spend their weekends or simply recreate themselves from the boredness of their working places or homes. This category may be resident in Argungu or located nearby. It can also be used by organisers of training programmes, conferences, Seminars and meetings. It goes without saying that it will invite spectators coming for one function or the other

as day trippers. It will also house the administering force which will be concern with running of activities in the complex and the Economic aspect of the resort, this category constitute the working staff.

1.8 Project location Criteria:

There are enough reason to support the choice of Argungu for the project location. The annual fishing festival is an essential element in the life andeconomy of Argungu and the benefits of the expansion of associated facilities to provide an all year round attraction have been recognised. Stimulus are designed for an all year round sporting and conference facilities. In general terms, the measure of importance of a geographical unit as tourist destination or its potentiality is determined by three prime factors.

1. Attractions
2. Accessibility
3. Supporting Infrastructures
4. Existing Market/Catchment area

1.8.1 Attractions:

Adequacy of tourist exports were assessed to determined whether they can attract tourist and visitors.

A. Site Attractions:

- Marina dam reservour with its Scenic and varied landscape. The reservour has an area of 36.2sq.km. at full storage level and

a. maximum depth of 4.10 metres. The reservoir has a dependable source of water in Goronyo Dam Reservour.

- The magnificence of Dan koji Hill. This can be experiance by sailing on the beautiful lake past saveral fascinating Scenic of country side.
- Yakubu Nabame Craft School, which provides for handicraft works and training. This include hand woven cloth, leather works, Raffia weaving, Calabash Carving and decorating and metal works.
- Gozange forest reserve, provide the right solitude for recreationist.
- The ruins of the historic towns bult by Mohammadu Kanta, of particular interest is multi-walled town of Surame and the war Camp at Gungu also built by Kanta.
- The Kanta Museum located in the old palace of the Emir of Argungu is an all year round tourist attraction and one which also benefits from the fishing festival. It has a large number of impressive relics.

B. EVENT ATTRACTIONS:

Fishing festival - The largest singular tourist attraction held annually in the month of February-March at the festival site

of the Matan Fada lake. It attracted as much as 80,000 visitors in 1981, Comprising of tourist, officials, participants and invited guests.

Other Festivals - Kalan-Kuwa this is a local festival observed by the youth to mark the end of rainy season. It involves cultural activities and last for four days.

Debedi: Esssentially a bethrothal festival marked with cultural dance

Gulmo: Occupational festival to make a successful harvest.

Various Religious Festivals - at religious occassions.

1.8.2 Accessibility:

Accessibility is a function of distance from centres of population which constitute tourist market and of External transport and communications which enable distination to be reached.

AIR - By Air from other parts of Nigeria to Sokoto from where Argungu may be reached by road. The services of the airpot are considered adequate, though the airport building was an intrim measure to facilitate the airlifting

of pilgrims from the state. The Nigeria Airways operates two flights daily, morning and Evenning through this route to other parts of the country. Kabo Air travels use to operate international link to Niamey by air from Sokoto. The closest air field to Argungu is located at Zaüro about 40km, the airfield is to be developed in the near future. Other Airfields located within the State are these of Gusau, Yelwa, and Zuru.

Roads——Entry point to Argungu by road is through Sokbto and Birnin Kebbi. On the Eastern leg the Federal road F133 connects with the Main A 1 Sokoto road at Jaredi. The carriage way which is 7.3m wide is tarred and in good condition. The Western leg of the F 133 is reached via a narrow Barley bridge across the River Sokoto at Argungu. It Extend to Bui joining state road which runs to Kangiwa and Kamba. The Bailey bridge at Argungu is at present the only river Crossing in the area. It is only able to carry one-way traffic, therefore a supervisor organises the queueing of vehicles and padestrians on either side which take turns to use the bridge. The F203 runs southwest, and connects Argungu to Birnin Kebbi, Kalgo Bunza and Kamba.

The road is also in good condition. and 7.3metres wide. The junction of the two federal roads, the F133 and the F203, is the focus of the transportation network in Argungu.

Rail — There is no rail connection to Argungu. The railway is not an important means of transport in the State. The rail line ends at Kaura Namoda through Gusau from Kaduna State.

1.8.3 Supporting Infrastructures:

Amenities at the destination comprise of accomo ation , catering, water, internal transport (though not organised), communication, power and Entatainment facilities.

1.8.4 Existing Market and Catchment:

Another important measure is whether the area is already attracting tourist of which such a facility as resort could be provided. It is to be observed that apart from the fishing festival period, the occupancy rate is very low as shown by records of overnight visitors at the Festival Village (Fig.11) Limited in-house accomodation will have to be considered. The attractions will need to be improved to invite visitors and tourist. The thesis will in response to this observation concern itself with the means of improving the attractions, which will be

The catchment area include the neighbouring countries of Niger and Benin Republics. The resort is also expected to draw market from both the staff and students of the, polytechnic at Birnin Kebbi , the University of Sokoto and College of Education for holidays, Conferences, and weekends. The place is also observed to be a transit point for travellers using lagos - Niamey international highways.

CHAPTER 2

# GEOGRAPHICAL INFORMATION

## 2.1 Location:

The town of Argungu lies in the western part of Sokoto State within the Sudan/Sahel Savannah belt. The location coordinates are 12.75°N, 4.5°E at an approximate altitude of 225 metres above sea level. It is found along the bank of River Rima, approximately 90km to the west of Sokoto; the state capital, and 560km north west of Abuja by road. Since Colonial rule, Argungu has been the headquarters of an Emirate of the same name. As an Emirate, now a local government unit, it consists of eight districts namely. Argungu, Augi, Bayawa, Gulma, Kamba, Kangiwa, Lelaba, and Yeldu.

Physically, the emirate has the shape of a human foot, broadening towards the toes and forming a kind cresent. It is bounded by Binji, Yabo and Sokoto local Governments to the north and to the East, and by Birnin Kebbi. Bunza and Bagudo[1] Local governments to the scuth and south east.

## 2.2. Human Settlements:

### 2.2.1 The People and Culture.

The people of Sokoto State consists of three major Ethnic groups namely the Hausa, Fulani,and Dakarkari. Minor group include Dandawa, Zabarmawa, Dukkawa,Kambari and a multitude of other minor groups scattered over

the state in little pockets, The Hausa speaking majority are sub-divided into Zamfarawa, Gobirawa, Kabawa and Katsinawa.

The Zamfarawa are found mostly in Anka, Gummi, Mafara, Kaura Namoda and Maradun districts. The Kabawa on the other hand are predominantly found in Argungu and some parts of Jega, Birnin Kebbi, and Silame districts.

2.2.2 Argungu Ethnic Composition.

Argungu consists of about six dominant linguistics and Ethnic groupings, although the major language spoken is Hausa. There are the Lekawa, the Kabawa (Hausa), the Arawa, the Fulani and the Barebari or Kanuri-speaking peoples. Minor sub-groupings include Maliyewa ( from Mali), Kangawa, Lalibawa, Dandawa, etc. The Sarkawa form a major group of the Kabbawa.

The Kabawa:

Have been the dominant Ethnic and linguistic group in Argungu. This group comprises the Lekawa, the Kabawa (Hausa), predominantly fishing and farming folks.

The Zabarmawa -

Found principally to the north west of Argungu district (Kamba, Illo, etc). They engage in long distance trading.

The Fulani:

Claim Torankawa origin - descendents of Dan Fodio, the founder of Sokoto caliphate. They are either pastoralists or sedentarized folks.

2.2.3 Culture:

Defined as the totality of a people's visual, sensual and psychic art, beliefs, music, dance, social institutions, personality characteristics, etc. as these continue to evolve in the course of that community's history and phases of social involvement. The pre-Islamic culture of the Kabbawa is manifest not only in their modes of social organisation and distinctive personality types but also in their religious practices, beliefs especially water andland rites, and the various arts associated with fishing, housing, farming and other occupational specialisation.

The Argungu is today festival invaded, in that most of the Societies Socio-Economic development can be largely traced to the dominant role played by the festival.

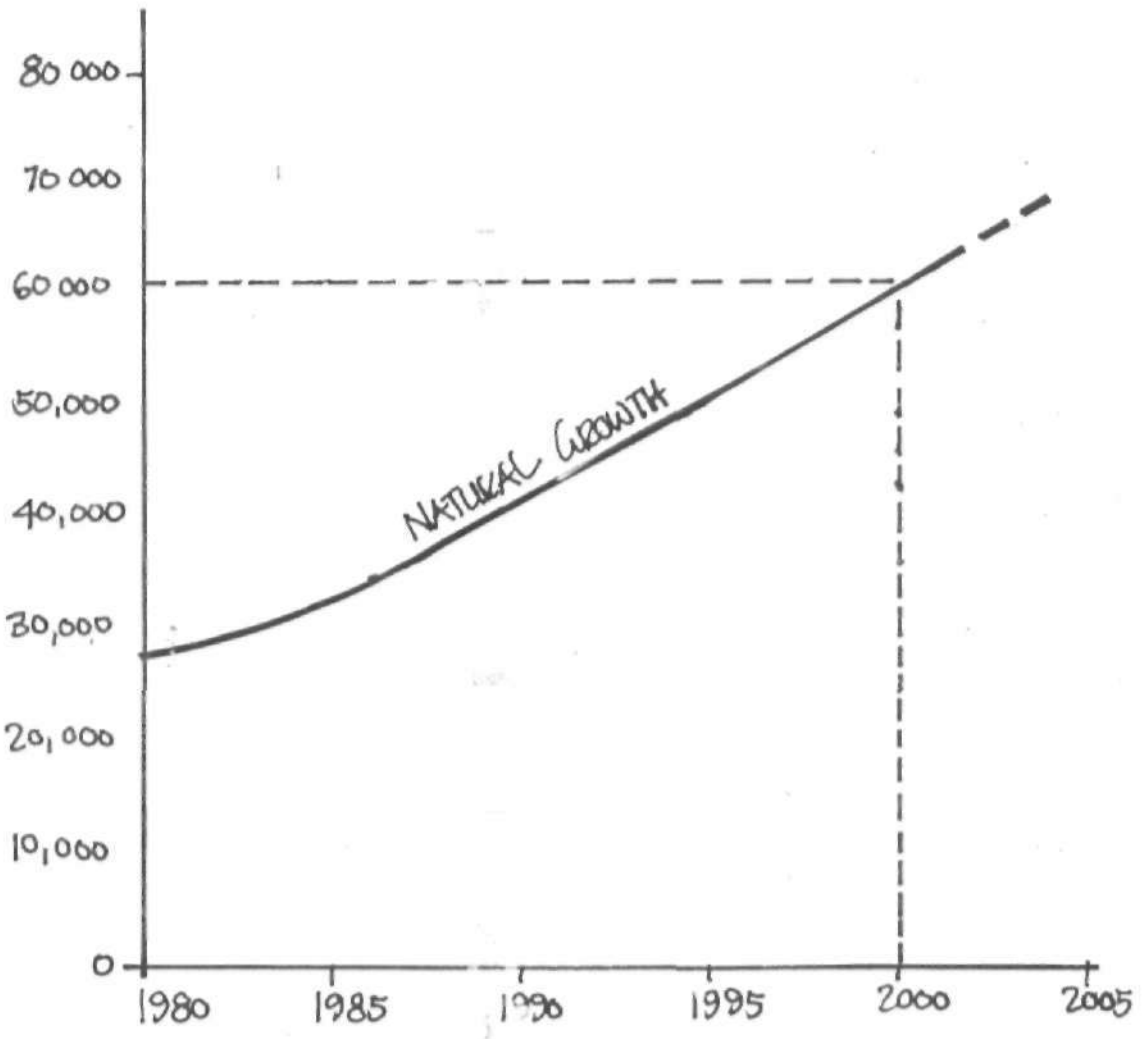
2.3 Population Structure:

In 1963, the population of Argungu Emirate was assessed at approximately 300,000 (1963 census figures). Fourteen years later, the population was placed at about 460,000 persons, and today Argungu local government area has a population of about 650,890 (1980 figures). The size of Argungu division, the most densely populated of the eight districts, is about 280,000 while Argungu town itself is being estimated at about 96,000 persons.

However this figures do not agree with the result of a compound survey conducted by Dar Al-Handasah consultants in December, 1980. The survey put the population of Argungu at 28,000 with an annual growth of 5 percent (Fig.1). The projection assumes that there will be an increase in population growth brought about by immigration caused by increased investment in employment opportunities and infrastructures in the town.

The generalised age and sex structure is shown in (Fig.2).

FIG. 1 POPULATION GROWTH

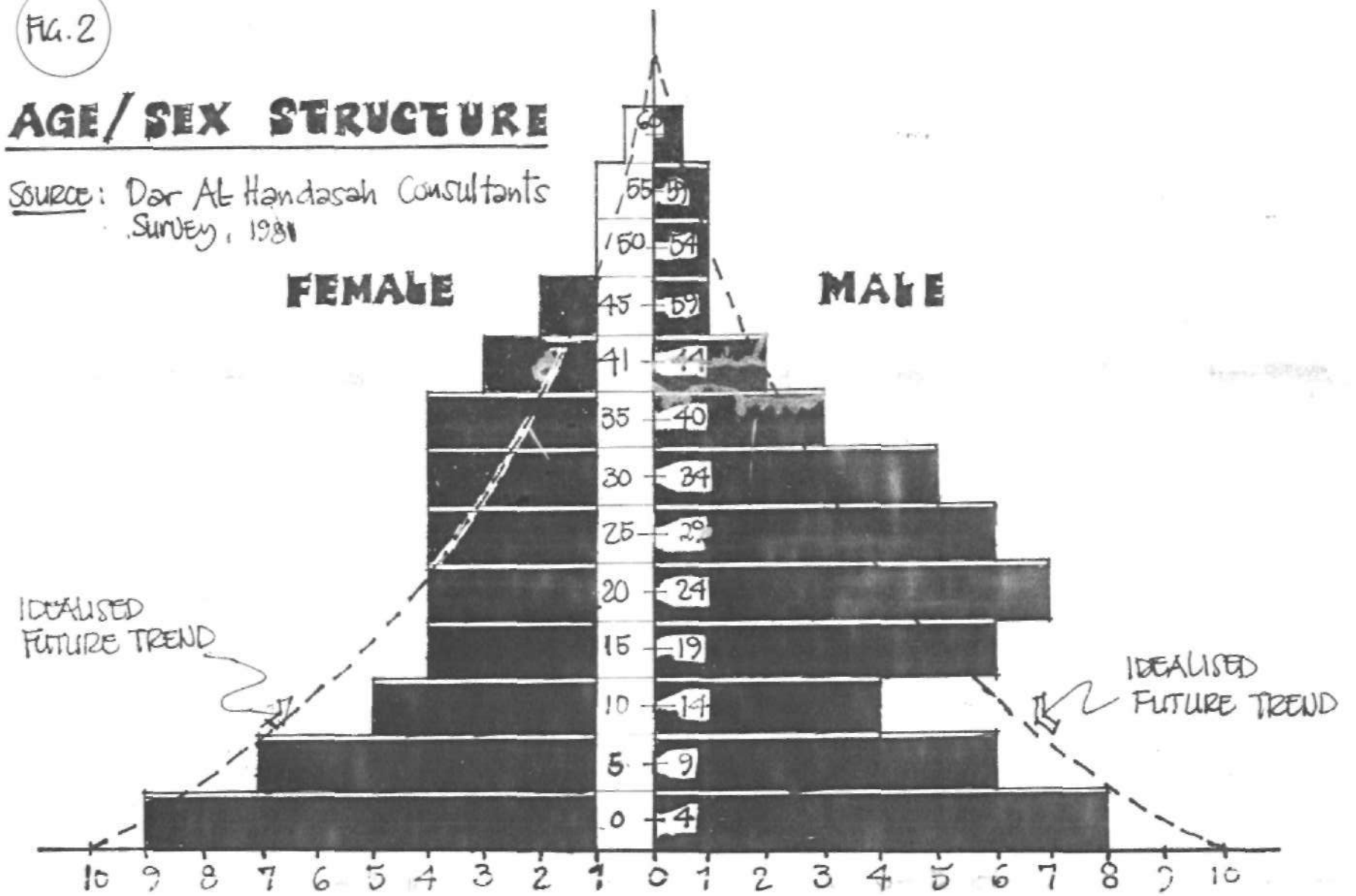



Source: Dar Al-Handasah Consultants Survey, 1981

FIG. 2

## AGE/SEX STRUCTURE

SOURCE: Dar Al Handasah Consultants
Survey, 1981



## 2.4 ECONOMIC BASE

As the key to the town's potential to attract immigrants, the performance of the local economy will exert a major influence on future population growth. It will also determine the standard of living and future income levels, in this way it will also determine the future demands on infrastructures, housing, health and education facilities, transport and community facilities

### 2.4.1 Agriculture.

This has an overwhelming importance in the economy and social life of the town. The practice vary according to topography. In the fadama are of the river valley, floating rice cultivation dominates. The seeds are planted at the end of the dry season, and establishes itself before the annual floods arive, which then support the rice to maturity. In the higher area, vegetables are grown, Irrigation activities are carried out by the river basin authority.

### 2.4.2 Fishing:

There is no formalised fishing industry in Argungu Fishing is carriedout on a secondary basis but it provides valuable cash incomes for the fishermen. This Economic sector carried to the fore iront of Argungu life during the Fishing Festival in late February - March. However, the large catches are usually found in the festival areas, and the use of these areas is reserved for the festival period.

2.4.3 Fishing techniques:

A wide variety of Ingenious techniques have been developed for exploiting the economy to its fullest. Some techniques depend on the nature of the water, others upon its seasonal rise and fall and the spawning of the fish. while Some techniques call for considerable cooperation, others allow for individual enterprise.

The most common method use in the Gulbin Kebbi, is the use of a pair of Sein nets known as Homa (bufferfly nets) which are held in each hand of a fisherman. Other methods include the use of large throwing fishing nets known as Taru, hook traps called Mamari, and Fatsa, and a variety of raffia-woven traps such as tsara and Undurutttu. Various types of harpoons are also used, the must common being Harruga and Zago. The use of harpoon or spear does notlend itself to individual effort, it is most productive in communual fishing.

Most fishing is done with traps for once set, a trap can be left while the owner sets more or does other necessary work. In still water, fish are lured by bait into ingenious 'no return' traps. Other automatic devices include underwater cages with doors, released when the bait is taken, and bent saplings with bait triggered to fling the fish cut of the river and unto the bank. Some times the rivers may be swept by nets supported by cork floats and weighted with sinkers, and the fish may either be brought in with the nets or speared.

Besides its being a major source of protein for generality of the population, fish is also an important trading commodity which bring in large reward. The fish are preserved by salting, drying and smoking.

2.4.4 Commerce and Industry

Currently industry has very limited role in Argungu. It is typical of what may be found in most medium sited towns in Northern States. Concern groups include, blacksmith, bakery, and block or brick making. Crafts, weaving and Dyeing and leather works are also locally popular. The state government has introduced a scheme where funds are provided for loans to assist expansion and modernisation of existing small scale industries.

Sokoto State is world-famous for its beautiful handcrafts and arts. These are locally woven cloths of different pattern and design. They are produced manually by patient craftmen. They consists of richly decorated gowns, knives, and domestic furniture. There are also house bridles and stirrups, all of which could be easily purchased at reasonable prices in the market, cooperative store, arts council gallery or directly from the makers.

Similarly, the kabawa of Argungu has been famous for salt and Tin mining, mostly surface mining.

## 2.5 Season and Climate:

Climate changes may be considered as a result of certain adjustment of nature, from one pattern to another or may be due to overpowering of one climatic element over the other. Geographers have accepted the view that climatic fluctuations and changes usually constitute a pattern. Fluctuation tendencies of any single climate parameter are identified with circles of short term duration, such circles may relate to sunspot activity and exhibit periodicities ranging from 11.5 - 22.5 years, as well as submultiples and multiples of the basic 11 year solar cycle. This point has suggested that climatic change in the whole occurs at interval and bring with it a rigorous change from the established normal to another. Because of the many variable parameters that constitute the climatic ingredients, geographers realised that both the seasonal changes and climatic changes are inevitable because they are ingredients of nature.

### 2.5.1 The Climate of Argungu

Climate is said to be Semi-arid with tropical characteristics that evolve two distinct seasons namely, the dry season and the wet season.

### 2.5.2 Wet Season

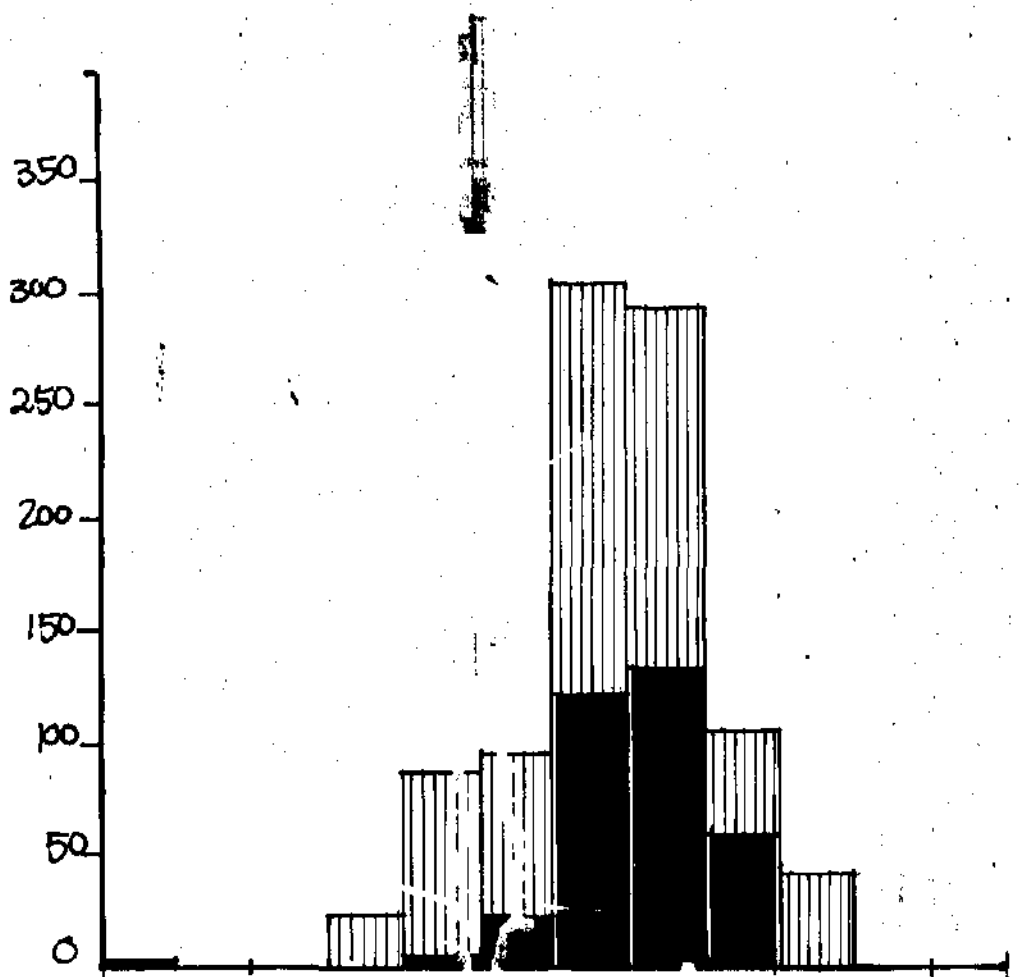
The wet season begins in late May or early June. The opening rains are characterised by high winds

and thunderstorms. The wettest month is August when the number of rainy days incertain week can be as high as six. Initial rains come in very heavy downpours lasting barely one hour. This produces a large scale surface erosion and gulley wash. By August the rains fall in smaller shower of longer duration. During the rains temperatures drop and the relative humidity increase. The average annual rainfall of 740mm was recorded, which spread over the period of 120 days of the wet season. (Fig.3). The highest rainfall probably occurs from night time to early hours of the morning which suggest that like squalls contribute more to local rainfall then local storms.

2.5.3 Cold Season

By the middle of September, the rains begin to get fewer. October sees the change in the direction of the winds which now become north-easterly heralding the onset of the harmattan. Thus, October is a transitional month when normally the wet season ends and dry season begins. The cold season of the harmattan reaches extrames in December/January when temperatures can be as low as 50°F (10°C). A characteristics of this season is the dust which it transports and blows. Fine sand brought by the wind clouds the sky which attains a brownish tinge.

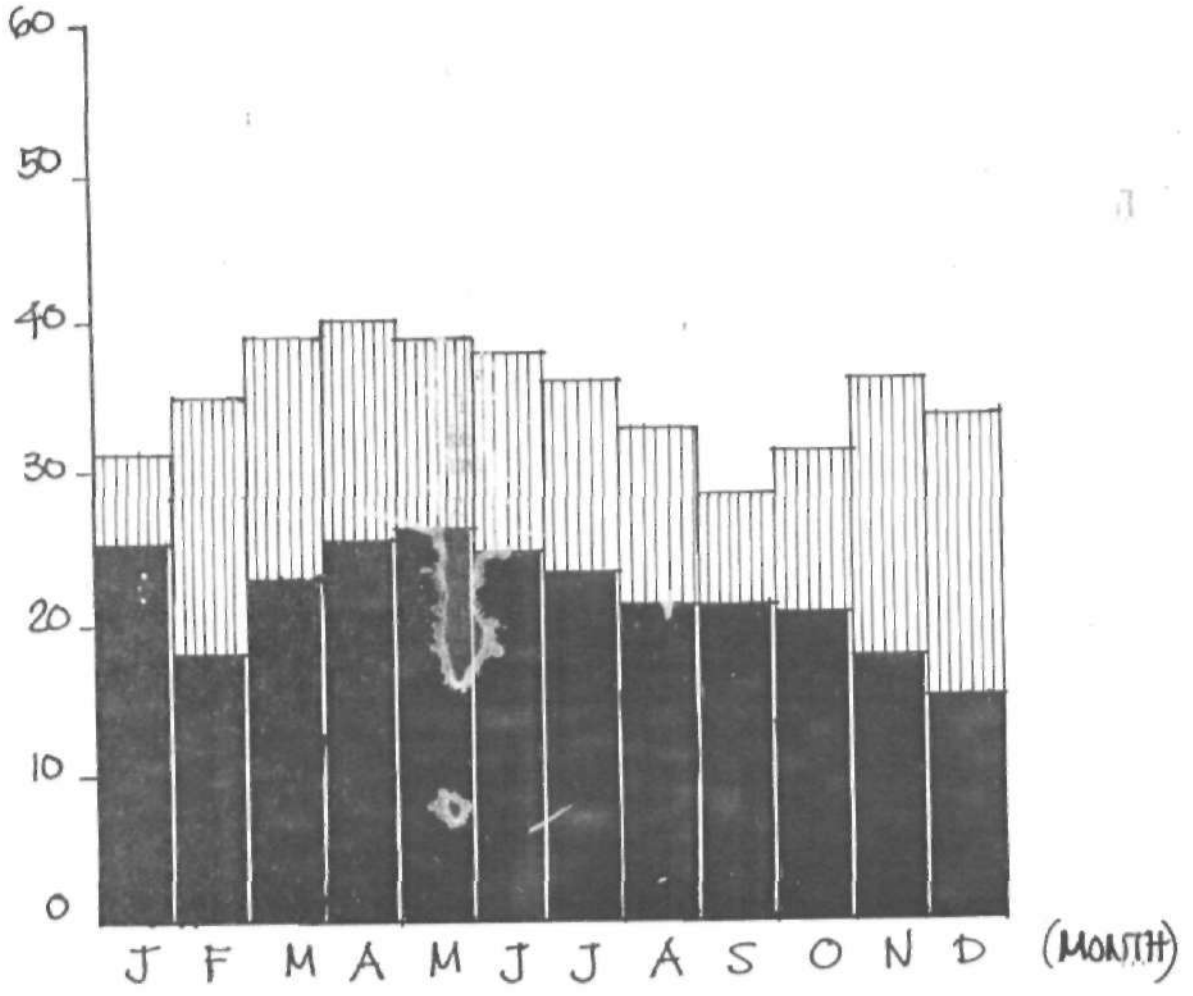
FIG. 3 RAINFALL CHARACTERISTICS (mm)




| | J | F | M | A | M | J | J | A | S | O | N | D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAX. (mm) | 0·3 | – | – | 17·5 | 89·5 | 98·4 | 306 | 286 | 109·3 | 36·8 | – | – |
| MIN. (mm) | 0·3 | – | – | – | 0·5 | 17·1 | 120·6 | 131·5 | 55·7 | – | – | – |

Source: Metriological Unit, Sokoto Airport

FIG. 4 TEMPERATURE CHARACTERISTICS (°C)




| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAX. (°C) | 31·5 | 35·5 | 39·0 | 40·7 | 3[illegible]·7 | 36·8 | 32·6 | 28 | 32·4 | 35·8 | 34·5 | 32·1 |
| MIN. (°C) | 15·7 | 18·8 | 22·0 | 25·7 | 2[illegible]·2 | 25·0 | 23·1 | 22·5 | 22·5 | 22·0 | 18·7 | 15·1 |

Source: Metriological Unit, Sokoto Airport

2.5.4 Dry Season:

This starts around March and reaches its climax in April/May. Since the sky is always clear, temperature rise to as high as 100°F (37.7°C) with 95°F (35°C) being common. Rivers begin to shrink and relative humidity drops. High Evaporation rates affect vegetation and soil. The average maximum temperature ranges between 30°C to 40°C, while the average minimum temperature ranges between 15°C to 26°C and a likely maximum range of 20°C daily(Fig.4).

The climatic changes is brought into effect due to the movement of the two important airmasses, the North-Easterly and the South-Westerly. The former blows from the Sahara, it is dry and tropical continental in origin and usually laden with dust. The later is from the Atlantic, it is characteristically cool, moist and equatorial meritime in nature, which brings rainfall. Generally, in west Africa these two air masses form a discontinuity zone at their boundry. Usually, the Zone between the moist equatorial (ME) from the South and the dry tropical continental air (CTS) from the North has been called the inter tropical convergence zone or inter tropical discontinuity.

| SEASON | PERIOD OF OCCURANCE |
|---|---|
| (i) Dry Season, the Season of harmattan | October - March |
| (ii) Hot Season, the dry season | March-April May |
| (iii) Thunder storm and the squalls | May - June |
| (iv) Wet Season | July-September/Oct. |

2.6 Physiography and Soils:

Argungu town and its environs is characterised by low-laying plains with a few hills sparsely distributed These plains form part of the Sokoto plans. The region is undulating and highly drained, blessed with numerous rivers, streams, lakes, ponds and pools. The most important are the Rima and Gulbin Kebbi. The region has a very good flood plain of an average of 5km wide.

The area is covered by the ferruginous tropical soils, considered to be the zonal soils developed under the prevailing climatic conditions. The soil is sandy, coarse textured, freely drained with discontinous Iron patches. However if surface run off occur, the soil exhibit a high erosive potential which will be increased if development occurs without protective measures being

taken. In some places the soil is markedly laterised by the loss of silica. The resulting free metal oxides from a high proportion of the clay fractions and often coat the quartz and Crystalline clay particles of kaolinite. The free Iron oxide tend to cement the soil and are often deposited in the profile in the form of mottles or concretions.

To the west of Argungu lies the Fadama of the Sokoto Rima River. Here the annual flooding of the valley floor has produced fadama soil of great agricultural value.

The natural fall of the ground in Argungu is from the hilly area down to the river. The average gradient is 0.5 percent (1,200). The total annual rainfall and soil condition would normally allow rainfall to perculate into the ground without causing flooding.

## 2.7 Geology and Hydrology:

### 2.7.1 Geology:

Argungu is located in the Gwandu (formation of the middle Eocene period in the tertiary age. The rock type is sedimentary. Consisting of sandstones, shales and limestone. From available bore hole records the basement rocks are over 273 metre deep. Since most of the area is not under water, it is assumed any structure built on this area cannot exceed the maximum depth of the sedimentary formations.

TABLE 2.0 LAYERS IN THE SUB SOILS

| Depth (ft) | Description |
|---|---|
| 35 | Red Brown, Sandy Clay |
| 65 | Iron Stone, Asolitic, hard |
| 160 | Iron stone, Pisolitic, Sandy |
| 150 | White grey clay with boulders |
| 710 | Clay, grey sand(in part) |
| 270 | Sand, fine to medium grained |

2.9.2 Hydrology:

The hydrology of this area is derived from Sokoto basin. The area under this basin is underlain by rocks of the basement complex. The sedimentary rocks of this region (tertiary) consist of the Sokoto group unconformably over lain by the younger Gwamdu formation. The other sister groups is made up of the Dange formation and Kalambaina formation. The Gwandu formation which is a characteristic of the area under study yeilds water under phreatic conditions from depth ranging from 6 to 45.7metres and it is being exploited for water supply to various towns and villages. The general slope of the water table is to the west.

## 2.8 Vegetation:

The Vegetation is generally the Sudan type, characterised by open woodlands, short, tender grass-lands and stunted shrubs. The trees are deciduous, and in recent times, the impact of man and soil erosion is greatly felt. The vegetation becomes sparser except along the marshes where dense populations are encountered.

Grass cover is very scanty with dotted trees and where found, grass growth is shorter and dominated by hyperrhenia/Andropogan gayanus spp. The area is continuously cultivated, and little trace remains of the natural vegetation. The main trees are combretum, Acacia, and Commiphora spp. supported by a few traces of isoberlinia spp.

## 2.9 Solar Radiation:

Solar Energy arrives at the top of the Earth's atmosphore very close to a constant intensity of 1,353W/$m^2$ However, on the Earth's surface, this constant is known to vary from place to place and from time to time due to metoriological conditions, but the average intensity on the Earth's surface is 1000w/$m^2$. The total solar power density for Sokoto state has been estimated at 984W/$m^2$. Cloud and weather patterns vary and attenuate the solar radiation intraversing the atmosphere. Thus we would

Expect to find a region that has generally cloud-free weather such as the dry regions, to receive the greater Solar energy. Additionally, water Vapour, haze, dust and other contaminants tend to decrease the solar energy available at the earth's surface. And in as much as these quantities vary with altitude,. the Solar Energy also varies with altitude.

2.9.1 Variation of Solar Insolation.

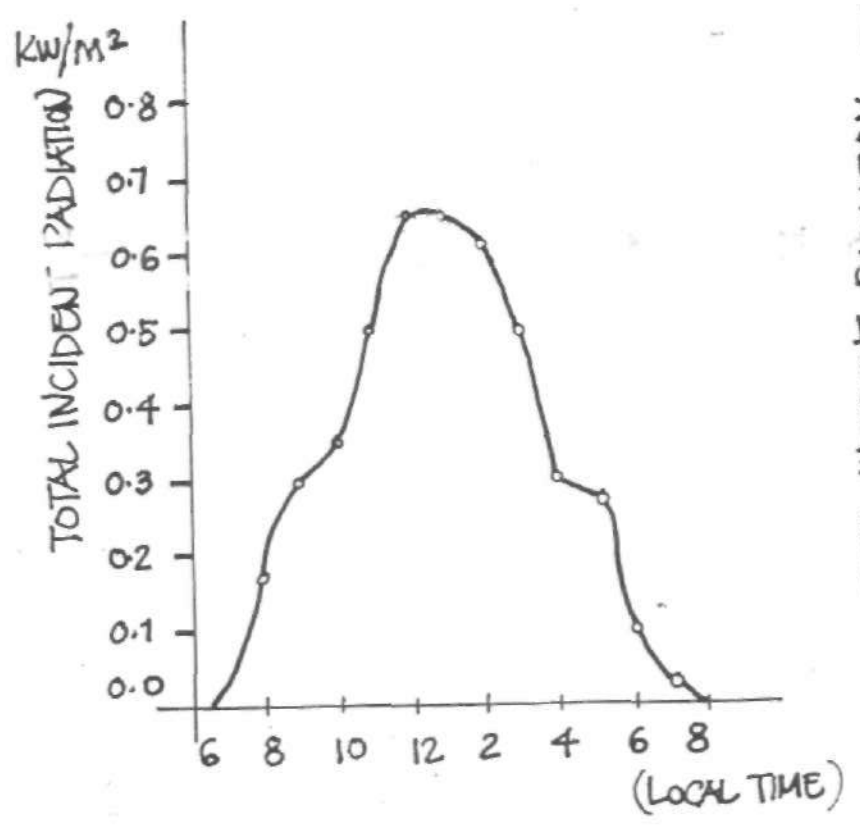
The variation of total incident Solar radiation with local time are shown (Fig.6). When there are few clouds in the sky, as at the approach of rainy, season, the Curve (Fig.6a) shows some dips and appears a bit noisy. The rather noisy curve shows the effect of clouds which at any instant decrease the insolation.

A single cloud on an otherwise clear day, being blown through the direct sun-site path would simply result in a notch in the cosine curve.

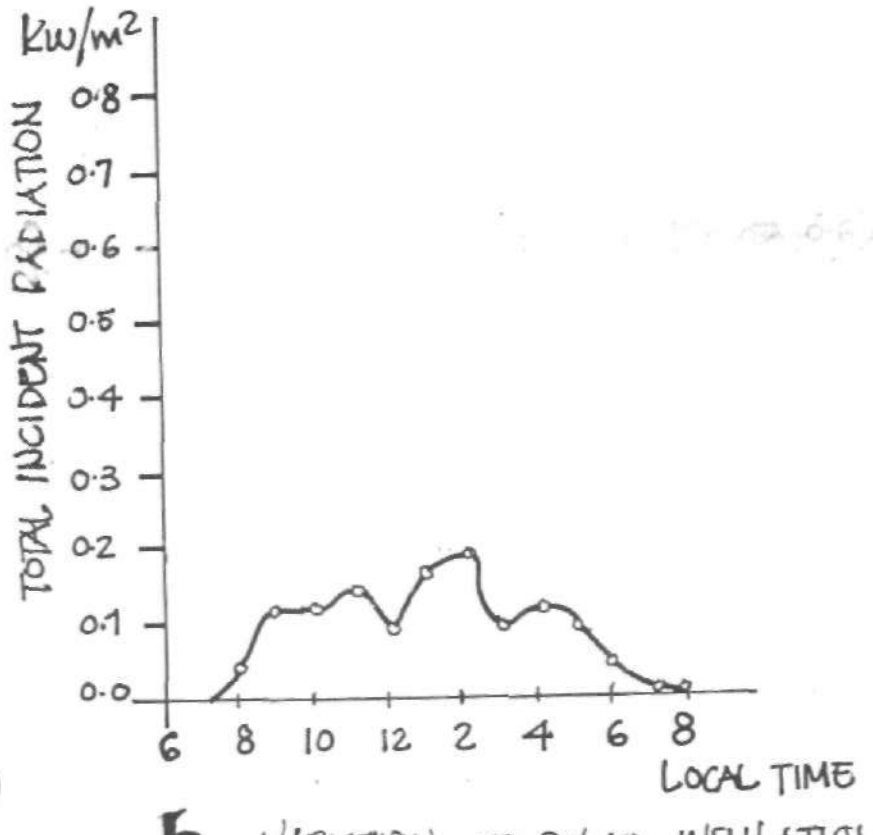
During the rainy season, the weather is generally very cloudy. General over castness pulls the entire curve down (Fig.6b), then we obtain a noisy curve. Thus the solar incident radiation is affected greatly by the presence of clouds. Such effects is even more pronounced during the harmattan period, when besides clouds, there is lot of dust, Sand and haze particles in the atmosphere.

FIG. 6 SOLAR INSULATION CHARACTERISTICS

Source: Nigeria Journal of Science and Technology, 1983 P.25




a. VARIATION OF SOLAR INSULATION ON A RELATIVELY CLEAR DAY




b. VARIATION OF SOLAR INSULATION ON A CLOUDY DAY

As such, the ratio of direct and diffused components of incident solar radiation alter signiiicantly and the total incident radiation is circumstantially reduced.

The total Solar power incident in a day varied between 4.5Kw/$m^2$ to 6.5 KW/$m^2$. In Argungu, the total sunny insolatio time is about 11 hours.

2.9.2 Comfort Conditions:

The major elements of climatic environment which affect human comfort can be categorised as follows.

a. Air temperature (dry bulb and wet bulb)
b. Radiation heat exchange between body and the surrounding.
c. Air movement
d. Relative Humidity

The heat in the human body is autonomous and does not depend on the heat externally, The Skin is the immediate organ that has contact with the environment, through which the body response in an attempt to maintain a balance of the internal energy with the external. Such a response include shivering and sweating. This is so because the body operates within limits between the minimum level of heat and the maximum limit. In the tropical zone, the limit of 'comfort zone' is between 23°C and 29°C above which people start to feel unconfortable. In such a situation introduction of humidity or air movement will improve the condition and restore comfort.

Heat lost from the body is in the form of infra red radiation which is radiated by all objects not at absolute zero, about 60% of the heat loss from the body is by this process. Evaporation and convection constitute 22% and 15% respectively.

The relative humidity of the environment also influence comfort, it has a limit of 30-70% above which the condition becomes uncomfortable. The air movement on the other hand has a limit of 50-75cm/s. Air velocity below 25cm/s is considered still air and may not be noticeable. But up to 50cm/s, the air becomes noticeable.

From the analysis of the climatic elements in this Chapter, there are certain times of the year when a combination of these factors results in uncomfortable conditions. Usually with high temperature and humidity combine with low air speed. This are observed to be the afternoons and nights of April, May, June and October.

2.9.3 Design Consideration:

A number of factors affecting indoor air flow will be considered in the design of the buildings to improve the comfort of the users.

(a) Orientation:

The best orientation to wind will be considered to guarantee comfort for both vertilation and excessive wind speed. It is obvious that the greatest indoor air

velocity is achieved when the elevation is at right angle to the provailing wind. How ever, the speed may be excessive at other times, a compromise may be made with the wind incidence at 45°, thereby reducing the pressure by about 50 percent. But where this is not achieved due to obvious constraints, air conditioning will be recommended.

b. External features - obstructions should be avoided interms of scattered buildings, walls, fences, trees and shrubs.

c. Cross Ventilation - In the absnece of outlet opening there will be no effective air movement.

d. Positioning of openings for example through space. Mostly use by the occupants, eg. through lounges up to 2 metres high.

e. Size of openings.

f. Control of openings - Canopies, louvres, and other elements controlling opening will be use to influence the air flow pattern. Others include flyscreen, etc.

2.9.4 Conclusion:

A construction design using maximum natural ventilation from the prevailing winds and with the smallest possible building area perpendicular to the

to the late afternoon sun, would result in an north-East, South-west orientation andwould provide the most comfortable living condition, and would reduce the dependence on Expensive Environmental conditioning equipments,

CHAPTER 3

## THE ARGUNGU FISHING AND CULTURAL FESTIVAL

### 3.1 Preamble:

The Argungu Fishing Festival is probably one of the most eloquent efforts by an African people to maintain a significant feature of its socio-cultural heritage. The festival today is not simply a major cultural force, identifiable to a particular people. It has turned the Argungu region into one of the major tourist centres of the world. Internally it has equally become a primary factor in local-level development and inter-Ethnic mixture. The annual festival at Argungu has a long fascinating history behind it. It obviously predates the conquest of Kanta of Kebbi in Early 16th century. The festival is probably the oldest known institution of its kind among most of the riverine people of Nigeria. The Ganni festival in Gongola State are obviously not as old and popular as the Argungu Fishing and Cultural festival. The later surpasses both interms of behavioural cluster, grandeur , age and crowd pulling.

## 3.2 Historical Background:

### 3.2.1 Evolution of the Festival

The history of the Argungu Fishing Festival is one which is replete with spells of adjustments and modifications. Since about the 16th Century, the festival has been undergoing some series of changes; it is only about the late 1960 that the evolution and transformation of the festival became quite dramatic. The Festival as we know it today must have begin as a form of religious rites intended to distinguish particular occassions in the life cycles of the neighbourhoods and communities encapsulating roughly the area we call Argungu - today. But as from 1934, the festival began to loose its primary animistic stamp, to become increasingly secular and modern in the wake of the growing significance of Islam and the growing intrest in the festival by members of the international community.

The Evolution of the festival at Argungu seems to go hand-in-hand with the socio-Economic development of the Kabbawa generally. It would appear that as the town and region continue to become more and more complex ethnically, demographically , and religious wise, so has the festival itself. Since the days of Kanta, the Argungu festival as we know it today seems to have become elaborate and stylized. Starting initially as an informal family and communal affair, the festival has over the years become a national and international

concern, attracting more and more people. At the same time, the festival has since the Jihad period, been getting progressively enriched with the fielding of more events for the general entertainment of the attending public.

In those days, the rituals and attendance remained in the main, a highly localised affair featuring priests, fishing leaders, and other authorities as the rallying grounds for these informal aministic activities. By the 18th Century, the festival had taken a fairly clear shape except that it remained fundamentally religious in articulation, partly localised but significantly popular to the natives of the region.

3.2.2 Evolutionary Phase :

Three phases may be identified in the evolution of the festival; namely

(a) Phase One - (16th Century to 1804)

(b) Phase two - (1804 - 1934)

(c) Phase three- (1934 - to present day)

(a) Phase one(16th Century to 1804)

By the time of kanta, the festival at Argungu had probably taken up a sort of 'national' character. The spectacular rallying powers of kanta who used tb travel in a boat receiving honage throughout his riverine Empire, must have serve to bring into bold relief the desirability as well as the efficacy of a centralised

festival. Kanta himself was known to have encouraged both localised and annual festivals as a passport to having a very firm hold on his subjects.

This phase is especially characterised by four major public pagan rituals which could be seen as the essential precursors of the present day Argungu Fishing Festival (AFF), there are:

(1) Gyaran Ruwa (Purification of Waters)

(2) Fashen Ruwa (Opening up of waters)

(3) Gyaran Gari (Purifying the town)

(4) Shan kubewa (tasting the pumpkin)

The first two ceremonies essentially refer to water and the second to land propitiations. The objective was thanks giving and supplication for a bountiful harvest.

(1) Gyaran Ruwa:

Literary means 'cleasing or purifying the waters' prior to communal, in-group or family fishing. In the context of the Argungu festival, gyaran-ruwa specifically refers to the basic rituals of purification which precede the great fishing day, with a view to realising a hitch-free fishing on the appointed day. The gyaran ruwa derives its basic origins from the accpeted belief, held by the Sarkawa and other fishing folks, that the river is the domain of evil spirits that have to be placeted so as to ensure fishing success, the conservation of

fishing implements, especially the nets and the harpoons, and safe passage through the water for cattles and human beings..

(2) Fashen Ruwa: (Scattering or Openning of up of waters) Is probably a letter development indicating a decentralised or localised version of the gyaran-ruwa. It may also have ante-dated the gyaran ruwa in which case the fashenruwa could as well be seen as communual ceremonies, performed at different seasons coalesced into a single form of ceremony called the gyaran ruwa.

(3) Gyawan Gari(Purifying the town):

Is a specialised ritual of land propitiation. It is replete with sacrifices, bori and tsafi demonstrations, music, dancing, and artistic exhibitions, all aimed at purging evil spirits from the land and thereby soliciting for a beautiful harvest.

(4) Shan Kubewa or Shan fura

Literary means tasting the pumpkin porridge. Much as this ritual is also performed on the land, it does seem to have some bearing with the fishing festivals, the ceremonies of Shan Kubewa are performed at a time when harvest is being anxiously waited.

The four rituals has objectives of supplication and thanking for bountiful harvest year, of fear and hope and sacrifice and offerings.

(b) Phase two - (1804 - 1934)

This period shows the impact of the Sokoto Jihad initiated by the conquest of Shehu Dan Fodio, and strong establishment of Islam in the area. Consequently the fishing witnessed the departure from the basic performance of the rituals with less emphasis on pagan sacrifices. Certain entertainments patterns in ther to foreign to fishing caste began to feature. Some of the ceremonies relating to gyaran ruwa began to take a symbolic shape, with less and less emphasis on sacrifices, divinations, and incantations. Attendance continued to be relatively localised at this stage, though dignataries from neighbouring chiefdoms were frequently hosted.

(c) Phase three (1934 to present day)

About this period, the festival at Argungu had already assumed a fairly non-religious or non-animistic tone. The communities dominant sentiments and ceremonial preparedness converge practically on the gyaran-ruwa ritual which is also symbolic.

Attendance would appear to have increased considerably with community representatives taking some fairly conspicuous positions at the festival venue. Most notable of this is the historic visit of the then appointed Sultan of Sokoto Hassan Dan-Muazu in 1954. This was a response to an invitation extended by the Sarkin Kebbi of Argungu, Mohammadu Sama. In anticipation for this

the Sarkin Kebbi organised a grand fishing fiesta which would serve as a momentous symbol of the Kabbawa identity. The festival in honour of the Sultan actually lasted a single day, featuring basically the grand fishing event and spectacular kabanci display (water crafts). Between 1934, and late 1950's, the festival at Argungu began to record certain degree of consistency interms of dating and attendance, for the first time women and small children were being admitted into the festival ground.

3.3 Genesis of the Modern Fishing Festival:

The visit to Argungu in 1934, by the then Sultan Hassan Dan Muazu was very significant because of what had been regarded as the traditional enmity which existed between the authorities of the Sokoto caliphats and Kebbi since the days of the Sokoto Jihad. The visit was this perceived by both the authorities at Sokoto and Argungu as marking the end of the period of enmity and the beginning of an era of friendship and peaceful co-existence, hence the organising of a grand fishing festival to welcome the August visitor. It involved summoning fishermen from the whole of the emirate and beyond.

Thenceforth, the festival began to attract audiance from other parts of Nigeria. The British Colonial authorities began to join the audiance which annually

watched the Festival. During this early period, the festival was solely organised by the Argungu Native (later Local Authority). In 1960 however, the then premier of Northern Nigeria, Alhaji Sir Ahmadu Bello visited Argungu to witness the festival. The premier and his entourage were quite impressed by the festival and its attraction of tourists from many parts of the world., notably Britain and France. From then on, the Northern Nigeria Regional Government began to make an annual grant to the Argungu local Authority for organising the festival and the premier himself made it an annual event to witness the occassion. The creation of states in 1967 led to further enhancement of the furtunes of the Argungu Fishing and Cultural Festival. This came about with the deeper involvement of the then North-Western-State in the Festival. In 1969, the State Government took over virtually all the financial commitments of running the Festival from the local Authority. The government also began to construct the Festival Village at the Government Residential Area to accommodate important visitors. The deeper involvement of the government came about as a result of its realisation of the tourist potentials of the festival and the planned visit to Sokoto by the then Heads of State of Nigeria and Niger, Yakubu Gowon and Diori Hammani to watch the 1970 festival.

Besides its financial commitments, the state government also began to widen the scope of the festival. Thus in addition to the core fishing event of the festival, cultural shows in form of dances, games, and songs, as well as the Kabanci display ( a series of water events associated with the riverine life of the the people of Kebbi) were introduced. Agricultural fair was introduced in 1970. Similarly, motor rally was started in 1974, although it has not regularly featured. The inception of the last civilian administration in 1979 saw the introduction of Archery and beauty contests.

Concomitant with the widenning of the scope of the festival and audiance attending it, there was the expansion of infrastructure and other welfare services for the festival visitors. what all this meant was that the festival increasingly move away from its original structure and the role of the local authority became less and less important as a result of the dominant role which the government came to play.

3.4 Recent Growth of the Festival:

The Festival experiances major developments in the following principal areas: viz.

(1) Financing

(2) General attendance

(3) Accommodation

(4) Events that feature.

3.4.1 Financing:

The growth in the scope of the Festival has meant an equal growth in expenditure year in year out. Prior to 1934, the financing of the four rituals has been on a purely individual, familial or communal basis. By 1934, the native authority and the government started intvrn to invest in the festival. Government participation commenced during the colonial government when white residents and District Officers openly encouraged both the financing and restructuring of the festival in the 1950's. In 1960, the Northern Regional Government awarded in with a grant of £500.00 to the Argungu Native Authority. Following the creation of states in 1967, the then North western State Government became more actively involved in financing the festival. In 1970, the Federal Government donated ₦20,000.

Today more than 80 percent of the finance is provided by the Sokoto State government, Given the growing concern for the enormous amount of money being poured into any festival, the government has since 1978 opted to finance the festival solely on commercial basis.

TABLE 3.1 FESTIVAL GRANTS BY STATE GOVERNMENT (1975 - 82)

| YEAR | EXPENDITURE(₦) |
|---|---|
| 1975-76 | 839,161 |
| 1976-77 | 1,000,000 |
| 1977-78 | 766,320.24 |
| 1978-79 | 143,512.11 |
| 1979-80 | - |
| 1980-81 | 600,000 |
| 1981-82 | 400,000 |
| - | |

SOURCE: 3rd National Development Plan, Sokoto State 1980 Capital Estimate. pp.258.

3.4.2 Attendance growth:

From 1934, the festival has been attracting such a growing number of participants and avidiance. Visitors come from Sokoto and all states in Nigeria. Tourists and guests for the occasion troop in, in large number, from and far away as Europe, Britain, United States, Japan, South East Asia, not to talk of the regular guest and artist from Niger Republic and the republic of Benin

The 1981 festival recorded an Estimated attendance of about 80,000 for the duration of the almost week long activities. Out of this figure, Some 4,800 were fishermen, 2,000 officials, 2,400 guest artists (official and non-official), and about 1,500 invited guest. The remaining count being towns folk, freelance tourist from within Nigeria and beyond.

3.4.4 The Events:

The events that have been featuring in the festival have over the years become more diversified, stylised, and secular. The festival has been featuring among other things, a highly diversified and multi-sponsored Agricultural fair, a grand fishing competition Craft exhibitions, wrestling and boxing tournaments, cultural entatainments by various drama and dancing groups, traditional symphonies, instrumentalists, and flutists and other variety of artistes from Benue, Gongola, Niger and Rivers States as well as Niger Republic. There also features the much charished Kabanci display which entails a canoe racing regatta, free style swimming competitions, log rolling, barehand fishing, wild dock chasing etc.Etc. Much pleasure can also be derived from camel, donkey, and horse rides.

In 1973 and 1974, two impressive international Motor Rallies were staged and in 1981, the third international motor rally and an archery competition were also featured.

It should be observed that the Argungu Fishing Festival as being staged today would seem to have no relevance what so ever with the notion of supplication for good fishing and crop harvest. or with propitiatious for water and land spirits. The idea would seem to repose more in a recreating a unique cultural heritage, creating an atmosphere of convivialities and inter mixture between the local populace and foreingners.

3.5 Case study of the 47th Festival (1981):

The 1981 Festival at Argungu got under way from Wednesday 25th February and lasted for four whole days.

3.5.1 Attendance:

Total attendance on all the days of the 1981 festival was probably in the order of 120,000-130,000 people. Daily attendance increases gradually a though the festival untill it reaches a peak of 45,000 - 50,000 (Fig.9) for the Grand Fishing Comprising chiefly of 80% as tourist and some 16% as officials, participants and invited guests. Tourist and participants come from all parts of Nigeria as well as from the Republics of Niger and Benin (Fig.7). Nationals of Pakistan: India, South East Asia, United States and Western Europe are conspicous. Approximately 70% of the attendance hailed from Sokoto State and about 80% of the total attendance consisted of Nigerians.

3.5.2 Accomodation:

A substantial proportion of the participants are tourist stayed with friends and relatives distributed within Sokoto, Argungu and nearby towns. Only about 1/40th of the attendance were accomodated at the Festival Village and otner government houses.

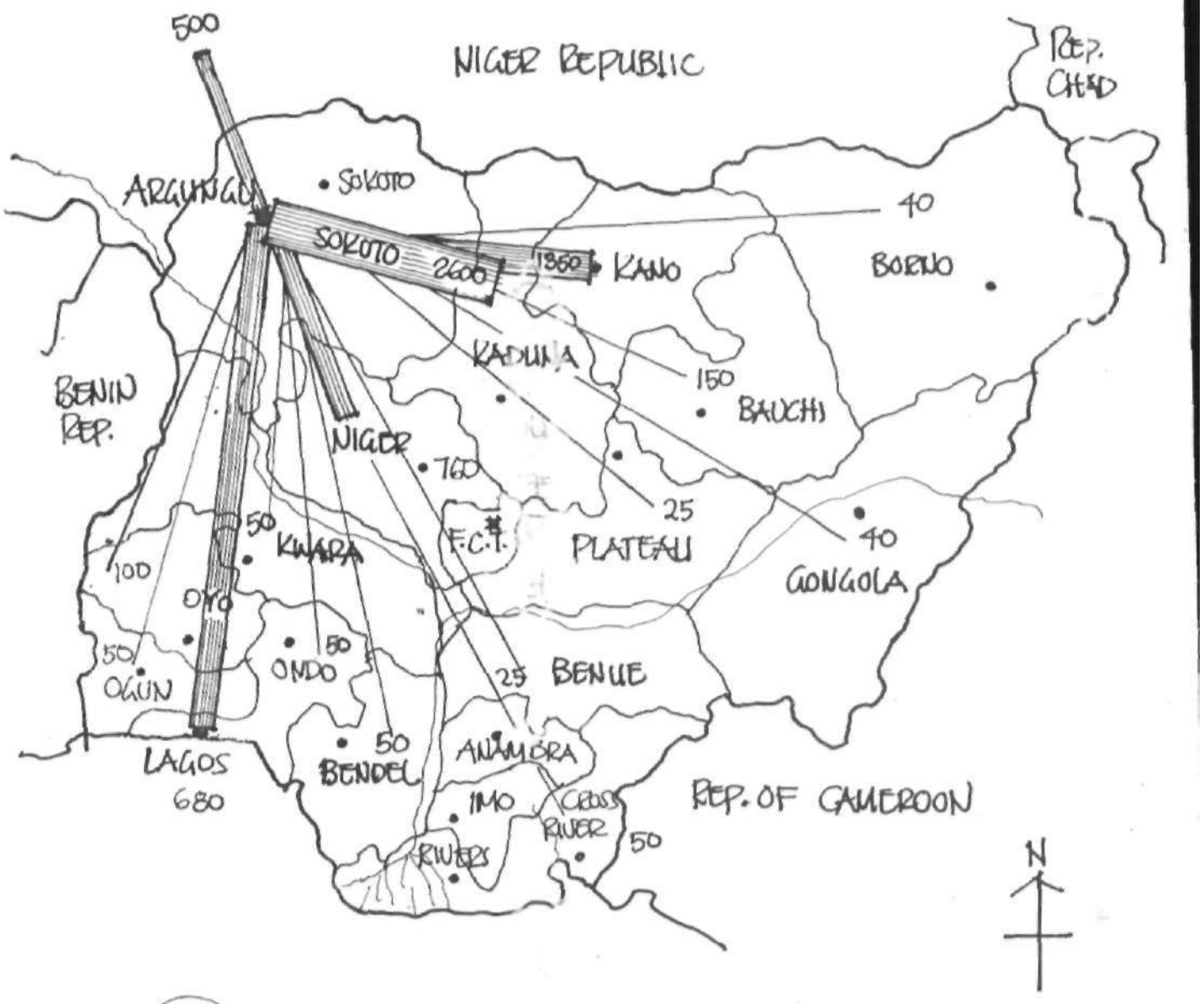



FIG. 7 ORIGIN OF OUT-OF-STATE VISITORS TO (1981) FESTIVAL

SOURCE: Dar Al-Handasah Consultants
Survey: 1981

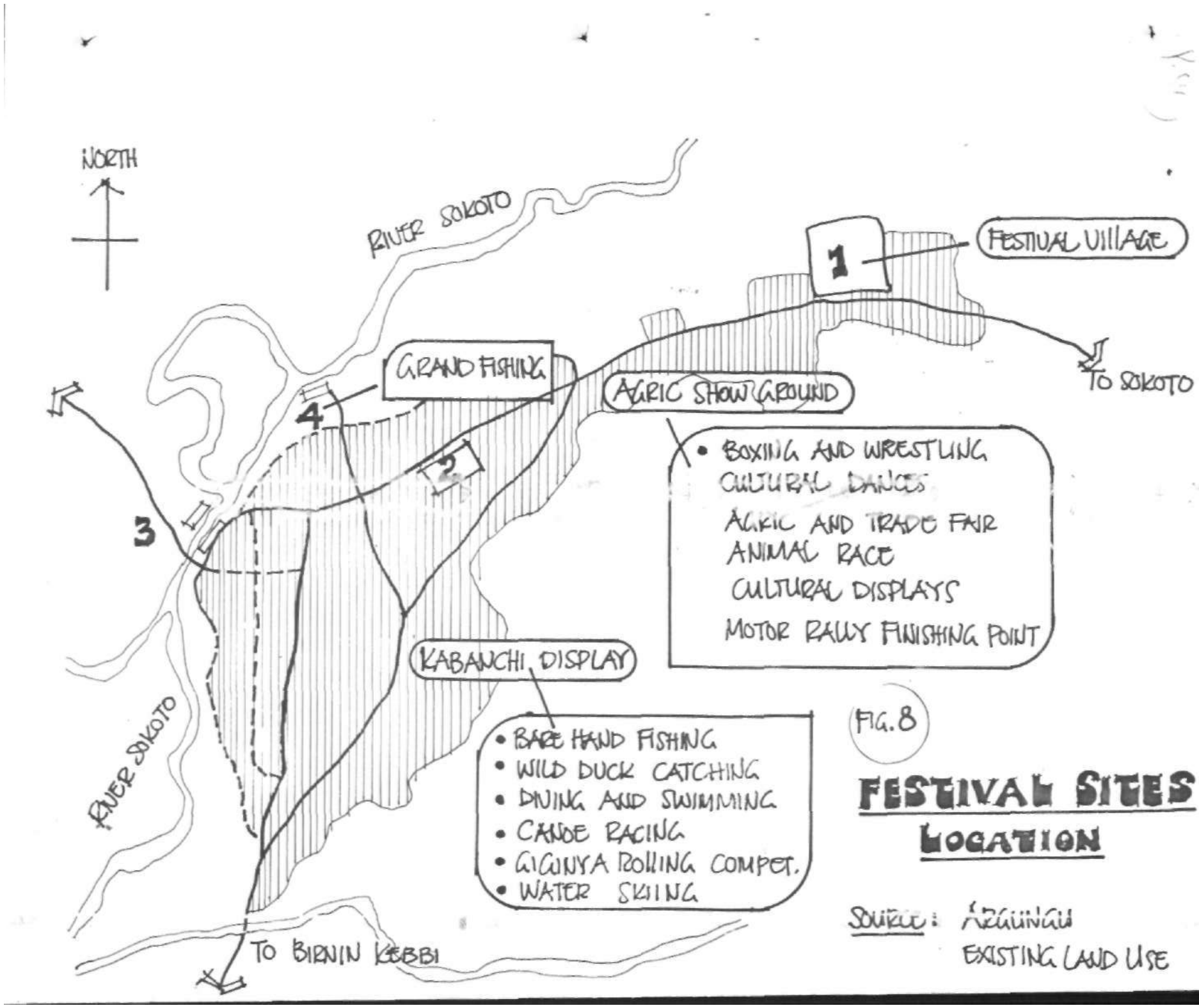


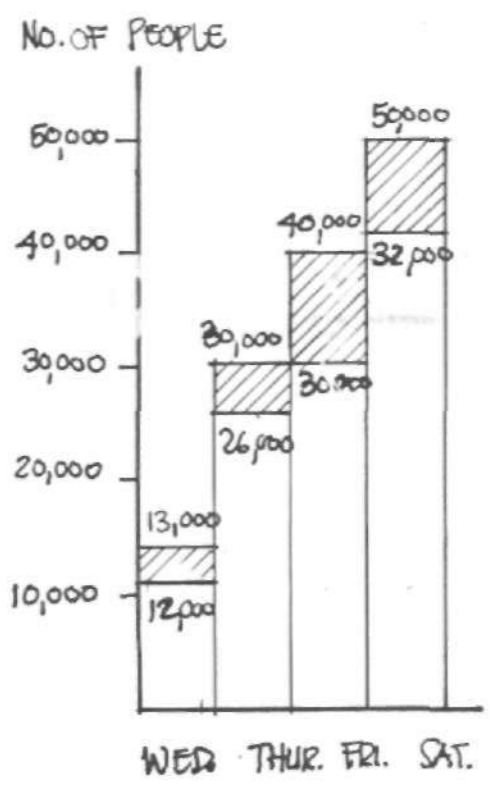

FIG. 8

**FESTIVAL SITES LOCATION**

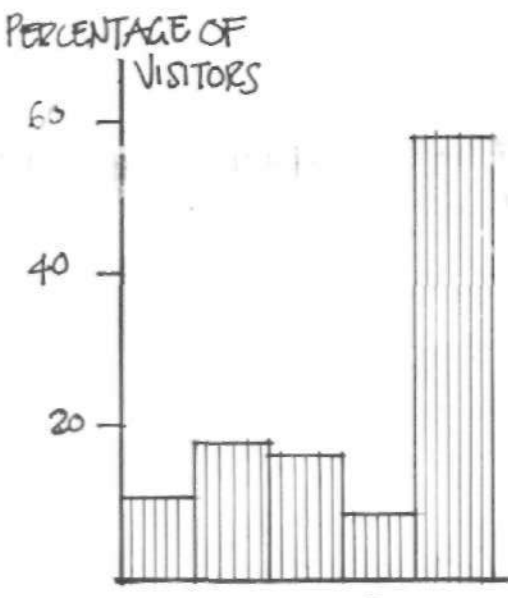
SOURCE: ARGUNGU EXISTING LAND USE

FIG. 9

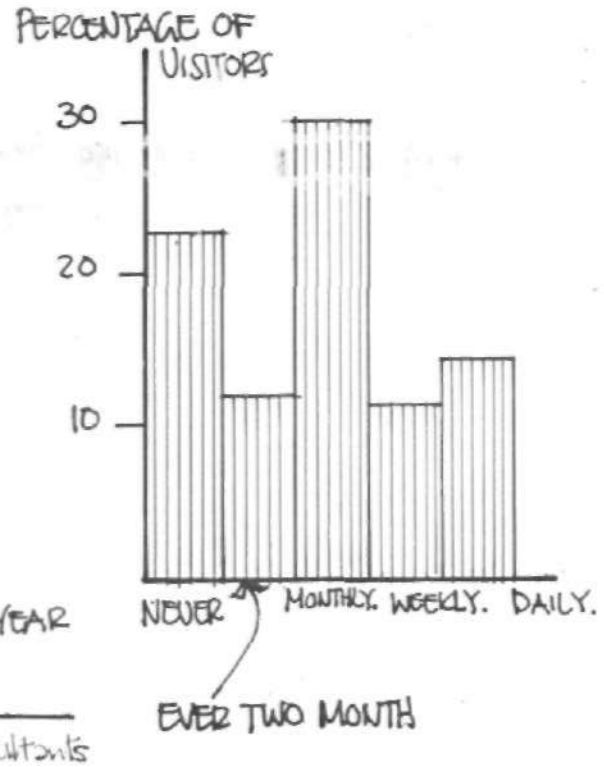
**a.** DAILY ATTENDANCE AT EVENTS




**b.** PREVIOUS VISITS TO FESTIVAL




**c.** FREQUENCY OF VISITS TO ARGUNGU AT OTHER TIMES OF THE YEAR




SOURCE: Dar Al-Handasah Consultants Survey, 1987

3.5.3 Side Events:

(i) wednesday, 25th February

Events - Opening Ceremoney

- Archery Competition

- Film Shows

- Beauty Contest, Miss Argungu Festival '81.

Site location - Festival Village Amphitheatre

attendance - 12,000 people

(ii) Thursday, 29th February.

Events: Elaborate Agricultural show which lasted from morning till Evening, through out the festival. It features among other things, cattle show, Crop exhibition, display of fisheries and fisning implements, livestock feeds and products.Agricultural Machinery, all designed to enlighten farmers, fisherman and tourists.- Contributors include, Ministry of agriculture, IAR, Ahmadu Bello University, Federal department of fisheries, and the UNESCO mounted difierent exhibitions.

- Cultural Exhibitions of hand Craft works.

- Boxing and wrestling competitions
- Cultural Entertainments and dances.

SITE location - Agricultural fair ground (Fig.8)

Attendance .. 30,000 people.

(iii) Friday, 27th February

Events - Kabanci Display(Series of water sports and activities). This included, girls canoe race, swimming on gourd, Male cance race, water skiing with participants from river states, girls swimming, log rolling competition, men swimming, bare hand fishing. wild dock catching boat regatta, etc etc.

- Cultural Entertainments with guest artists.
- Musician, dances and Cultural troups.

Site location - Mala lake, in the Eastern and of the town. The river here is 200m wide.

Attendance: - 40,000 people.

(iv) Saturday, 28th February

Event - Grand fishing finale competition. The grand fishing started with a gun signal, hearing which fishermen numbering about 5,000 leapt into the water. Each armed with two hand nets and a gourd. The fishermen shout and scream a midst music and songs from Professional entertainers. The fishing lasted for 3hours.

CHAPTER 4

## TOURISM ANATOMY

### 4.1 Historical context:

Man since has always travelled, but tourism is a recent phonomena, whose meaning first appear in the dictionary in 1881. There are three epochs of tourism The first dates to the early days of the railway age, that is to about 1840 in Britain. The second Epoch covers the railway age itself. The years between the two world wars, which witnessed the significant development of the private motor car and of the bus and coach. And the period after the second world war, when civil aviation came to share with the private car the principal transport role in tourism, form together the third Epoch. Transport is the necessary precondition of tourism, and the three Epochs are to be identified with particular made of transport. Mechanised transport has made travel possible for a significant part of the population of the developed countries. Henceforth tourism has become a matter of intrest and concern to governments and the people a like. Thus, much of the historical backgreund of tourism is concerned with the development of modern transport.

The year 1936 saw the emergence of modern tourism when the international labour Organisation(I.L.O.),

at its first convention adopted a motion to bolster the promotion of paid holidays, recreation, and therefore tourism. In September, 1980, the world tourism conference in Manila, Philiphines gave birth to what is known as the Manila Declaration on world tourism adopted by one hundred and seven countries with delegations that totalled up to ninety one. The central theme of this delegation was leisure and paid holidays. This aspect of paid holidays came under leisure tourism which deals with site seing holidays, pleasure, general interests et cetra.

In order to apply the Manila declaration it was given top priority at world tourism conference in Acapulco, Mexico in August 1982. The details of which are the right to leisure, rest and leave with pay. Also the creation of legislature frame-work and social conditions for facilitation of access to holidays for all categories of papulation. Some points were highly stressed among which are:

(a) that "leave" should not be a priviledge but a right.

(o) that the right to "leave" is unanimously acknowledged by both developing and developed countries and officials of private operational sectors in commercial and non-commercial areas.

This is a clear indication that the right to holiday and "leave" has been recognised the world over.

## 4.2 Defination of Tourism

In attempting to define tourism, it is impretive to distinguish between the concept and the technical definations. The concept of tourism provide a broad notional frame work, which identifies the essential characteristics, and which distinguishes tourism from similar, often related, but different phanomena. Technical defination on the other hand provides i instruments for particular study such as for legislative or industrial purpose.

"Tourism is the sum of phanomena and relationship arising from the travel and stay of non-residents, in so far as they do not lead to permanent residence and are not connected with any earning activity." This is the defination adopted by the International Association of Scientific Experts in Tourism(A.I.E.S.T.).

From this defination five main characteristics of tourism may be identified.

(a) tourism arises from movement of people to, and the stay in various destinations,

(b) it consists of Journey to the destination and the stay including activities at the destination,

(c) the journey and stay takes place outsides the normal place of residence and of work,

(d) the movement to destinations in of temporary, short term character, with intention to return within a few days, weeks or months.

(e) destinations are visited for purpose other than taking up permanent residence or employment remunerated from within the places visited.

Tourism involves trafficking of people, a market rather then an industry, and in general, the incidence of a mobile population on any given reception area and its resident population. The external traffic within an area or outside it, makes use of the services provided, and the tourism product is an activitly enjoyed with other people. Related activities of tourism involves a total philosophy, raising question of ethics, but also represent a powerful economic force. That is why tourism is a function of wealth, because growing prosperity will inevitably bring growth in the tourist traffic. In another vein tourism is the name given to the movement of travellers as it affects transportation hotel accomodation, entertainment and other services demanded. It can be said that tourist are not only holiday makers, but also religious pilgrims, business men, diplomats and international students who travel in the capacity of consumers rather than producers.

4.2.1 Types of Tourism:

Tourism could be seen as three folds

(a) leisure Tourism - which deals with leisure and recreation.

(b) Business tourism - based solely on business travels

(c) Specific tourism - which deals with educational, sports and religious aspects of travel, et cetra.

Similarly, tourist could be categorised into three, the international, regional and local tourists.

(a) the international tourists are those resident in other countries coming into another area.

(b) a regional tourists, include tourists living within a geographic region visitng an area.

(c) local tourists are those living within the local tourists sites.

## 4.3 International Tourism

Tourism is one of the most dynamic industries as it can help to create income and employment within the receiving region. International tourism is now biggest single item in international trade. For example its Britains fourth largest export and one of the countries biggest doller earners. Tourism is a new Economic resource which flourishes best in areas which are poor in industrial resources.

The prospects for the development of international leisure tourism in Nigeria depend on variety of factors. These include the level and growth of foreign travel for holiday or leisure purposes in the principal tourist generating countries of the world, particularly the western Europe and the United States which accounts for around 70 percent of total world international tourism. Forecast of international tourism to Nigeria will however, be limited to leisure tourist,

ie, persons t r a v e l l i n g t o Nigeria wholly or mainly for leisure purposes. Essentially business tourism is almost independent of the types of tourist facility available or the cost of travelling to Nigeria, which are the most important factors influencing leisure tourists.

Leisure time can only be pursued out of work time and international tourism in particular demands substantial periods of leisure - at least a few days and usually a week or more. These damnds have partially been accomodated by a lengthning of paid holidays from three to four and five weeks.

Table 4.1 Leave and Public holidays in Selected Countries, 1980.

| | Normal Min Paid holiday per annum (weeks) | Typical Paid holiday period per annum (weeks) | Numbers of Public Holidays (days) |
|---|---|---|---|
| Canada | 4 | 4 | 11 |
| France | 4 | 4½ | 9 |
| West Germany | 4 | 4 | 11 |
| Italy | 5 | 5 | 18 |
| Norway | 4 | 4½ | 9 |
| Sweden | 5 | 5 | 10 |
| U.K | 2 | 3 | 8 |
| U.S.A | 1½ | 2½ | 11 |

SOURCE: EIU International Tourism Development.

Travelling from place to place for pleasure is no longer the preserve of the wealthy, thus is due to social, economic and technological factor (Cosgrove and Jackson, 1972). About 150 million people crossed international frontiers as migrants in 1971, spending nearly $20 billion accounting for about 8% of the total world trade.

The majority of the tourist emanates from dominant economic centres. The nationalities spending most on international tourism are the Americans, Germans, British, Japanese, French and Dutch. Tourists from this countries spent roughly US $68 billion in 1983.

Table 4.2 Expenditure by tourist from certain European Countries in Developing Countries in 1982/83 (US $ million).

| | 1982 | 1983 |
|---|---|---|
| Japan | 2329.5 | 2559.8 |
| Uk | 1119.5 | 1058 |
| F.R.Germany | 1887 | 1727.2 |
| USA | - | 1193 |
| France | 1247.9 | 807.6 |
| Canada | 403.8 | 482.8 |
| Sweden | 82.5 | 203.7 |
| Total Expenditure (US $ billion) | 69.4 | 68.5 |

SOURCE: Tourism Policy and International Tourism OECD, 1984.

The reason for the developing countries lack of success is the west's control over companies and organisations connected with tourism.

The west still has the lion share with 200million tourist going to Europe each year, with France as the most popular with 30 million annually. China received 8 million in 1983, Mexico, 4.2million. The major areas of attraction to tourists are the East African Countries, Asia, the Carribean and the Pacific Island states. Tanzania for example, tourism is the only part of the Economy which continues to produce foreign exchange, the government is having to reply on the industry as a source of revenue.

## 4.4 Domestic Tourism

### 4.4.1 The Nigerian tourism industry:

Nigeria is well endowed with diversity of people, customs, cultural entertainments and landscapes as diverse as possible. Not untill 1958, was there any effort to develop tourism in Nigeria. The impetus came up with setting of an advisory committee in the same year to look into ways of promoting tourism industry.

The Committee had the following terms of reference.

(i) to look into ways of improving hotels and catering industry.

(ii) Provision of entertainment facilities.

(iii) Improvement of transportation facilities

(iv) Development of other resources

(v) Publicity Campaign of Scenic views and attractions.

At the end of their assignment, the committee gave the following recommendations.

(i) Nigeria should join holiday associations for Exchange of ideas

(ii) that publicity should be intensified

(iii) improvement of transportation

(iv) Entertainment facilities should be organised

(v) Preservation of cultural, natiral features, crafts, customs and creation of game reserves.

(vi) training of tourism personel.

Based on the above recommendations, Nigeria took the following steps.

(i) Nigeria Hotels limited was established and hotels were opened at Kano, Jos and Lagos.

(ii) Catering rest houses established

(iii) Campaign on cultural preservation, sales of souvenir intensified

(iv) Establishment of transport firms

(v) Joining of international tourist bodies, for Example, world Touring and Automobile - Association (O.T.A.) and Alliance Internationalede Tourisme (A.I.I.).

(vi) Tax relief on hotel industry

(vii) Training of personel embarked upon and publicity campaign brochures such as "Fly Nigeria" were distributed by the Federal Information Services in Conjunction with Nigeria Airways and the B.O.A.C.

(viii) Immigration laws were eased and visitors from U.S.A. and Britain allowed to stay for upto a month without travel document.

Later, in 1962 the Nigeria Government established the Nigerian Tourist Association (N.T.A.) This was subsequently replaced by the Nigerian Tourism Board (N.T.B.) in 1976. Charged with the responsibility of projecting Nigerian tourist image both in Nigeria and overseas by highlighting tourism sites, values, beauty and locations. There has been tremendous progress in tourism development since the Establishment of such boards both at federal and state levels. The board (N.T.B.) has drawn up a National Tourism Master Plan to carryout strategies for the development of tourism in the country. This agree with the fact that in 1956 only one percent of the country's population was entitled to three weeks holiday and nearly 45-60 percent of the population was entitled to public holiday in 1980. This suggest that there will be substantial increase in tourist and recreational demand.

The Board was set up with a view to meet the following functions:

(a) to encourage people living in Nigeria to take their holidays there in and the people abroad to visit Nigeria.

(b) to encourage the provision and improvement of tourist amenities and facilities in Nigeria, including the development of hotels and ancitiary facilities.

(c) to promote and undertake research in the field of tourism.

(d) to assist in the development of museums and historic sites, park, games, reserves beaches, natural beauty spots, holiday resort and souvenir industries.

## 4.5 Tourist Destination

The measure of importance of a geographical unit as a tourist destintion or potentially is determined by three prime factors; viz: attractions, accessibility and amenities. These are called the tourist qualities of a destination.

### 1. Attractions:

There are two categories of attractions in a tourist destination viz, site attractions, which may be climatic, social, historical, and secondly event attractions, for examples congresses, exhibitions, festivals, sporting events, etc cetra.

2. Accessibility:

The word 'access' is open to wide interpretation and is certainly not limited to the more familiar use which is that of physical access. Any participation in tourism or recreational activity depends on a knowledge of the existence, location and physical access. Accessibility is a function of distance from centre of population, which constitute tourist market, and of external transport and communication, which enable a destination to be reached.

3. Amenities:

Amenities of the destination comprise of accomodation, catering, entertainment, as well as internal transport and communication, which enable the tourist to move around during his stay.

4. Organisation:

The fourth factor which determines the importance of a tourist destination is the tourism organisation. This produces the frame work in which tourism can operate to develop the tourist product.

4.6 Factors in Tourism Participation:

Perhaps, the most singular factor determining tourism participation is standard of living, in other words 'income'. A high standard of living manifests itself in high disposable income, which tend to be accompanied by reduction in hours of work and by lengthening of holidays with pay. Other factors that affects participation include:

(a) Demographic factor - Population concentrations.

(b) Socio-Economic factors

(i) age distribution

(ii) education level

(iii) occupation structure-which determines income level.

The income referred here is discretionary, ie after tax and expenditure on essentials are met. This is the factor that determine expenditure on tourism. There should be no lack of potential demand Nigerian's income per Capita grew quite rapidly in the 1970's. Further growths is also expected in 1980's per capita income may grow by 2% per annum.

It has been estimated (N.T.B. Master Plan, 1982) that the 'potential domestic tourist' market will reach about 2.5million person in 1980 and 4 million persons in 1990. This population provide the main pool of potential tourists from which domestic tourists could be actually drawn. ...."They will have sufficient incomes and leisure time for tourism and this group will be growing as a proportion of the total population."

Age/Sex distribution is also an important determinant (Fig.4). Ages between 18-45 years are the ages of active participation in tourism (Cosgrove,1972). Participation tends to increase and later decline with age. Sex participation is greatly affected by the type

of tourism, females tend to participate more in leisure tourism and specific tourism, which deals with educational sports and religious aspects. Religion (Islam) further restricts their participation in tourism expecially those that require exposure.

Increased participation in tourism by Nigerians in recents years is traceable to the following:(Ojo,1978).

(a) Example of European expatriates who still comprise a high proportion of Nigeria's domestic tourists.

(b) Increased mobility resulting from improved roads and transport both public and private. Attendance is affected by a constant exponential transportation gradient and is usually a negative function of the distance.

(c) The growth in paid employment with free week ends, and annual leave.

(d) Increase in number of those with income which allow a surplus for leisure activities, including travel.

Other influences include the role of promotion and the media, newspaper, magazines, films, radio and television, play an important role in influencing the use of leisure facilities throughout dissemination of information about the leisure activities.

However, this is found to be haphazard or non-existent. Peoples level of awareness is mainly limited to sites close to their homes, plus one or two major attractions (Eg. Yankari and Argungu) which for particular reasons have attracted national attention.

## 4.7 Prospects of Tourism in Nigeria

### 4.7.1 The need for development:

Nigeria has an estimated 44 potential games reserves, 17 major water falls, 13 beach areas, 22 hills and mountain areas, 45 lakes and riverine resort and a host of cultural festivals (Fig.10). Compared to the East African Countries these sites are not smaller in number, with Kenya having only 34 parks, games reserves and marine areas.

The need for development is abvious because of the wastage in foreign exchange earnings. Indeed, the various state governments have been trying to improve the different tourist sites to encourage people to spend their holidays within the country. A glance at the amount of money expended by Nigerians holidaying abroad is enough food for thought. In 1980 alone, two and half million Nigerians spent their holiday abroad and about ₦1.2billion was spent on foreign exchange, of which ₦139.03million was spent on Basic Travelling Allowance (B.T.A.). In 1981, ₦255.16million




FIG.10 NIGERIA MAJOR TOURIST SPOTS

was spent on B.T.A. alone, corresponding to an increase of 83.5 percent. Conserving our foreign exchange through the development of tourism industry is therefore crucial. It can also ensure political stability due to business and economic growth.

4.7.2 Impact on the Economy:

Nigerian economy, before and after independence has been dependent on agriculture and shortly after, oil was 'discovered' and became the backbone of the economy. With global economic recession, oil industry had also suffered some set back. The aftermass of total dependence on oil has brought serious economic chaos in the country in later years. Tourism has always been second to agriculture and oil, but largely unrealised and unexplored.

The country's tourist earning in 1955 was ₦1.0 million, it rose to ₦6.6 million in 1963. Between 1968 and 1969, the industry was seriously hit due to the civil war and the earning declined to ₦2.0million. After the war, the earning from international travels rose from ₦4.6million in 1970 to ₦8.0million in 1974. Business travel and influx during the period of 'oil boom' beginning from 1975 had some colossal impact on tourist earning. In 1975, the earning was ₦18.4million and in 1976 it was ₦20.6 million. ₦63.0million was however recorded in 1977 which was attributed to influx of visitors to the world Black and African Festival of Arts and Culture(FESTAC)

TABLE 4.3 Earnings from International tourism

| | Earnings(₦ million) | Remarks |
|---|---|---|
| 1955 | 1.0 | |
| 1963 | 6.6 | |
| X | X | Effect of Civil War |
| 1970 | 4.6 | End of Civil War |
| 1974 | 8.0 | Oil Boom influence |
| 1976 | 20.6 | " |
| 1977 | 63.0 | Influx of visitors during FESTAC |
| 1980 | 105.74 | |
| 1981 | 115.13 | |

SOURCE: Federal Ministry of Commerce and Industry.

Tourist arrivals in the country has been on the increase in the last decade, as out of 200million trips made in the world yearly, 75 percent are made in Europe. While 22 percent in America and the rest in Africa, of which Nigeria had 1,050 foreign leisure tourists. In 1980 for instance, there were estimated 10.0 million trips in Nigeria of which 0,7 million came from within Nigeria and 0.3 million for foreign countries. earning from Nigerian travels were estimated at ₦3.0 million, while foreign travels were estimated at ₦1.0

million and contributed to the earning of Nigeria couriers valued at ₦0.5 million. Hence, estimated grand total for 1982 was ₦4.5 million. It therefore, reveals that tourism is capable of transforming the nations Economy into a verile one if carefully developed.

### 4.7.3 Tourism Prospects and Problems

Future Prospects:

Since the establishment of the Nigerian tourism board by the government there has been concious efforts geared toward tourism development. In the fourth national development plan (1981-85), encouraging provision was made for the Nigerian tourism board. The board however, functions with the co-ordination of the various state tourism boards (the Sokoto State Hotels Management and Tourism board was established by an Edict in 1978). In all, a sum of about ₦115 million was allocated for the implementation of tourism during the plan period. The various state governments have sizeable programmes in this area, and the Federal Government only aim at supplementing these efforts and giving a sense of direction to the sector.

The programme of the Nigerian tourism board comprises mainly of man power development and training of staff for the hotel, catering and general tourism-Industry. A number of projects were also aim at, which include the following.

(a) Establishment of National institute for tourism

(b) Holiday resorts in each state of the federation

(c) Circuit tourist development, four circuits are identified, viz:

(i) South-western and South Eastern circuit

(ii) Northern tourist circuit

(iii) Niger-Benue Circuit

(iv) Bauchi-Chad Circuit

(For the development of these circuits, a sum of thirty five million naira was allocated).

(d) A model tourist village is planned for each state of the federation. A sum of nine million naira was allocated for this venture.

(e) Tourism development at the Federal Capital with an allocation of twenty million naira.

(f) Victoria beach holiday resorts.

Problems of the industry:

The Nigerian tourism board has made little or no impact on tourism due to a number of problems, major areas being lack of funds, and lack of personel and poor accomodation. Generally, the problem confronting the industry may be identified in the hotel aspect and government policy.

(i) Hotel rates are high compared with the services rendered.

(ii) Communication facilities and information about and information about attractions are haphazard on non existent Car hire services are difficult to comeby in the various hotels.

(iii) Cooperation between tourist agents in the private sector and the government is deficient, particularly the travel agents.

(iv) There is great reluctance by investors to finance the development of sites because of heavy cost of providing infrastructures, acquiring land and risk involved.

(v) Most of the areas with attractions are placed at locational disadvantage. Their remoteness increases cost of servicing some these area with water supply, roads, electricity, housing and drainage. Apart from this there is virtually lack of publicity and leisure education in the country.

(vi) There is also the near absence of well developed travel agencies to engage in nation wide campaign right at the time they land at the airport. This is is characterised by exorbitant taxi fares, long delays, which usually create a bad image of the country.

One may say in conclusion that Nigeria has potentials in tourism enough to become number one

revenue a earner for the country. Perhaps what is needed is proper machinery that will expose and direct Nigeria tourist image on international front. The provision of infrastructure is the must important stimuli for tourism development in Nigeria. Efforts should aim at providing air and road transport, electricity and water supply.

## 4.8 Tourism in Sokoto State

### 4.8.1 Role of the State Tourism Board:

Tourism in Sokoto State, like in most parts of the country has not been fully realised and is still at its infancy stage. Exploration of tourist resources is yet to begin appreciably. The state's Hotels Management and Tourism Board which was established by edict in 1978 is responsible for development of tourism in the state. The board manages a number of hotels in the state which include, the Sokoto Hotel, 3-star Shukura hotel and recently open the Festival hotel at Argungu A 5-star Giginya international hotel complex is recently completed in Sokoto. Similarly, works on the construction of new 3-star hotels in Gusau, Yelwa and Illela are expected to be completed before the end of 1987. The board also maintain a number of catering rest houses in Yauri, Argungu (Festival Village), Birnin Kebbi, Zuru and Gusau. This is in addition to a host of privately owned hotels of approved standard. Foremost among these

are, Ibro International hotel, Sokoto Guest Inn, N.A.A. Guest Inn. Mabera Guest Inn, Et cetra.

The Government had also established the Rima transport cooperation which handles transportation serivces both within and outside the state. The government is becoming concious of the importance of tourism in boosting the economy of the state.

4.8.2 Tourism and the Fishing Festival

The most singular, largest tourist attraction in the Fishing Festival at Argungu. In July, 1985 a committee was set up by the state government on Argungu Fishing and Cultural Festival, after it was not staged, for the first time, for two years (1984-86), since it was started as an organised festival in August, 1934. Among its terms of reference, the Committee was to suggest ways and means by which in the long run the festival could be self-sustaining financially. Also to suggest ways and means forthe all year round utilisation of the Festival village. In its recommendation, the committee suggested the following:

(i) Some public conferences, Seminars, workshops, Campings, etc. should as much as possible, be diverted to the Festival Village, while private organisations should be encouraged to do the same.

(ii) Cultural entertainments inform of dances, drama, boxing, wrestling, etc. should be organised in the village from time to time and whenever there are conference guests in the village.

The major problem facing tourism in the state is therefore that of attracting tourist apart from the festival season. The lack of adequate tourist facility at the destination further confound the problem. Indeed, the present site is not ideal for such a development. This where thrist of the thesis comes in, the authoar shall explore the varied and attractive landscape of the chosen site to provide attractive environment that will be 'inviting' with its supporting facilities. Moreover package tours shall be introduced in which tour operators will be involved to inform, solicit for and organise travel to tourist destination (the resort).

4.8.3 Tourism Infra-structure in the State:

A number of infra structures have been surveyed and for the purpose of this studies, we shall categorise tourist resource into three folds; Natural infra structure, physical and social infrastructures.

(a) Natural infra structure:

Are the natural resource potential which camprises dams, lakes, hills, forest reserves, rocks and mountains Et cetra. of Scenic valves.

Sokoto is not mountainious, important rocks are those found in KotorKosti, other dome-shaped hills are found around Zun and other parts of the state.

Apart from river Niger that passes through Yauri there are a number of rivers, lakes and dam reservoirs in the state, Major dam developments include, Baccalori dam in Talata Mafara. Goronyo dam, Marina dam (Argungu) and these at Silame and Bunza. The Goronyo dam is a large reservoir covering an area of 20,000 hectres (200 square Kilometres). The Goronyo dam is the second largest reservoir in Nigeria, the availability of such lake offers ample opportunity for tourism development. The splendourous Scenic beauty of Goronyo dam will enrupture countless travellers in the future.

(b) Physical Infra Structure:

Comprised transport communication, water and electricity supply.

(i) Rail, Railway are not mostly used as a means of transport in the state. The only railway line in the state runs from Kaduna State, passes through Gusau in Sokoto State and stops at Kaura Namoda in the extreme north of the state.

(ii) Air, Sokoto the State Capital has the largest airport in the state. At present Nigerian Airways maintains daily air services between Sokoto, Kano, Kaduna and Lagos and other principal cities in the Federation.

The airport is of international standard, and based on the existing demand, the services of the airport are considered adequate.
Untill 1983, there had been an international link in Niamey(Niger Republic) by air from Sokoto. There is the need to facilitate easier link with other tourist markets in Africa.
Package towns may be arranged as operational strategy for attracting tourists, this will apply to both domestic and international tourists, who will in both cases, reach Argungu (the resort location) by bus.
Besides the airport in Sokoto town, there are aerodromes in some towns of the state, Gusau, Zuru, Yelwa and Birnin Kebbi.

(iii) Roads; this is the most important means of transportation in the state. There exist good rood net works to join Sokoto with other parts of the State as well the other major towns of the federation. Sokoto is linked with Zaria Via Gusau with one of the best trunk 'A' roads. A federal trunk 'A' road from Kontagora in Niger State link Soketo through Yelwa, Koko and Jega. This has considerably reduced the cost of transportation in southern part of the country. There is an organised state bus service for commercial transportation which

has well equiped telephone booths situated near the _____ Sokoto Central market.

(vi) Navigation, there are many water ways in the state. A large portion of the Niger River flows through the state from Nigeria/Niger boarder to Yelwa (an Inland port). The water bus now introduced has greatly increased the volume of traffic in the area, with the neighbouring Niger and Benin Republics.

(c) Social Infra-structure:

Consists of man made tourist leisure attractions and entertainments facilities. These may be in the form of games reserve (to be developed at Goronyo) and Argungu), gardens and park, heritage museums, craft Centres and sourvenir shops and a sizeable number of historic sites.

Museums any where in the world are a source of attraction for visitors. They represent living treasures of the people and their history. It is a means of preserving antiquities for the future generation. Some important museums in the state are listed below.

(i) Kanta Museum, It is located in the old palace of the Emir of Argungu, behind the town's friday mosque. It is an all-year-round tourist attraction.

The museum possesses a large number of impressive relics of legendry Kanta and extensive exhibition of historical artefacts of the arts ~~and~~ crafts of the Kebbi emirate. The museum also contains tombs of some of the rulers of Kebbi.

(ii) Sokoto Museum: located opposite Federal prisons Sokoto. It contains historical exhibition of the Sokoto caliphate in the form of astefacts and museum pieces. The museum attract visitors and tourist alike. It is the second largest attraction to the Hubbare of Shehu Usman Dan Fodio.

(iii) Yelwa-Museum of archeology: houses all archeological findings and antiquities of the ancient kingdom of Yauri. It is located in the Emir's Palace Yelwa-Yauri.

(iv) Zuru Museum - Opposite Federal prisons, Zuru

(v) Heritage Museum, Belonging to the College of Education Sokoto, fine arts department. This is yet another museum which possesses important antiquities. It is popular in exhibiting recent excavations and findings by archeologists in the state.

(vi) National Museum, A National museum is situated on Sokoto bye-pass road.

Historical sites of great attraction is the ruins of the historic sites of Surame and Gungu. Surame was the capital of the famous ruler of Yebbi Muhammad Kanta. The ruins are located few kilometres away from Binji. The town had seven walls.

The ancient city of Gungu is however located along the bank of the river opposite of Surame. Gungu means "oasis" the ruins of this historic town is about 55 kilometres to the West of Sokoto (about 45 kilometres from Argungu) Gungu was a war camp and was famous for its massive stone walls, and laterite.

There many Craft Centres, leather and raffia works. Cultural Souvenir shops are found along Race Course Road Sokoto and at Kalambaina and the festival village at Argungu.

Recreation and Entertainment:

There are a number of informal recreational activities which may be tied to some occasion. The more formal ones are the youth clubs, garden, parks, a Cinema and discotheque in some hotels. Picnics sites is found in Kwara-lake reservoir which has alarge turn over during week-ends, and on public holidays. Some boating facilities are also available.

Holiday :

Holiday facilities have not been fully realised in the State. The Festival Village at Argungu is however serving holiday makers and visitors, site and

facilities do not encourage long stay. But a number of hotels in Sokoto offer some of this service.

Conference:

Facilities specifically design for conference are practically absent. Sokoto University hall is however occasionally being use for this purpose. Since the government accepted the recommendation that conferences and Seminars etc in the state will as much as possible be diverted to the Festival Village at Argungu. Provision of such conference facility is envisaged in the tourist resort. A site for National Solar Energy Research Centre is acquired in Argungu by the Solar Energy Society of Nigeria (SESN). This is expected to attract conferences in the future.

CHAPTER 5

# DESIGN STUDY REVIEW

## 5.1 Purpose of the Study.

Design case studies are a means to a better understanding of the subject, interms of contents, needs, and problems. Thus a good case study appraisal should be seen as a means to a successful design programme. The case studies may be used as an inventory of space allocation and requirement. It should also be possible from the review to see the extent of respect given to tourism or holiday developments and how the resources were used for its exploitation, vis-a-vis location and local conditions. In summation, the studies will give an insight for the development of the brief for an efficient and rational approach to the problem (thesis) at hand. For this purpose, examples are drawn from both local and foreign case studies. Programmes reviewed at home include the Festival Village at Argungu and the Bagauda lake hotel, Kano. While cases drawn abroad include two tourist villages in italy and two holiday resorts one in mexico and the other drawn from Australia.

## 5.2 Festival Village Argungu

5.2.1 Location: The Festival Village is located about one kilometer to the East of Argungu in the government reservation area. It covers a land area

of 27.6 hectres. The site slopes gently towards the river valley. It is situated along the major road leading to Sokoto and accessible from it(Fig.8).

5.2.2 Development:

The Village was initiated in 1968 with a view to ease accomodation problems during the festival time and also house other entertainments. At other times of the year, the village serves as a catering rest house, accomodate holiday makers and tourists.

5.2.3 Infra structures:

(a) Access roads within the village are tarred though with deteriorating conditions

(b) Utilities provided include a good supply of water, electricity and Power.

(c) Shopping facilities, Post Office Room, banking services.

(d) Press Centre

(e) Amphitheatre with a capacity of 500 people

(f) two small restaurants and bar are found with a separate kitchen attarched to one of the restaurant. The two restaurants has a capacity of ninety and saventy persons respectively.

(g) Swimming pool which is found on the slope edge bounding the site in the north, is found close to the amphitheatre.

(h) two table tennis courts

(i) Garden parks provided with concrete seat for visitors relaxation.

5.2.4 Accomodation:

Initially 100 round huts were constructed in 1970 gradually, a series of additions were made. The accommodation situation at the Festival Village is now made up of the following,

17 guest houses and lodge

12 air conditioned suites

20 air conditioned chalets

40 air conditioned round huts

54 non-air conditioned round huts

162 timber chalets and tents

5.2.5 Design-Critique:

Supporting feeilities are grossly inadequate overall planning layout is dispersed Guest rooms lack Kitchennettes and the restaurant is found to be inadequate. There is no define administration block and the parking space is not define leading to indescriminate parking of vehicles in the village. Apart from the festival period, the accomodation is under utilised. Creating maintainance problem.(See Fig.11).

The round hut cluster is a good concept that provide a central relaxation hut for 'communal' living. There is a good attempt in the use of traditional forms and building materials(Plate II)

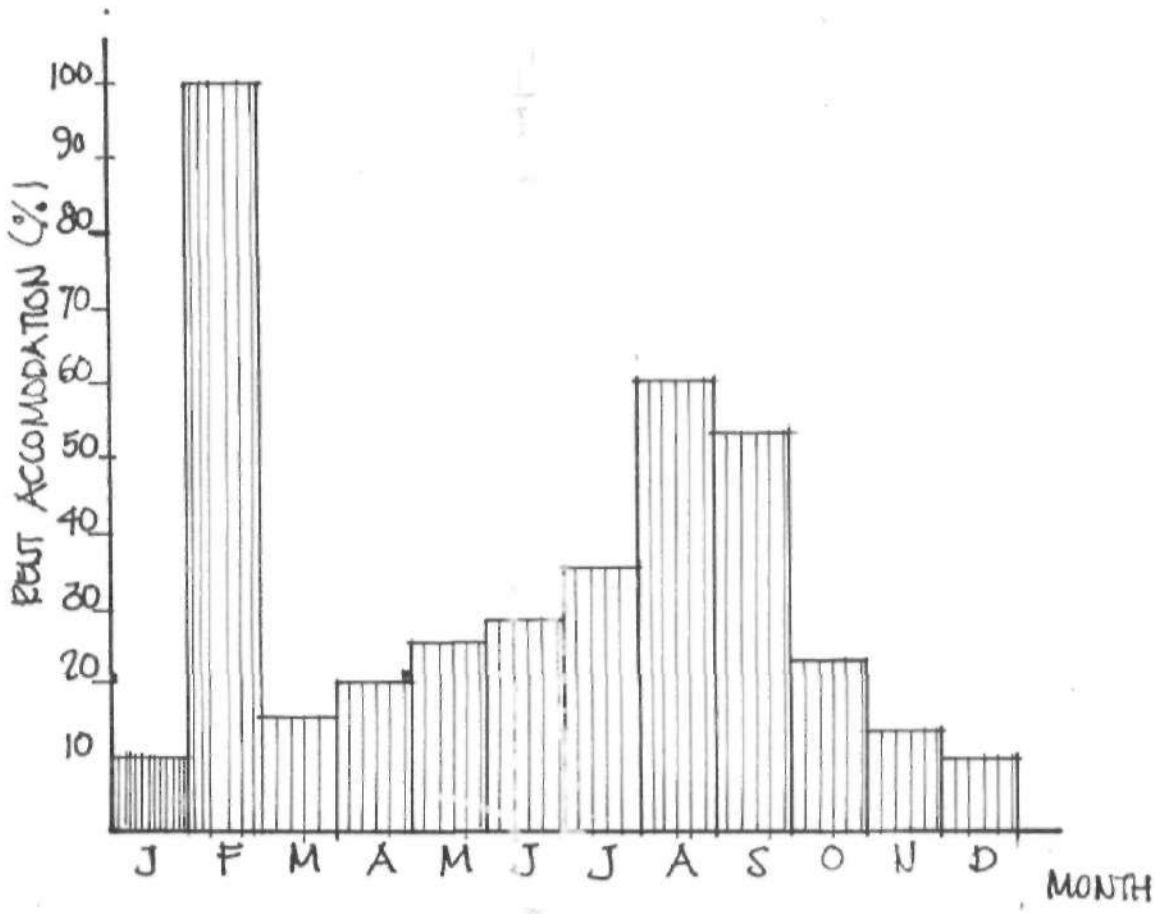
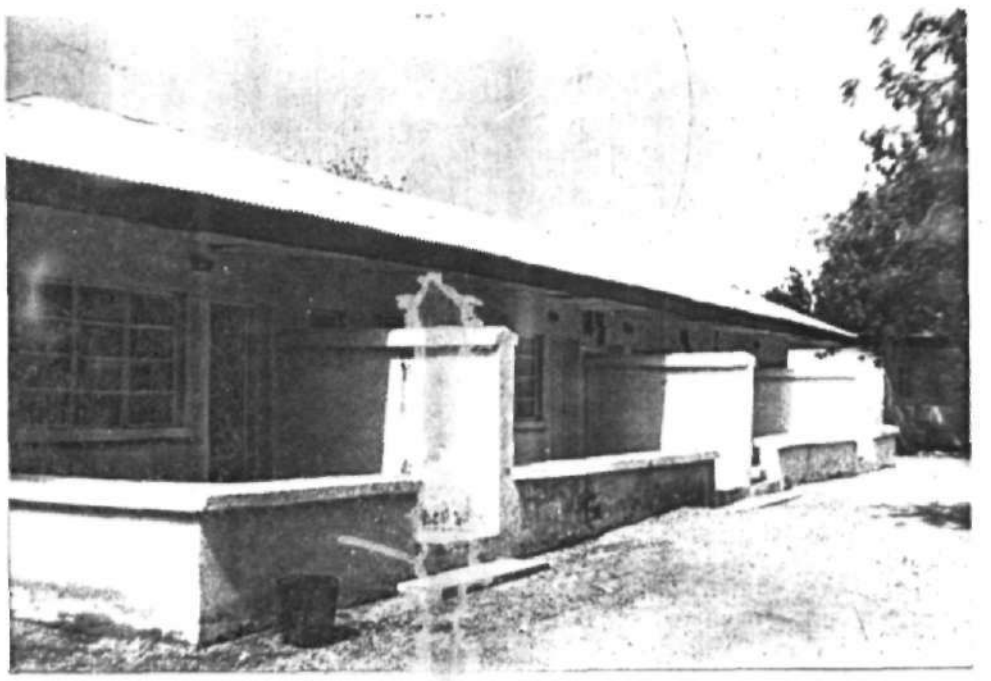



FIG.11 FESTIVAL VILLAGE OCCUPANCY RATE, (1985).

Source: Hotels Management and Tourism Board, Sokoto.



1a. Chalets

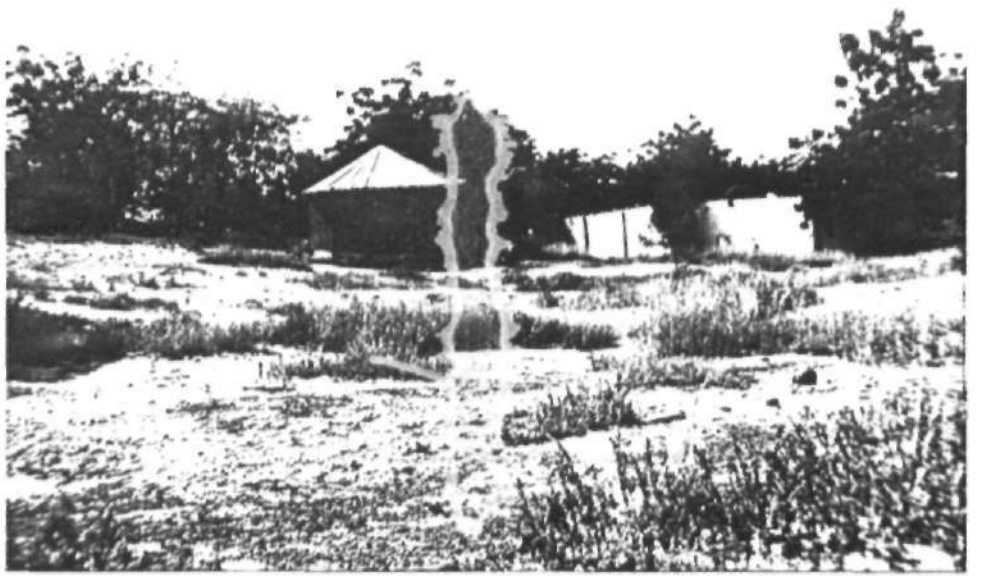
PLATE I (GUEST CHALETS AND SUITES)



1b. Suites



PLATE II, VIEWS OF THE ROUND HUTS



## 5.3 Bagauda Lake Hotel

### 5.3.1 Location:

The Lake hotel is located 58 Kilometres West of Kano on the Jos-Kano road. The resort covers a ground of 130 acres. The Bagauda lake is man-made. The hotel is accessible, about fifty minutes drive from Kano Airport.

### 5.3.2 Infra Structure:

A number of facilities are physically available in the resort which include good access road net work to visitors facilities. Utilities including water supply, drainage, sewage disposal and Electricity are provided. There is an administration block and a health clinic for the welfare of the users which is adjacently located. Other facilities include a fire control service and a conference hall (Tchad Hall) which in full capacity can accomodate 500 people. A nite club for dancing and cabaret is also provided. Catering provision include lounge, Bar and restaurant designed to take sixty and one hundred people respectively. It is provided with an outdoor place and a children play area. Equipped with swings. A Swimming Pool is located adjacent to the restaurant and bar. Shops and beauty parlour are provided to meet visitors services. Visitors needs for recreation are provided in the form of a swimming pool, four tennis courts and an open air theatre. An artificial beach is also created in the lake area.

5.3.3 Design Critique:

Facilities are adequately provided to meet primary tourist services. The buildings are well designed and integrated with the Environment.

However, the planning is dispersed with chalets too far away from the restaurant and bar. The round huts lack aesthetic appeal. There is also observed a poor attempt to mix traditional architecture with contemporary modern designs and which are by themselves domineering.

## 5.4 Playa Blanca, Mexico

A typical club mediterranian resort village is the Playa Blanca in Mexico. The club mediterranee is an interprenuer and leisure organisation initiated by Gerald Blitz as a sporting club. The Company started building sports hotel in 1956 and subsequently holiday villages in 1967. These are located in Europe, the moderrrannian and North Africa Coast, Polynesia, Mexico and the Indian Ocean.

5.4.1 Design Consideration:

Consideration is given to site and location of the resort with the facilities and freedom for guest to explore sporting activities, artistic skills and crafts. This leisure entertainment of individual participation is combined with conventional spectator Entertainments of Cabaret and Music, and discotheques.

5.4.2 Infra Structure:

(a) Administration, Shopping arcade and launderette.

(b) Restaurant

(c) Theatre with capacity for 1000 people

(d) Night Club bar with dancing space

(e) recreation facilities for children which include funfair rides.

(f) Out door recreation facilities include swimming pool, boating lake, horse riding and tennis. Indoor facilities cover a wide range of activities for visitors, swimming pool, bowl room, Billiard and tennis. They are geared to the eighteen to thirty-five age range.

(g) Craft facilities, allow visitors to explore new skills such as pottery, painting and fabric printing.

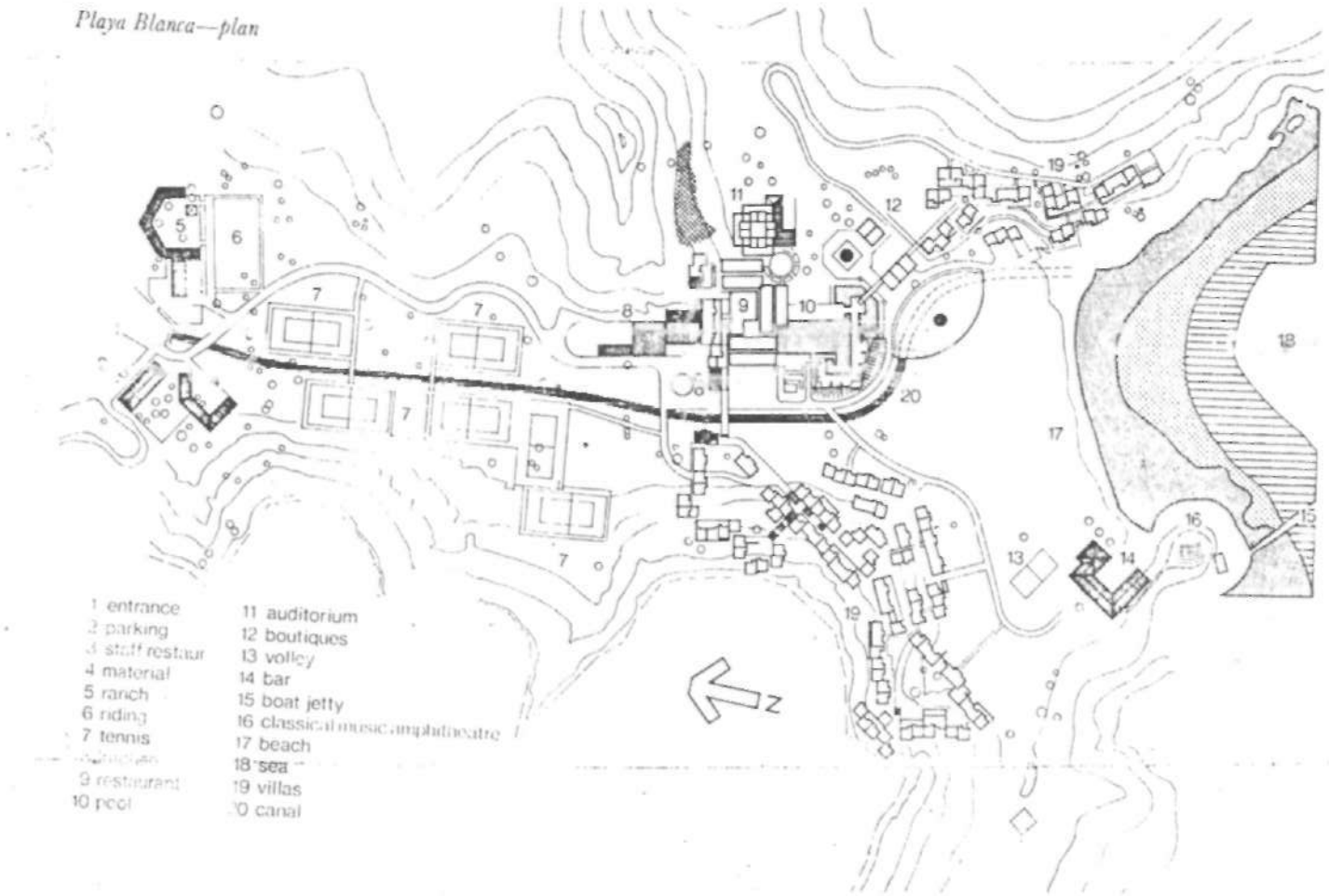
(h) all accomodation is based on double rooms, (single or two storey) self catering.

5.4.3 Design Appraisal

At Playa Balance the accomodation Extends up the sides of a valley at the point when it opens out to the sea. The Central feature is the swimming pool with restaurant adjoining and a nearby auditorium and boutiques (Plate III).

PLATE III, PLAYA BLANCA (MEXICO)

*Playa Blanca—plan*



The accomodation which is in the form of chalets (two storey) extends around the slopes where the valley open to the beach. At one of the beach there is an open air threatre, Valley hall pitch, 'bar de plage' and jetty.

5.4.4 Design Critique:

Generally, the concept is in sympathy with the local tradition and character, buildings integrated with the site. Adequate facilities are provided for individual development.

5.5 Tourist Village, Otranto(Italy)

5.5.1 Location: The tourist village is heated on the apulian coast near otranto. This yet demonstrate the reason why developers in the holiday business choose to build holiday villages rather than hotels and Villas.

5.5.2 Infra structure:

Facilities include a reception building, animatian theatre for dance and drama. Swimming pool for boys and adults, launderrate Service and shopping facilities. Guest accomodation are supported by kitchen, restaurant and bar facilities(Plate IV).

5.5.3 Design Appraisal:

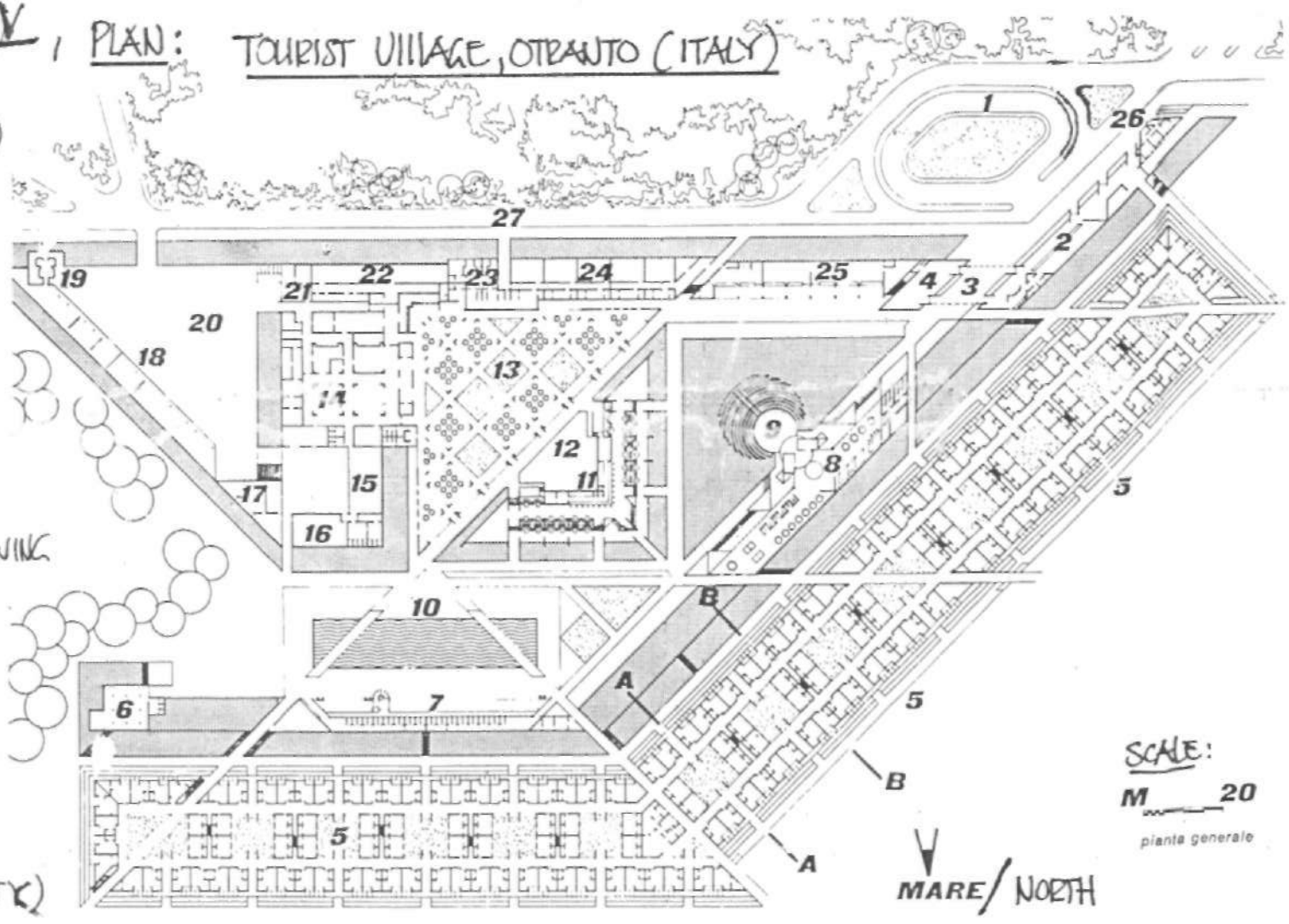
The guest sleeping units are in the form of suites of double bed space. The sleeping cells are two storey and provided with a roof garden. There is

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**LEGEND** PLATE IV, PLAN: TOURIST VILLAGE, OTRANTO (ITALY)

1. ARRIVAL PLAZA
2. RECEPTION, 3, 4, (INGRESS)
5. GUEST ROOMS
6. BOY'S - CLUB
7. SWIMMING POOL SERVICES
8. LOUNGE
9. THEATRE
10. SWIMMING POOL

11. BAR, 12. PLAZA,
13. RESTAURANT
14. KITCHEN, 15. PERSONAL WING
16. LAUNDRY, 17.
18. OFFICES
19. ELECTRIC CABIN
20. LOADING BAY, 21, 22,
23., 24, SUITES
25. SHOPS, 26. GUARD (SECURITY)




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an extensive use of terrace garden for all the floors for relaxation. On the ground floor are 3-suites of double space provided with sitting area and convenience. First floor contained 4-suites of semidetarched family units.

Padestrian circulation is well defined and tunnels are used to link sleeping units with other facilities in the complex. The Central feature is the swimming pool for the young and adults. The sleeping units restaurant and bar are all overlooking the pool. An outdoor place is provided for the bar.

5.5.4 Design Critique

The tourist village on the apulian coast has an increasingly marked character in its respect for landscope. Greater respect is also paid for privacy and community life. Economy is also reasonably reconciled in the design.

However, recreation facilities are not given prominance outdoor/indoor sport facilities are absent. ENo provision is made for children facilities.

5.6 Tourist Village, Nicotera (Italy)

5.6.1 Location: The project is located in the region of Nicotera for the tourist management, it was designed by pierfilippo cidonio, as architect.

Design: Principle of system building is used in the design of the village which provide large clear space for flexibility of use, running one use into another, to give a relaxed and communual affair(Plate V).

5.6.2 Infra Structure:

(a) Reception and administration building

(b) Restaurant, Cafes and bar

(c) Swimming pool, Kitchen and launderrate Services

(d) Amusement Centre(Arcade) and Shopping facilities

(e) Two amphitheatres to seat two thousand people in all.

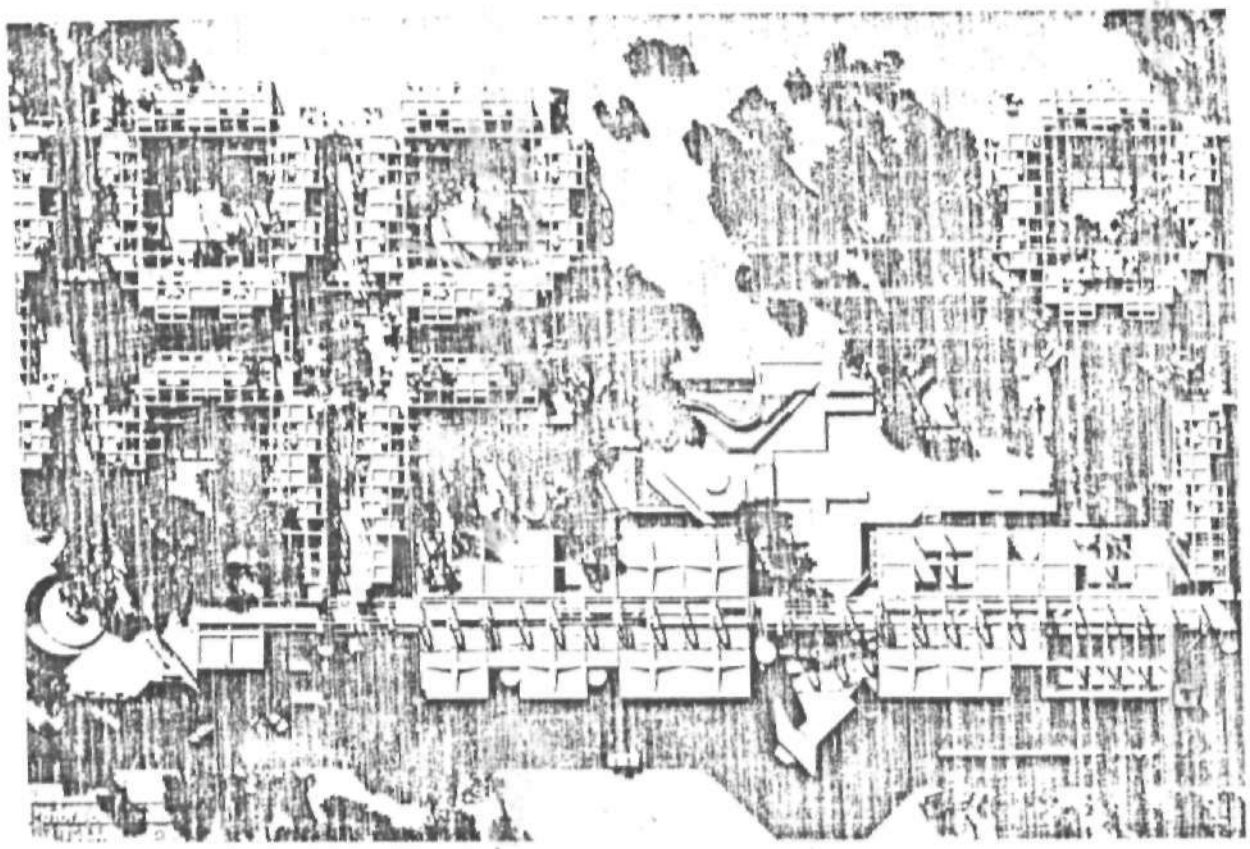
(f) ballroom as dance theatre

(g) guest accomodation

5.6.3 Design appraisal:

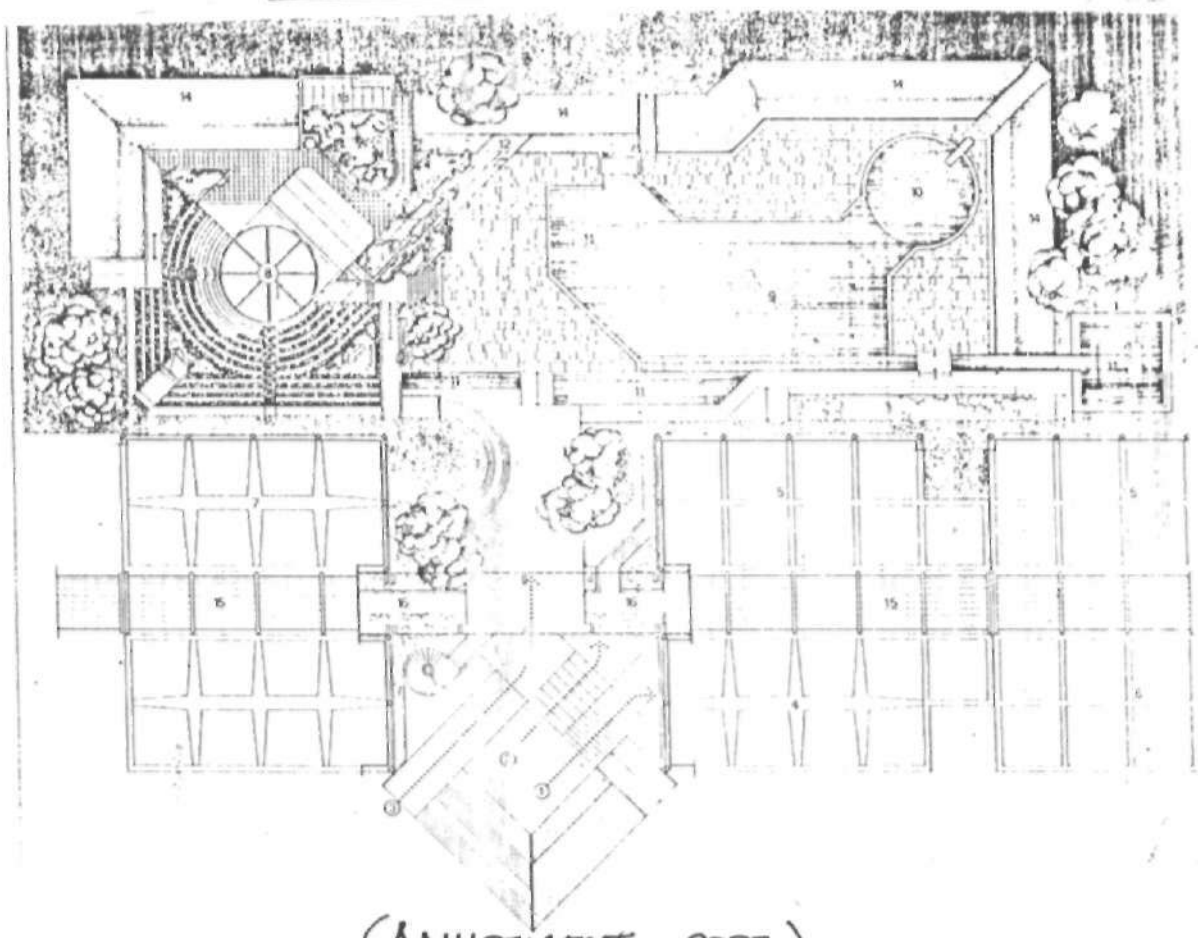
The site layout is well integrated with parking facilities limited to the periphery of the village complex. The focal point is the access road leading to the restaurant, swimming pool and dance theatre. A central access gallery is designed as a spine for the whole complex, from this gallery is attached all the facilities in the complex. At either end of this galley is located two amphitheatres. The accomodation is placed in three zones, Each Zone separated from the other by communal facilities and a large clear open space.

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(SITE PLAN)

PLATE V, TOURIST VILLAGE, NICOTERA (ITALY)



(AMUSEMENT CORE)

Accomodation is two storey comprising of suites of double and single beds physically separated by partitions. It caters for both individual and family needs. Each unit is provided with a garden Court or terrace sitting.

Four tennis courts are provided for outdoor sports, a swimming pool is found at varying heights or levels for divers, learners swimmers and a large clear paved terrace for sitting and sunbathing.

5.6.4 Design Critique:

Use of open planning lend itself for flexibility, thus is the unique feature of the design. Adequate facilities are provided.

5.7 Holiday Resort Pottnest Island, Australia

5.7.1 Location: In roftnest Island, close to the township of kingston.

5.7.2 Facilities and Design.

Formally the Governors summer residance, the Island was declared a tourist resort in 1911, and the old buildings were used for tourist accomodation. Improvements were made, while the old bar was converted to a museum. A new 60-unit accomodation was added to the site at Geordie Bay. New water front Collages were built north of the Board cottages. Staff accomodation and restaurant were added. On the saddle of the Island between Geordie and Longreach Bays,

hundred cottages were situated. The cottages were sites as retaining walls to the bank flanking both bays. This serves two functions, one is to check the savere wind erosion of the banks of the saddle and also allow the rear cottages(Plate VI). Ocean view over the water front, as the siting is on different levels. Shopping and sporting facilities were sited on the flat of the saddle between the two bays.

5.7.3 Design Critique:

(a) Except for the water front cottage, the development was not pre-conceived as a tourist resort, it therefore grows out of necessity for it.

(b) Good layout in the placement of the water front cottages.

(c) Facilities lack functional relation, as its development was not planned.

CHAPTER 6

# PROJECT ANALYSIS AND REQUIREMENT

## 6.1 Site Selection Criteria:

In selecting a site for this project, certain criteria was drawn to identify a suitable site that best serve the purpose of the project. The criteria set include:

(a) Occurance of a natural feature of attraction on or near the site

(b) Physical access to site and travel distance from centres of population.

(c) Availability of land and site development cost

(d) It is desirable for the site to have good drainage.

(e) Availability of services and utilities on or near the site.

### 6.1.1 Choice of site:

Equiped with this criteria a no of possible site were investigated from local maps and master plan, transportation routes and zoning ordinances were also used to check desirability.

(a) Site A: the master plan (1980-2000 A.D) for Argungu maintain the existing site of the festival village, which is located in the northern part of the town, on the western end of this is proposed a hotel

and a golf course. The site except for its being accessible does not satisfy the requirements for the site criteria set above. No site feature of interest, though the site has an intresting drainage pattern.

(b) Site B: A new site for festival lakes is proposed on the Marina Barrage - a dam reservoir located about 10 kilometres from Argungu, along the course of River Rima. A site is proposed here also for launching of boats and for fishing festival of international standard. This becomes necessary because of threat caused by the construction of dams at Baccalori and Goronyo.

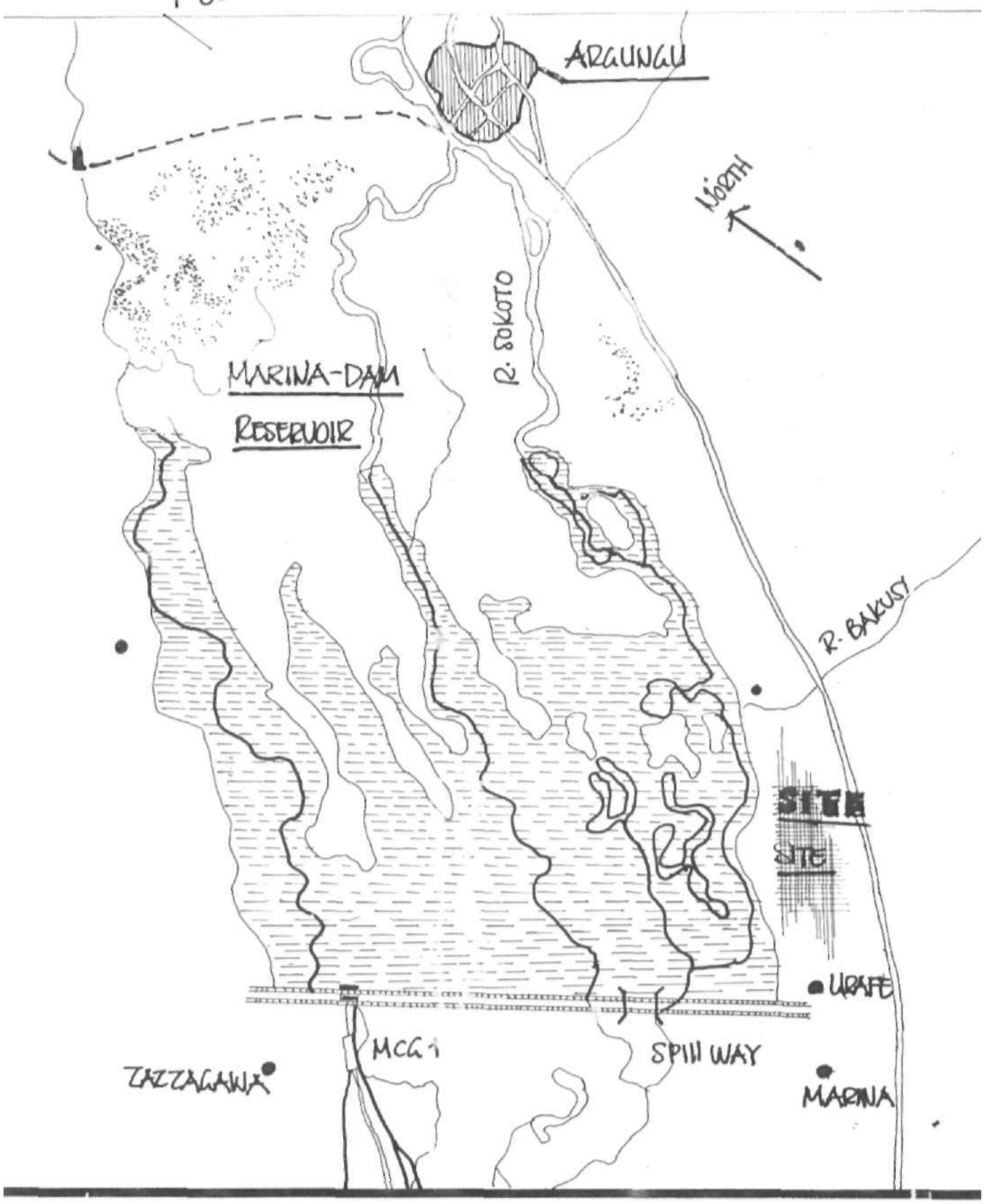
The area around here has natural scenic features which was further enhanced by the creation of a dam close to marina village. Here is found an alternative site which offers good landscape qualities. Therefore, the propose site for the tourist resort was ultimately choosen outside the Argungu Master Plan (1980-2000) (See fig.12).

6.1.2 The Site location:

The site is situated in Virgin landscape bordering Marina dam reservoir on the south east. The total site is located on coodinates $4^{o}10'E$ to $4^{o}31^{o}E$ and $12^{o}29'N$ to $12^{o}42'N$. The land is undulating and is bounded by banks ranging in height from 2 to 60 metres. The site is located about 10 kilometres from Argungu.

FIG. 12 **SITE LOCATION**

SOURCE: SOKOTO RIMA BASIN DEVELOPMENT AUTHORITY



6.1.3 Site Analysis:

Site analysis represent the natural cultural and aesthetic factors of the site. It does not only involve analysis of the specific site, but also, the total site, which include the site environs to the horizon and beyond. Access to the site is from a feeder road that connects the trunk 'A' road along Birnin Kebbi road. Bordering the road on the south and the dam reservoir on the north east, the site has good physiographic futures. The site extend from the access road to the embarkment and streches N - E and S-W along the bank. Logically the ingress/egress to the site will come from the access road bordering the site.

6.2 Micro Climate:

The study of the site micro-climate and its possible modification is only the first step in a large and complex design process. In the context of this analysis, micro climate refers to the climate of the site at the general spatial scale.

6.2.1 wind direction: the microclimate variant over the site is greatly influence by the two air masses, south-westerly humid atlantic and the North Easterly trade wind, the Saharan air mass. The latter is dry and dust laden, usually stronger and more frequent.

6.2.2 Physiography and drainage, two rocky plains are found as if to peg the site on the two end of the dam. Small drainage lines acting as channels constitute the pattern. The general slope is undulating, avergely 1 in 20 towards the bank. The heighest point on the site is 60 metres. The soil generally is freely drained, but highly susceptible to erosion if surface run off occurs. Sandy-clay, which is the soil nature present a moderately coherant material building the substructure uniformly.

6.2.3 Vegetation: On site is savannah trees and shrubs sparsely located. River Side vegetation consists of riparian vegetation of the tropical forest, shrubs, bamboos, Epiphytes are found along the bank. There are few palm trees around the site. The ground vegetation however suffers degradation as a result of cultivation and grazing activity.

6.2.4 Dam Reservoir: Firm the attraction and give 'life' to the site. The site will utilize this view and the expanse of water for leisure The reservoir has an area of 36.2square kilometres at full storage level and a maximum depth of 4.10metres,

6.2.5 Noise Source: Emanates from the access road adjacent to the site. This will generate more noise than the source from trunk 'A' road which may reach the site as diffused.

## 6.3 Control of Microclimate:

### 6.3.1 Temperature Control:

Topography can affect the microclimatic temperature of the site, temperature in the atmosphere decreases with altitude at the rate aproximately $1^{o}F$ per 330feet (99m) in summer and $1^{o}F$ per 400feet(120m) during harmattan. with a dam reservoir near the site and water having a higher specific heat than the land it will have a pronounced effect on the microclimate. Thus, it will be warmmer in harmattan and cooler in hot season and usually cooler, during the day and warmer at night than the surrounding terrain.

Similarly vegetation (Plant material and grass cover)(Fig.14) reduces temperature by the absorption of insulation and cool by evaporation. It has been found that temperature over grassy surface on Sunny days are about 10 - $14^{o}C$ cooler than those of exposed surfaces.

### 6.3.2 Control of Wind:

Basically, plants control wind by obstruction, guidance, deflection, and filteration. The difference is not only based on the degree of effectiveness of plants but also on the techniques of placing them. However, plants as natural elements are not always predictable in their size, shape and growth rate and thus in their absolute effectiveness. Obstruction

with trees, as with all other barriers, reduce wind speed by increasing the resistance to wind flow, Effective wind break should offer 50 percent reduction of wind velocity for a distance of 10-13times the height of the trees. Coniferous and deciduous trees and shrubs used individually or in combination affect air movement.

Deflection of wind over trees or shrubs is another method of wind control. Plants of varying heights, width, species and composition planted either individually or in rows, having varying degrees of effect on wind deflection. Coniferous ever green that branch to the ground are generally the most effective year round. Plants for wind control. Wind velocity is cut from 15 to 25 percent of the open field velocity.

6.3.3 Solar and thermal control:

Better achieve through appropriate orientation with minimum building surface exposure to the late afternoon sun (western elevation). Where this is is not fully achieved, the use of sun-shading devices (vertical or horizontal), Internal blinds, special glasses (heat absorbing or heat reflecting),etc is advocated.

Thermal effect is due to heat gain by the building . This may be reduce considerably by Solar control as above and by appropriate choice of building

material, and provision of ventilation and air movement by artificial or natural means.

6.3.4 Noise Control:

Vegetation is useful in conbating noise and air pollution trees and shrus as deadners of noise. The fact that the source is usually screened is said to lesson its effectiveness. Thick harbaceous ground cover attenuate sound intensity by sound absorption.

## 6.4 Concept of Landscape

The word 'land scape' has diverse meaning, perhaps it was drive from the old Dutch "landskip" a painters term refering to a type of easel. Later, the meaning was transfered to the subject of painting.

In broad terms, geological movements, the hydrological cycles humus, flora, fauna,diurnal,annual and even processional cycles all contribute to what we call landscape.

### 6.4.1 Landscape Architecture:

The importance of Architecture is direct and intimate conjunction with the elements of the biosphere can hardly be overrated, Since in the creative order of things, it is the mode between the mental and the physical worlds. Landscape architecture brings harmony between the primeval and manwrought elements at a physical level in order to satisfy man's mental and spiritual needs. It is extensive in its scope,

ranging from spatial composition through natural cycles, good husbandry and social response to construction and control. It will not readily be confined ; isolated or cramped because essentially it contains everything and it is not itself contained.

Landscape architecture is not synomymous with 'garden design' rather the latter is a subject of the former. Landscape contains the architecture, architecture contains the garden. Disunity at any point is critical. One must attempt to marry them together, and there should emerge a rare quality and a high degree of satisfaction.

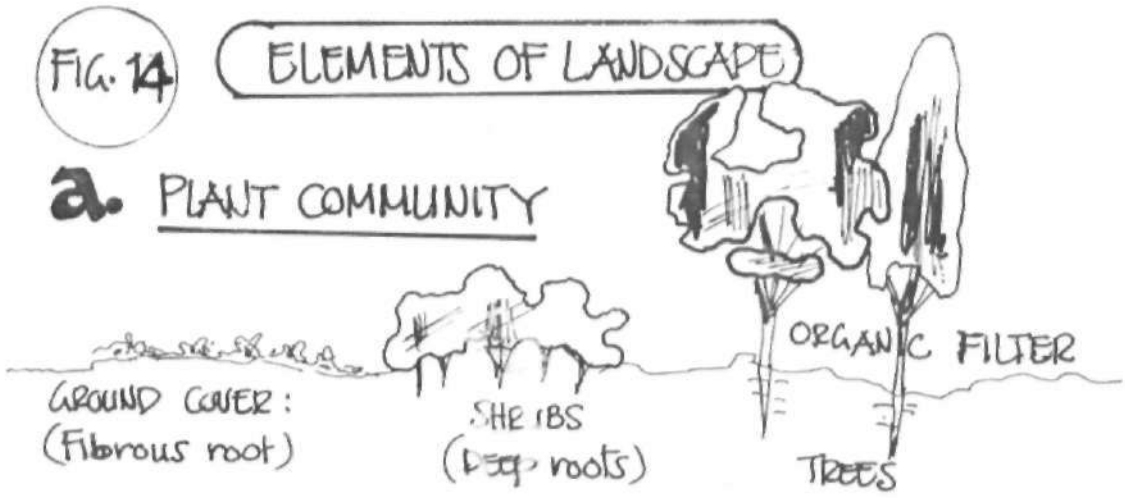
6.4.2 Choice of Plants:

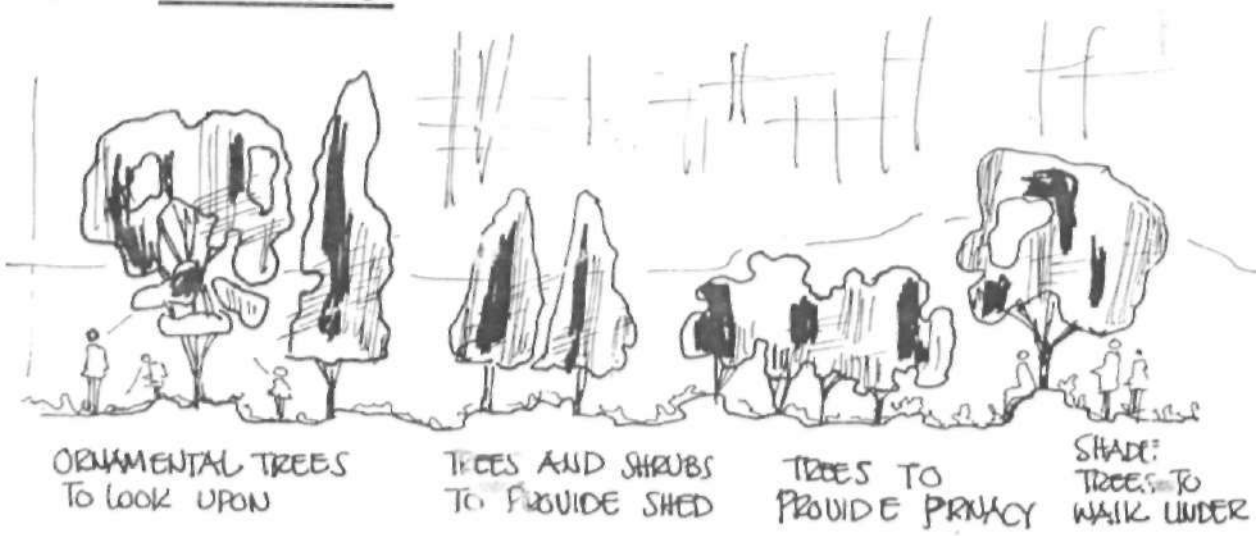
Just like humans, plants have their likes and dislikes. Some species live well together, others do not. Among the main criteria for choice of plants will be rock, soil, water, climate, aspect, size, vigour, shape, texture, colour, season, age, habit, utility, price, maintainance, et cetra. The choice of specie may vary a little with experience of the site. (Appendix 'A').

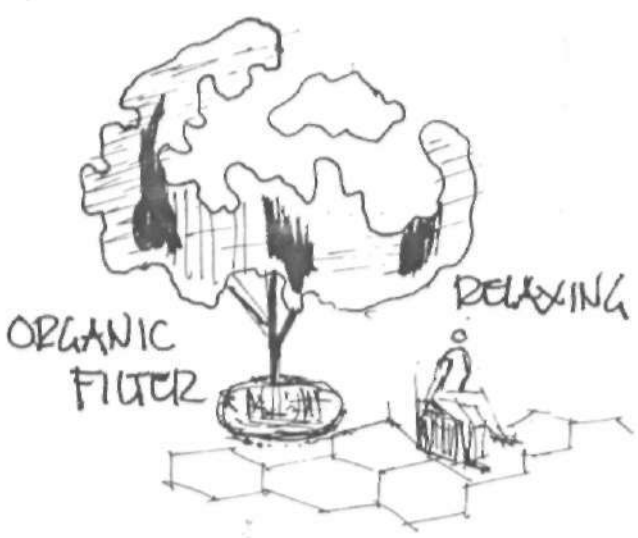
6.4.3 *Shrubs and Ground Cover.*

The critical height for must shrubs is related to the eye level. Shrubs vary in height from prostrate up to 5 meters and may include those smaller trees which are many stemmed from the base.

FIG. 14 ELEMENTS OF LANDSCAPE






LANDSCAPE FOR COMFORT.

Grass cover should be seen as a major element in landscape design. It is comparatively cheap as a surface material. It's smooth texture emphasizes landform and cotouring. Grass colour and texture can be a restful effect, it regulates the temperature of the site micro climate. It help reduces glare and check the nuisance of harmattan wind that blows dust around.

6.4.4 Damage to grass:

Casual walking or sitting down does not harm grass. Damage occurs when entry is restricted or when regular short cuts are developed. Short cuts must be discouraged with dhrub planting or changes in level or fencing.

6.5 The Resort Defination:

The tourist resort for Argungu by defination is not conceived as a resort hotel, because it may not provide for accomodation and it is not located near any holiday facilities. It is not a tourist hotel because it is not a tourist destination by itself even though it is located near one. Because of the tourist facilities to be provided such as tour operation, travel agents and its closeness and accessibility to a tourist destination. It is by the demand of the thesis a transition point between tourist home and destination. It is design to be an added attraction to the available resource.

Tourist arrive at the resort, arrange for there travels if it has not been pre-arranged. Under take their tourist pursuit or participate inleisure and recreational activities provided in the resort. Educationalrecreation are provided in the aquarium complex. There are conference and banqueting facilities with an amphitheatre for cultural performance which will be utilised for visitors entertainment. Craft museum allows for appreciation of intrinsic cultural values of the people.

## 6.6 Architects Brief:

The development of the brief take into cognisance the data analysis, case reviews, existing demand and projection to the ideal for efficient functioning of the resort. The defination of the resort will be kept in view.

Facilities to be provided will be broadly classified into two major groups.

(a) Recreational facilities, comprising of anusement park, landscape zone, Aquarium etc.

(b) Supporting facilities, which may include, accomodation, administration, conference catering and other services.

## 6.7 SCHEDULE OF ACCOMODATION:

### 6.7.1 (Supporting Facilities)

| Space Delineation | No. | Total Area | Capacity (Persons) |
|---|---|---|---|
| ADMINISTRATION | | 451.5m$^2$ | |
| Reception lobby/Receptionist | 1 | 40m$^2$ | 30-35 |
| Banking/Postal agency | 2 | 160m$^2$ | |
| Travel agency | 1 | 27.0m$^2$ | |
| Promotion and Publicity | 1 | 40.5m$^2$ | |
| Lost Property Office | 1 | 16m$^2$ | |
| Information/booking | 1 | 20m$^2$ | |
| Accountant | 1 | 20m$^2$ | |
| General Manager | 1 | 24m$^2$ | |
| Secretary | 1 | 12m$^2$ | |
| Staff lounge | 1 | 70m$^2$ | |
| Toilets | 1 | 21m$^2$ | |
| Store | 1 | 21m$^2$ | |
| CONFERENCE/CONVENTION | | 975.m$^2$ | |
| Lobby lounge | 1 | 70m$^2$ | 50-56 |
| Auditorium | 1 | 455m$^2$ | 500 |
| Conference Hall | 1 | 156m$^2$ | 250 |
| Committee Room | 1 | 50.m$^2$ | 40 |
| Small Lecture Room | 1 | 90m$^2$ | 100 |
| Partany Room | 1 | 30m$^2$ | |
| Press Room | 1 | 30m$^2$ | |
| Studio | 2 | 48.0m$^2$ | |
| Store Room | 1 | 24m$^2$ | |
| Toilets | 4 | 21.0m$^2$ | |

| Space Dilineation | No | Total Area | Capacity (Persons) |
|---|---|---|---|
| RESTAURANT CATERING | | 293m$^2$ | |
| Restaurant | | 280m$^2$ | 200(50covers) |
| Terrace Dinning | | 70m$^2$ | 50 |
| Cafe shop | | 30m$^2$ | |
| Games Room | | 30m$^2$ | |
| Kitchen | | 150m$^2$ | |
| Cooking | | (60m$^2$) | |
| Preparation | | (30m$^2$) | |
| Scullery | | (20m$^2$) | |
| Cold and Dry Storage | | (40m$^2$) | |
| Offices | 2 | 24m$^2$ | |
| Rest Room | | 24m$^2$ | |
| Cloak rooms(M) | | 32m$^2$ | |
| " (F) | | 24m$^2$ | |
| Guest toilets | 4 | 21.0m$^2$ | |
| Staff toilets | 4 | 21.0m$^2$ | 100 |
| Benquet Hall | | | |
| BAR CATERING | | 190.5m$^2$ | |
| Bar Room | 1 | 120m$^2$ | 100 |
| Bar Storage | 1 | 21m$^2$ | |
| Bar tender | 1 | 10.5m$^2$ | |
| Empty Storage | 1 | 21m$^2$ | |
| Toilets | 3 | 18m$^2$ | |

| SPACE DELINEATION | NO | TOTAL AREA | CAPACITY (PERSONS) |
|---|---|---|---|
| SERVICES AND MAINTAINANCE | | 432.5m$^2$ | |
| Central ware house | | 81m$^2$ | |
| Store | | 54m$^2$ | |
| Workshop | | 81.0m$^2$ | |
| Plant room | | 20.0m$^2$ | |
| Offices | 2 | 24m$^2$ | |
| General Store | | 48m$^2$ | |
| Changing rooms | | 20.5m$^2$ | |
| Rest room | | 24m$^2$ | |
| Laundry Service | | 80.0m$^2$ | |

6.7.2 (RECREATIONAL FACILITIES)

| Space Delineation | No. | Total Area | Capacity (Persons) |
|---|---|---|---|
| AQUARIUM | | 722.5m$^2$ | 25.30 |
| Entrance lobby | | 25m$^2$ | 25-30 |
| Information | | 30.m$^2$ | |
| School tour Reception | | 50m$^2$ | 50 |
| Offices | 3 | 30.0m$^2$ | |
| Exhibition Hall | | 60m$^2$ | |
| Pathology lab | | 24.0m$^2$ | |
| Library | | 72m$^2$ | 60 |
| History Museum | | 60.0m$^2$ | |
| Souvenir Shop | | 20m$^2$ | |
| Snack Shop | 2 | 20.5m$^2$ | |
| Children contact Area | | 200m$^2$ | |
| Machinery Room | | 84.0m$^2$ | |

| Space Delineation | No. | Total Area | Capacity (Persons) |
|---|---|---|---|
| NIGHT CLUB | | 422.5m$^2$ | |
| Discotheque | | 220m$^2$ | |
| Dance Hall | | | 50 |
| Band Stand | | | |
| Store Room | | | |
| Multi Purpose Hall | | 200m$^2$ | 200 |
| Hobbies Room | | 60m$^2$ | |
| Storage | | 25.0m$^2$ | |
| Cloak Room(M) | | 32m$^2$ | |
| " (F) | | 24m$^2$ | |
| Toilets | 6 | 31.5m$^2$ | |
| CRAFT MUSEUM | | 449.5m$^2$ | |
| Craft workshops | 2 | 120m$^2$ | |
| Exhibition Hall | | 60.5m$^2$ | |
| Storage | | 45.0m$^2$ | |
| Souvenir Shops | 3 | 30m$^2$ | |
| Beauty Saloon | 2 | 40m$^2$ | |
| Berber shop | 2 | 30m$^2$ | |
| Mini Mart | | 144m$^2$ | |

| Space Delineation | No. | Total Area | Capacity (Persons) |
|---|---|---|---|
| HEALTH FACILITY | | 105m$^2$ | |
| waiting lounge | | 50m$^2$ | |
| Treatment Room | | 9m$^2$ | |
| Pharmacy | | 16m$^2$ | |
| Storage | | 9m$^2$ | |
| Toilets | 4 | 21.0m$^2$ | |
| Toilets | 4 | 32.0m$^2$ | |
| Cloak Room | 1 | 21.0m$^2$ | |
| SWIMMING POOL | | 472.0m$^2$ | |
| Leisure Pool | | 60.6m$^2$ | |
| Store Room | | 30m$^2$ | |
| Changing (M) | | 32m$^2$ | |
| " (F) | | 24.0m$^2$ | |
| Treatment Room | | 25m$^2$ | |
| Plant Room | | 20.0m$^2$ | |
| Terrace sitting | | 270m$^2$ | |
| Snack shop | | 10.5m$^2$ | |
| Toilets | 4 | 21.0m$^2$ | |
| OUTDOOR ACTIVITIES | | | |
| Lawn tennis(36x16) | 2 | 1392m$^2$ | |
| Fives Court | 2 | 33.6m$^2$ | |
| Base ball | 1 | 42.00m$^2$ | |
| Archery | 1 | 1500m$^2$ | |
| Walking + Cycling trails | | | |

| BEACHING AND WATER FUN | | 794m$^2$ | |
|---|---|---|---|
| Sailing and Rowing | | 400m$^2$ | 20 boats |
| Angling booths | | 100m$^2$ | |
| Beach Relaxation | | 270m$^2$ | 100 |
| Kiosks | | 24m$^2$ | |

| Space Delineation | No | Total Area | Capacity (Persons) |
|---|---|---|---|
| RECREATION HALL | | 1435.25m$^2$ | |
| Amphitheatre | | 910.0m$^2$ | |
| Sport Hall | | 371.25m$^2$ | |
| Indoor tennis | | | |
| Squash | | | |
| Archery Shooting | | | |
| Gallery | | | |
| Equipment Room | 2 | 50.0m$^2$ | |
| Changing rooms | | 74m$^2$ | |
| Office | | 12m$^2$ | |

| PARKING EVALUATION | | | Car Space |
|---|---|---|---|
| Amphitheatie / Conference | Car 5person | 2750m$^2$ | 200 |
| General | Car/5person | 825m$^2$ | 60 |

## DESIGN REPORT

### 7.1: Design Parameter

> "Man has a innate to make meaningful order in his world. Without the presence of order in the important aspect of his life, man cannot live. He therefore tends to create around him the kind of order he finds most congenial."

Organisation pattern for the design programme is based on segregated concept of resort planning. The planning of recreation areas and facilities is a complex task that requires an understanding of many factors. It is totally unrealistic to plan these areas and facilities in the absence of clear knowledge of the needs they will serve. It calls for vision and clarity of purpose with regard to the direction in which the resort serviee will move. Three basic parameters are given priority in the design of the resort for Argungu.

(a). Planning

(b). Environmental

(c). Design consideration/implication

**In the design of the site** the principle of functional planning are considered.

(i). Programm: adequacy of space to accomodate facility and cater for youths, children and adults.

(ii). Utility: areas to adequately segregated to protect against danger of motor traffice or harzards. Design of play areas to provide a positive influence toward safe and healthful practices.

(iii). Aesthetics: attractiveness and pleasing appearance of the total site environment attempting judicious use of shrubs, plants, lawns and desirabiliwy for a good architectural solution.

(iv). Adaptability: meet changing recreation demand with time and flexibility of proposed structure. In a nutshell, calling for possibility of extension withoutdestroying the whole.

(v). Use of natural features: Possibility of using a series of level planes, sometimes connected by sloping planes. The ground is based on the flow of water and consists of a modulated flowing surface. As Le Corbusier realised the tops of buildings are especially important on sloping ground, where they can be part of a place.

7.1.2: Concept development

Planning is a continous and incremental process which developed from identified guidelines for overall development. For the purpose of this thesis a number of planning concepts are identified as the basic ingredient to be adopted for the maximum perfection and function of the resort.

(1). Nuclear Concept

The nuclear concept is most ideal for lakes, water falls, mountain or island. In which case the facilities are concentrated around the attraction which act as the focal point.

(2). Linear Concept

The perception in this type of concept is that facilities are located along an extensive resource that is said to be characteristically linear. Supporting facilities may be placed along the bank of the lake, shore and waterfronts or falls. The only disadvantage of this concept is the tendency for this kind of development to cause an irriversible damage to the ecosystem of the site. Another shortcoming observed include the problem of linkage and maintanance to facilities which more often than not turns out to be monotonous.

(3). Segregated Concept

The idea here is for facilities to be spread out or segregated on large area. Zoning is very crucial in the overall development of the site. If properly handled, it proves to be more attractive and balanced. It is however more useful where a single attraction is not the major focus of recreation resource.

(4). Combined Concept

An amalgam of any of the above concepts will result in a combined concept. The later is viewed to be the most ideal solution for the site project at hand. And in line with the set out goals of the resort as per discuss above (Chapter 6).

The site present a variety of Engineering and architectural challenges and opportunities. Sloping

gently and then steaply at the embarkment and ranging in height from two to sixty meters. The principal attraction being the dam reservoir and occurance of varied and good vegetation which provide the right solitude to tourists.

7.2: Approach to planning

There are two separate scales which have to be considered. The first called macroplanning, which deals with the broadlines of the site as a whole and its relationship with the sorrounding. The second aspect called microplanning concern itself with the details within the frame work, virtually from the intimate aspect of individual enclosures to single species.

The site is zoned to avoid conflict of function and to harmonize the relationship of unit facilities within the total development. The whole project will be excuted in phases of which the aquarium complex, the principal attraction in the resort and the administration block with catering facilities will be completed in the first phase of the development. This will be followed by cultural and other supporting facilities. During this phase, visitors seeking in-house accommodation will make use of the 3-star hotel at Argungu with ten kilometres travel distance. The second phase of development will feature cultural and other recreation facilities as outlined in the brief. The last phase will have the housing accomodation, at this stage the popularity of the site has been established and for convenience the accommodation will now be part of the site development.

## 7.3: Marine life park

### 7.3.1: The aquarium

The marine life park consist of the aquarium, the porpoise showpools and docking facilities. It is located half way down to a slope close to the shore of the lake at a place where the ground levels off before descending more precipitously to the lake. The site commands a fine view of the lake and form the central attraction on the site. The cluster design consists of the marine life park in the form of show pools and a jetty. The greenery setting of the site is as much as possible preserved. The central idea for setting up the 'living sea' is getting to know the sea through the creatures of the sea, i.e. to enable visitors to come into contact with sea life.

### 7.3.2: Need for Aquaria

The setting up of aquaria is one of the popular attraction of the tourist resort for Argungu. The town of Argungu is synoymous with water, fish and other aquatic animals. The need to explore the frontiers of water and make it part of human daily life is part of the objectives of setting up the 'aqua world'. It is a hard fact, an aquarium complex built almost anywhere in the world will prove to be a popular attraction, both for education and recreation.

### 7.3.3: Defination of aquarium

Traditionally, an aquarium is regarded as an artificial pool or tank for keeping of live aquatic plants and animals.

It is also regarded as any container capable of holding water, fishes, and or plants and being inside a building.

In the history of man's interest in the sea, aquarium have undergone some changes. The most primitive kind of aquarium was one in which fish collected from the sea were displayed in what everway was possible. Later, fish were categorised and displayed according to species in series of isolated tanks. However, the most recent development in aquaria design has been to use large tanks in which different kinds of fishes are allowed to swim freely and to exhibit natural group behaviour. This is more acceptable and the resort aquaria will therefore aim at making the environment of the fish as naturalistic as possible.

7.3.4: Factors in aquaria

Before going into details of the requirements, an aquarium building should be accessible by public transportation and private vehicle. Adequate vehicle parking in the area is desirable. Perhaps, the most important factors are the following:

(a). dimension of the aquarium

(b). oxygen supply

(c). water supply

(d). over crowding

(e). over feeding

Most important consideration is the dimension of the aquarium as it affects the number and health of the specimen.

Fishes like all animals take in oxygen and give out carbon dioxide. Dissolved oxygen is extracted from water and carbon dioxide, a waste product, is released in the water. High level of carbon dioxide can become poisonous for the fishes. This may occur in an over crowded tank, shortage of oxygen may also occur in condition of gross organic pollution of tank by overfeeding. The rotten of these foods by millions of bacteria and protozoa make considerable biological demand on the oxygen supply.

The other vital factor is the water supply both as to the quality and the volume required for the proposed facility. The circulation pattern within the aquarium building for visitors is also very important, it should draw the visitor along the desired path. Handrails are required to keep the public about one metre from the viewing glass.

7.3.5: Aquarium Components

(a). Compost, the gravel at the bottom of the tank in which plants can be grown. This comprise of a mixed gravel.

(b). Lighting, helps display fish to best advantage and support plant growth. Artificial lighting is prefered, and natural lighting should be kept to a minimum. The use of decorative lighting is also popular.

(c). Air pumps, are used in the aquarium for the purpose of forcing air into tanks through a diffuser in the form of small porous stones. The stream of small bubbles formed agitates the surface of the tank allowing exchange of oxgen.

7.3.6: Indication of harzards

The obvious sign of trouble is the water becoming cloudy. In normal circumstances, the water should be clear with no characteristic smell. The cloudiness may be of white, brown or green colour. White cloudiness often means that for some reason the oxygen content of the water is too low and relatively high carbon dioxide content. Brown cloudiness may be caused by dirt or excessive food that has not been eaten and lies around the tank. Often turning the sand black. Green cloudiness is said to be healthy, nevertheless, since green is not visually appealing it should not be permitted in a show tank. Green algse can be cleared in 2-4 days by adding chemicals like potassium per manganate ($KmNo_3$)

7.4: Design of the Aquarium

The aquarium is heated on the bank of the dam reservoir.it is the major attraction for the water front activities. The aquaria can be approached from a focal point that radiates to the amusement park and the administration core. There are two entrances into the aquaria, the service entrance for the staff and the spectator entrance. A box office is situated by the

entrance where ticket could be sold. At the service entrance is provided a ramp for easy access to upper floor for both equipment and food for specimens.

7.4.1: Construction:

The aquarium complex is two floors, with a basement level that houses the machinery room and a central trench drain when there is the need for water to be discarded. All service pipes connect to the trench. Educational facilities are found on one wing of the basement with tour reception and lecture room. All floors are made of reinforced concrete (water proof cement). The second floor level is ribbed floor slab which allow for flexibility. The floor will be covered with a non-skid material, whilst the ceiling will be finished with rock wool to eliminate sound reverberation. No verbal explanation will be offered, but background music will be provided.

A ramp is provided which extend from the dock to the work level. The aquarium show tank form the attractive feature of the ground floor with an exhibition hall. The upper floor exhibit marshy birds which constitute the aviary. The central aeration and storage reservoir for the closed system of water circulation is found on this floor. There is an observatory space for visitors to have a panoramic view of the dam reservoir and the artificial beach. The place is located infront of the aquarium and connects to the restaurant and swimming pool place. Unlike standard

facilities of the kind which generally employ very small windows opening from many small tanks, the aquarium here will make use of immense tanks. These virtual slices will show sea creatures in condition of group biology. In one tank will be a display representing the sea in the coral reef zones and showing colourful tropical fishes. The other tank will be devoted to the outer ocean and will show the creatures typical of those regions. Exhibitions in other parts of the aquarium will help illustrate further the kind of life in the sea.

7.4.2: Large Tanks

Two tanks, one 8m by 8m and the other 8m by 20m with a depth of 2.5m each are to be made of sheets of acryl or chrome plated fiber glass/plastics. This will be connected by means of polymerised adhesives. The sheets are slightly coloured in green bronze to obviate glare. The larger tank will contain West Africa Sea current exhibition. The second one features coral exhibition of tropical fishes.

In both cases, the aquarium will contain several fishes (about 1000 and up to 60 varieties - Appendix 'B') of varying colours and sizes. These will be complimented by landscape and adequate pieces of stones to act as rock for the aquaria. The whole idea is to create an environment similar to the natural habitat of the fish beneath the water surface. The aquarium will be lighted by either the under water as well as to provide lighting or by special tubes like 'Gro-lux'.

An alcove sitting 'theatre' is provided for visitors to view the exhibition tank. The tank of the coral sea will be brightly lighted while other tanks will be dimly lighted. Although the intention was to give undersea environment natural realistic expression, because of the school of fish moving in pools of light, the use of brightness and dark and perhaps the background music intended, the resulting mood undoubtedly depicts a number of unrelated objects as seen in a dream. The designers aim is thus achieved 'surprise effect'.

7.4.3: Other tanks

Specialised tanks consists of specimen groups with different food habit, and means of locomotion. The idea is to help the visitor absorb and retain much knowledge of aquatic life. These pools are categorised into marine reptiles (snakes, furtles, crocodiles, etc.) mash birds (wil duck, coot, snow geese, etc), and the mollusc (sea shells, octopus). In all cases a synoptic information about the content of the pool will be provided.

(a). Quarantive tank

The purpose of the quawantine tank is to keep new fishes untill they are guaranteed safe for viewing. Newly caught fishes are kept in the tank to get them acclamatized with the new environment.

(b). Isolation tank

Either through difference in environment, fighting, natural body defects, the fish may fall ill.

Such fishes are isolated so as to prevent the spread of epidemic to other healthy fishes. Sick fishes are recognised by the inability of feed very well and the flapping of the fins. Major diseases are white spot and velvet. The tanks should have their own nets, feeding forcepts, etc which should never be used in other tanks.

## 7.5: Recreational Facilities

For any resort development such as this one, a wide range of recreational facilities is an essential accessory. The resort being an 'international' place where people of different nationals are expected, the choice of facilities are directed on international appeal. Modern sporting facilities are therefore provided to meet visitors recreational demand. In planning such activities, the following considerations were ranked high.

(a). to avoid conflicts or dangerous conditions in the juxtapositioning of the various activities.

(b). to provide physical and visual barriers between the recreational facilities and adjacent uses, such as, in-house accomodation and other communal facilities.

(c). to provide adequate parking areas to accomodate both participants and spectators.

(d). to provide proper access to the facilities for services and maintainance.

7.5.1: Water base recreation:

(a). Sailing and cruising, need for a boating dock, provision of slip way for boats, which will be used for temporary tying up during sailing hours. Provision of lavatories and simple changing and wash room are essential. A shed and/or trestle is useful for storning equipment and spares.

Shape of the water body is not very critical for sailing. However, a bank consisting of long smooth curves or straight is desirable. Depth of water should be at least 1.5 metres to 1.8 metres.

(b). Canoeing, as may apply during festival time and other leisure pursuits, a 500 metres to 1000 metres straight course is required. Water must be weed free.

(c). Angling, is about the most popular water recreation its varied facets allow it to be practised almost anywhere. But, zoning is important. It is best restricted to banks on one side only leaving large free area for fish. Meandering, wide, slow flowing site may be prefered for fresh water angling.

(d). Show pools, involve demonstrations of communications between porpoises (a small shale about 1.5 metres long) and human beings. For this purpose one of the pools will be equipped with special apparatus.

(e). Leisure pool, pools are best integrated with buildings or other hard elements. They can therefore

be designed as part of the landscape. Free standing pools need good handling in planning and design. A pool should not be located in low spot, water from the sorrounding area will drain into the pool, or under the deck and will pose architectural problems. It should be screened from North East and South West winds which make bathing uninteresting as swimmers become chilled when wind dry them off too fast.

(i). Construction and finishes

Outdoor pools will constructed of burnt brick which is locally available. The material will be rendered and painted with chlorimated rubber paint or white marble chippings can be added to rendering to obviate painting. Marble dust are more durable than painting. A white lining to the pool gives the water a blue colour through reflection from the sky.

The terrace paving has occasional aromatic sets between the slab, sometimes intersparsed by rocks as in the design of the swimming pool. The paving sometimes gives off directly unto the control grass lawn. The sorrounding will be kept clear to ease movement. The paving will be glazed brick tile of at least 3 metres wide and draining away from the pool. Asphalt tiles and smooth cement are not recommended.

Some planting will be introduced tc soften glare, in the form of harbaceous types raised in bedding to break the dorminant horizontal scale. The plants so choosen are ever green and do not drop leaves so thickly.

7.5.2: Filteration and water temperature

Diatomic filters will be incorporated, which is relatively cheaper and more compact which make easy handling. Moreover, this is preferable for periodic emptying of pools or provision of complete water changes on daily basis. In this respect pools will be provided with an outlet direct to main sewer.

The most desirable temperature for water depends on the relative humidity. The colder the air temperature, the warmer the water, and vice versa. In Argungu, the temperature can rise as high as 37°C with 35°C being common, for bathers to be comfortable the pool temperature should be maintained at 22.2°C.

7.6: Communal facilities

7.6.1: Creativity

The development of creative ability is a sound goal. Self expression is choosen through Arts and Crafts programmes. The satisfaction that can be derived from quality production, the skills that are learnt and the resultant socialisation with those who find a common interest in this programmes are all encouraged. This is why the idea of the craft museum where expartise can be taught and appreciated come about.

It will be responsible for both training, production, and sale of items of crafts, cater for the development and acquisition of skills through teaching and cajoling. It is expected to generate interest for visitors and tourists.

7.6.2: Social integration

Development of close personal relationship between people of varying age groups, nationality and background is to be enhanced. A socialising place where this idea is expected to be realised is provided in the form of open air theatre, restaurant, bar, and a discotheques which also function as a night club. A fair ground is also envisaged in the overal development of the resort. A children park that will be equiped to meet amusement requirement of children and youth is viewed as a socialising vehicle.

7.6.3: Educational Recreation

The aquarium complex is expected to serve for both recreation and education. It has an educational tour reception wing to which is incorporated a reference library and biological classification room. A formal lecture room is provided for 50 people at a time. Craft museum, botanical gardens, theatre and the aquarium are important recreational and educational assets provided.

7.6.4: Instruction and Entertainments

There are popular forms of entertainment that give pleasure to and instruct the audiance. The auditorium

theatre is provided for conferences, lectures, discussions and cinema or theatre activities. The amphitheatre serves for both drama, music and related cultural dances and other night entertainments requiring open air.

(a). Design of the amphitheatre

The amphitheatre is designed to be of the site and not on the site it utilizes the topography of the sight to the maximum. Its function generates alot of noise that are considered a nuisance and therefore a health harzard. It is for this reason that it is zoned away from quieter zones like the administration block and the housing units. It is provided with its own parking space for users.

(i). Geometry and accoustics

The shape of the amphitheatre is oval, which in pure geometrical form is a concave. This shape tend to focus sound and therefore produce non-uniform sound distribution. But where concave shapes are introduced in design it is acoustically desirable to have the focus outside the room. Essentially strong reflections must be avoided. However, we are dealing with an open-air theatre which reduces the effect of this reflection. Notwithstanding, the use of sound absorbers are recommended to reduce non-uniform sound distribution. Resonance absorbers are considered best which is used for a narrow band of frequency selective absorption. Resonators are made by placing of a panel with holes infront of a thick layer of

porous material. The large number of audiance at the function also contribute to sound absorption.

(ii). Construction and finishes

The walls are load bearing and constructed of hollow blocks. Column and beam are used to support cantelevered roof along the 'front of house' gangways. The roof structure is steel lattice trusses. The back stage facilities is however covered with reinforced concrete roof slab. The floor of the theatre is covered with polished brick joined with sand/cement mortar. Intermediate gangways are provided with Aluminium balustrades which functionally define the circulation on either sides of the seating area. Floor of back stage facilities (except for rehearsal hall which is finished in brick) are finished with terrazzo.

7.6.5: Administration

When a number facilities are brought together in a complex ~~such~~ like this, an administration unit is obviously necessary. It houses the central working force for the whole resort.

The administration block is designed as a one-storey building. Commercial agencies like the bank, postal and travel agencies are catered for on the ground floor. A receptionist is found on both floors, promotion and publicity, general office, booking and registration are also found on this floor. On the upper floor are located

offices, committee room and staff lounge.

(i). Construction and finishes

The traditional structure of column and beam is employed in the construction which give greater freedom in the design of the cantelevered facade both in the choice of material and finishes. Floors which are of reinforced concrete are finished with P.V.C. tiles. The ground floor is however finished with non-glazed ceramic tiles to withstand wear and tear and hence more economical.

(ii). Services

Toilets are placed directly on all floors for effective soil disposal. In view of the fact that the buildings will be constructed in phases, man holes and septic tanks are to be provided. It will utilize single stack system and tanks are situated at a minimum distance of three metres from the building line as foundation pathway or any constraints may allow. It should be noted that where natural fall occur, inlet should be kept as high as possible, pipe are to be 100 mm in diametre.

Sewage need to be disposed of quickly and easily. municipal system is not available in the site area. Therefore, additional and suitable land is necessary for sewage disposal. The disposal system will involve septic tank as earlier stated or made complete with rotary distributor system. These systems involve the allocation of an adequate area of site, which should be well separated

and screened from the resort by means of closed fences, trees or hedges.

7.6.6: Guest chalets

These are to be put on the site in the final phase of the development. The site layout proposes for chalets, suites, future development also anticipate hotel unit and round huts for variety. An executive chalet is designed as semi-detarched one-storey duplex. They are single bedroom with double bed space. Each provided with its own kitchnette, dressing room and conveniences. It has large living/dinning room adjacent to the kitchnette.

The chalets command good views of the lake and relaxing view of the irrigated farmland on the other side of the reservoir. Natural ventilation is given priority with minimum wall exposure to the west sun particularly for bedroom. The longer side of the building is placed parallel to the predominant wind direction. Walls of bedrooms are therefore conclusively exposed to the North.

## 7.7: Conclusion

There is nothing in the physical landscape or features of any particular piece of land or body of water that makes it a resource worth exploiting. It is the combination of the natural qualities and the ability and desire of man to use it that make a resource out of what otherwise may be a more or less meaningless combination of rocks, soils and trees.

If not for anything, the thesis has attempted to explore the frontiers of water to bring the life therein into a building and letting it to move in group ecology. The project has also attempted nature conservation through a programme that is directed towards providing a multi-themed leisure attraction, offering variety of facilities and interests. The author strongly believe that the topic has greater challenges for those who have interest in tourism. It has got qualities that can still be exploited.

## Glossary of Terms

Festival: Connotes public celebrations or collective ritual activities, more popularly, a festival is identified as a day or season for rejoicing and morry making within a given community.

Culture: The totality of a people's visual, sensual and psychic Art, beliefs, music, dance, social institutions, personality characteristic, etc.

Fiesta: Synoymous with the term festival and may be used interchangeably.

Rites/Ritvals: The different forms of practices or ceremonial activities frequently associated with a people's overt manifestation of their belief in or constellation of supreme beings.

Sacrific: Physical presentation of something of great value to oneself or to the participating community, for the sake of supernatural being.

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## APPENDIX A

### LIST SHOWING FISH SPECIES CAUGHT FROM RIMA RIVER AT VARIOUS PLACES BY THE FISHERIES SECTION OF THE AUTHORITY

| NO. | NAME OF THE SPECIES | F A M I L Y |
|---|---|---|
| 1. | Allestes baremose | Characidae |
| 2. | A. Levcisars | " |
| 3. | A. Nurse | " |
| 4. | Bagrus Bayad | Bagridae |
| 5. | B. Docmac Niger | " |
| 6. | Barbus Spp. | Cyprinidae |
| 7. | Clarias lazera | Clariidae |
| 8. | C. Anguillans | " |
| 9. | Gnathonemus Senegalensis | Mormyridae |
| 10. | Hyporopisus Bebe | " |
| 11. | Labeo Senegalensis | Cyprinidae |
| 12. | L. Coubie | " |
| 13. | Malaptorurus Electricus | Malaperuridae |
| 14. | Marcusenius Psittacus | Mormyridae |
| 15. | Mormyrops Deliciosus | " |
| 16. | Petrocephalvus Bane | " |
| 17. | Physailia Pellvcida | Schilbeidae |
| 18. | Protopterus Annectens | Lepidesirenidae |
| 19. | Schilbe Mystus | Schilbeidae |
| 20. | Symodontues Combiensis | Mochokidae |
| 21. | S. Ozellifer | " |
| 22. | Serotheredon Niloticus | Cichlidae |
| 23. | S. Galilaevs | " |
| 24. | Lates Niloticus | Centropomidae |

## APPENDIX 'B'

## PLANTING IN THE DRY TROPICS

Ornamental Trees

Acacia Seyal
Azadiracta Indica
Bavhinia
Delonix Regia
Jacoranda Minisifolia

Shade Trees

Adansonia digitata
Azadirachts Indica
Cassia Siamea
Khaya Senegalensis
Mangifera Indica
Parkia Clappertoniana - Dorawa

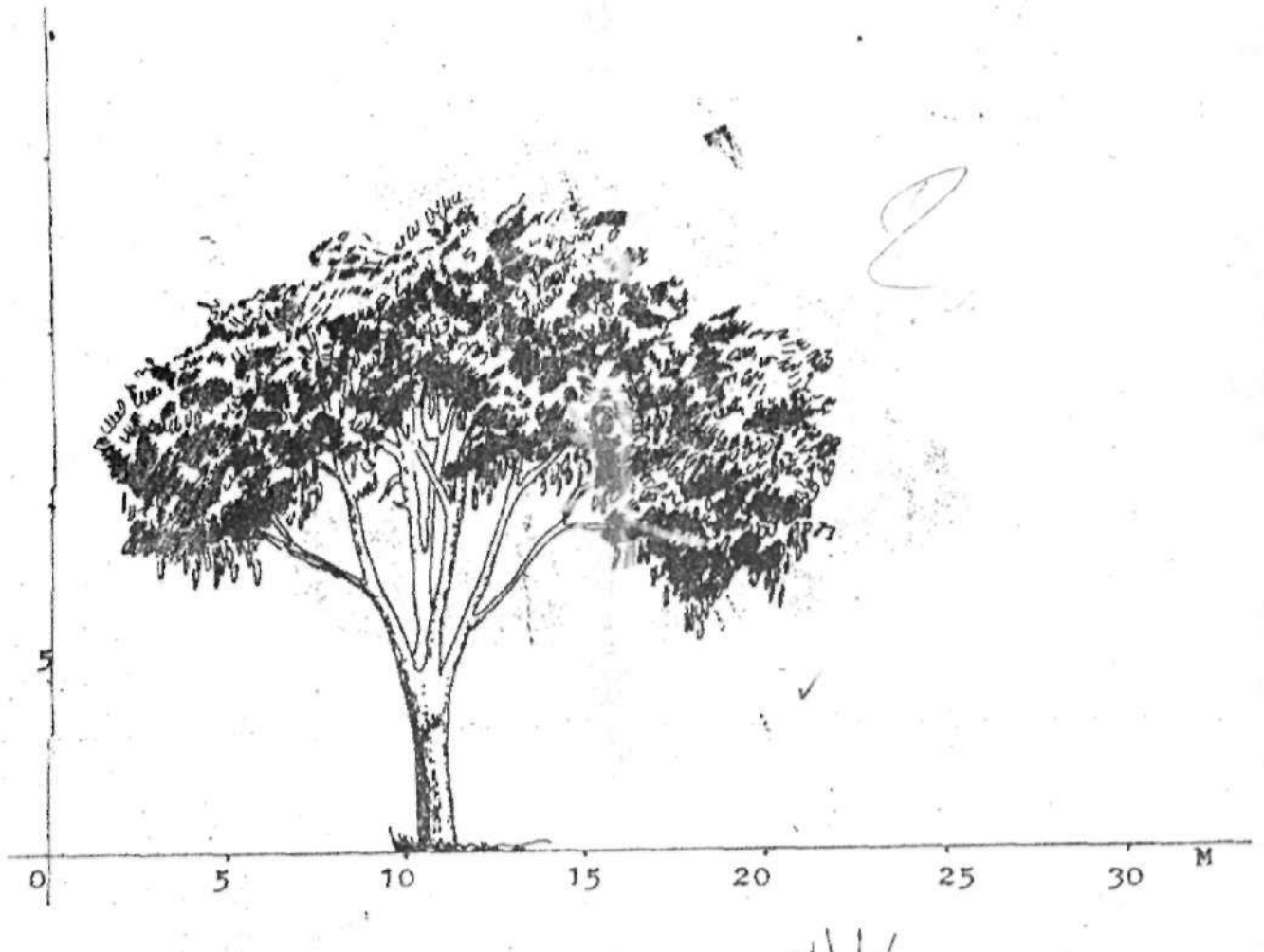
Native Trees - Special uses

Barasus Flabilifer - Giguiya
Buterosporum Parkii - Kadamya
Hypaene thebaica - Dum palm
Izoberlinia doka - Doka
Raphiia Vinifera - Tukuruwa
Tamarindus Indica - Tamavind tree

Fruit Trees

Citrus aurantium - Orange
" paradin - Grape fruit
Cocos nucifera - Coconut
Carica papaya - Pawpaw
Elaesis guineensis - oil palm
Mangifera Indica - Mango
Parkia clappertoniana - Locust bean
Pheonix dactylifera - Date palm

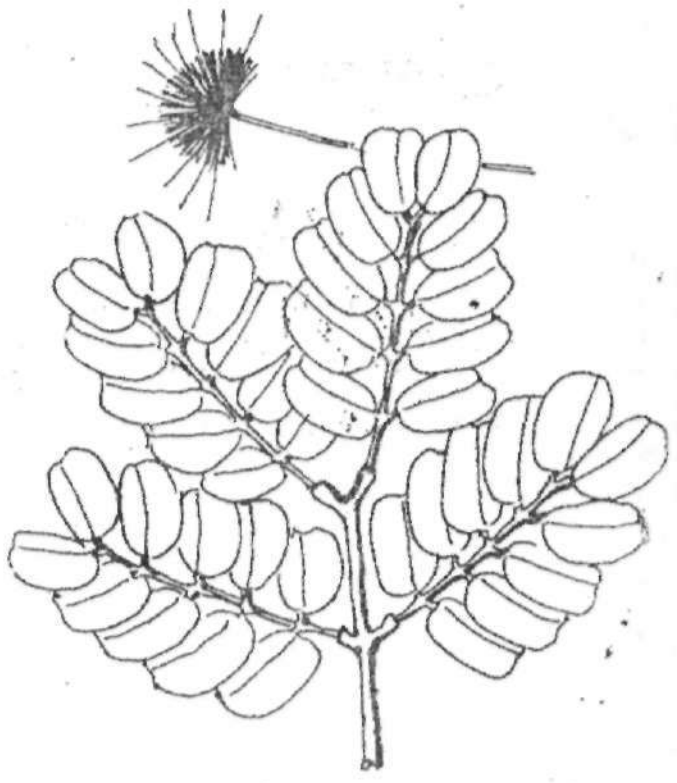
# APPENDIX B: PLANTING IN DRY TROPICS

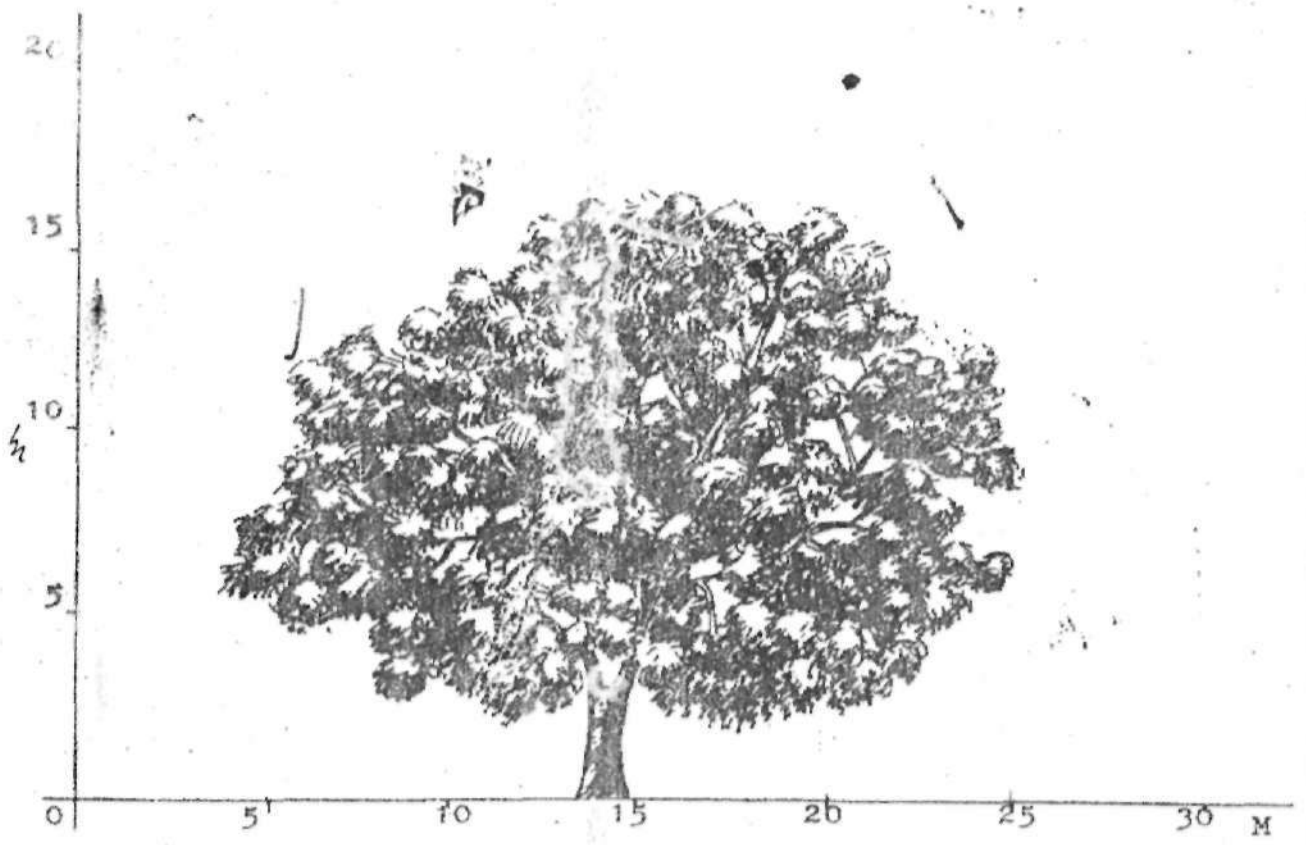



(1) ALBIZZIA SP.
(Katsari)

Wide distribution, savannah regions

Fast growing tree, Crown spreading, flowers (jan.-mar.) greenish-white, fruits thin, papery, yellow.

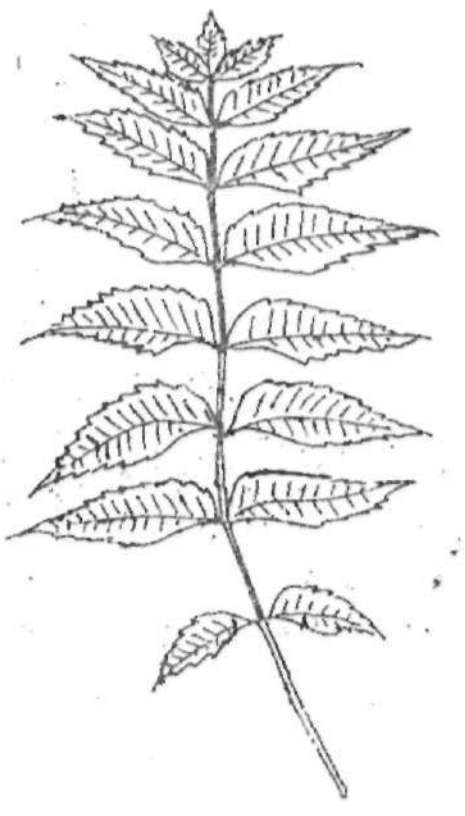


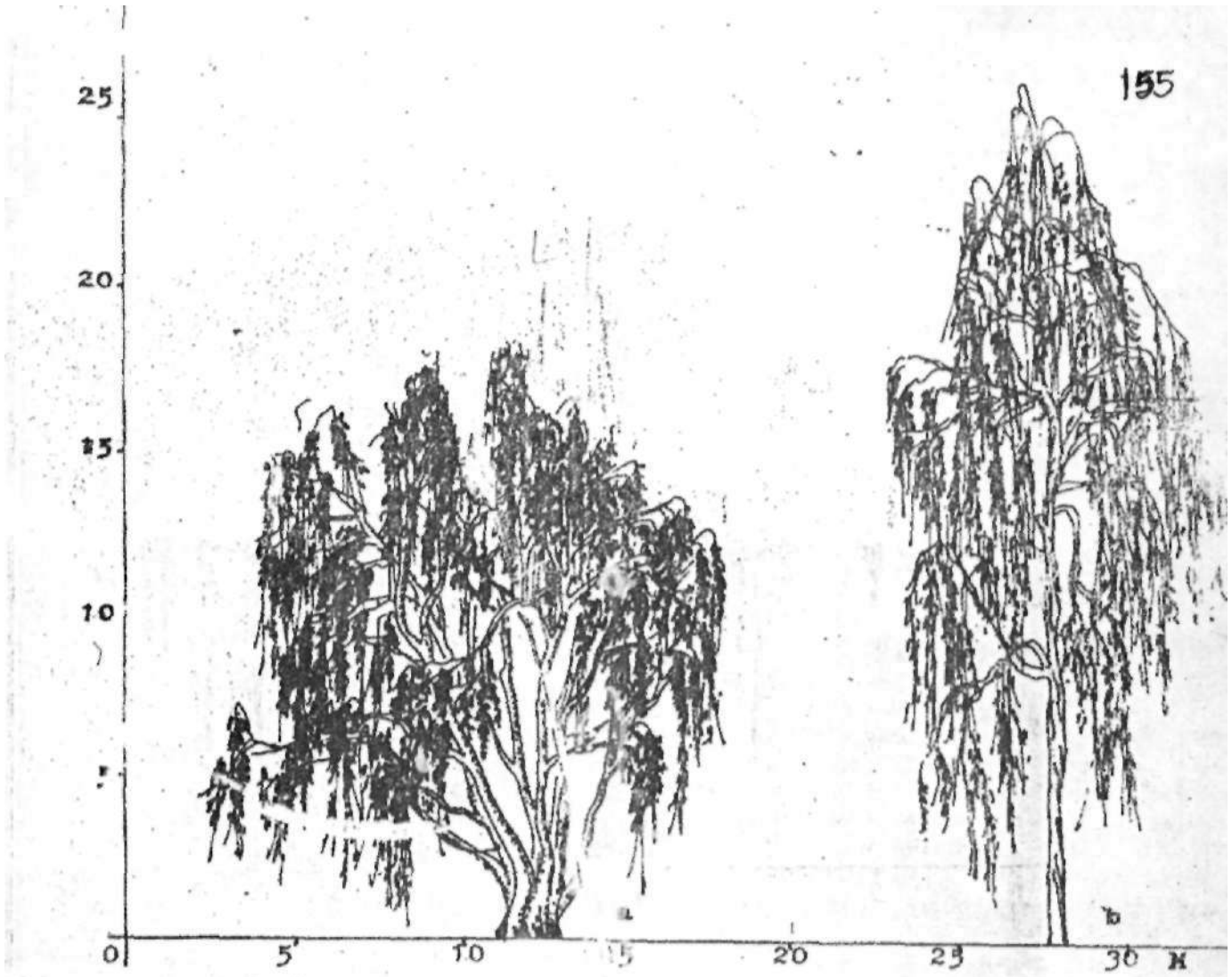



(2) AZADIRACHTA INDICA
Neem tree

Drought resistent specis,
widely cultivated.

Crown dense, leaves glossy,
crowded on the end of branches.
Flowers white, scented, (dec-
may).
Very endurable tree.






(9) **EUCALYPTUS** a) Amygdalina

A huge tree with narow crown, stringly bark , leaves linear, odour peppermint.
Dry regions.

b) Maculata

A tall slender tree, bark peeling off in patches, leaves linear, with strong "eucalyptus" odour.
Hot and dry regions.

c)Robusta

Mostly near sea coast.



D o d o n e a  viscosa
Clammy hopseed bush

Vigorous woody evergreen shrub of erect habit, up to 4m in hight 2m spread.
Small leathery leaves, flowers greenish-yellow,winged seed pods.
Good as decorative hedging or windbreak, can be clipped hard.
Widely tolerant of soil but prefers good drainage.
Withstands full sun, drought, wind and salinity.
Propagate by seeds or cuttings.



E u p h o r b i a  pulcherrima
Poinsettia

Bright scarlet bracts, very showy.
Shrub suitable for grouping.
Up to 3m in hight.
To be cut back after flowering (dec-feb).
Widely tolerant of soil, drought resistent.
Prefers fill sun.
Propagate by cuttings.



F i c u s  spec.

A shrub or tree, often epiphytic at first.
Large ovale leaves, often glossy.
The areal roots embrace the host tree.
Wide spread distribution.



H i b i s c u s  r osa-sinensis
Red hibiscus



Vigorous, much branching shrub, 2-4m in height and spread.
Leaves dark-green, and large numbers of short lived trumpet flowers produced throughout the year.
Colours range through red, orange, yellow and magenta, single or double.
Tolerates full sun or partial shade, but it will not withstand salinity.
Prefers moisture but will tolerate drought.
Can be pruned to keep low.
Good , decorative hedge.
Propagate by cuttings.

H y m e n o c a l i s  littcralis
Spider Lily



A low plant with dark-green long leaves and pure white, delicate flowers, borne in clusters on stout stalk. Flowers ones a year, but bushy leaves make effective edging.
Prefers sun and moderate moisture.

I x o r a  coccinea



Evergreen woody shrub, flowers scarlet, in crowded terminal clusters.
Of slow growth,
commonly cultivated in gardens as a decorative shrub.
Prefers sun, it will tolerate drought.

J a s m i n u m  spec.

A straggling semi-climbing shrub.
Flowers pure white, strongly scented.
Drought resistent.
Various species.



L a g e s t r o e m i a  indica
Crape - myrtle

Woody shrub up to 2m in hight.
Large magenta sprays.
White and pink varieties.
Drought resistent but prefers
sea-side regions.
Needs full sun.

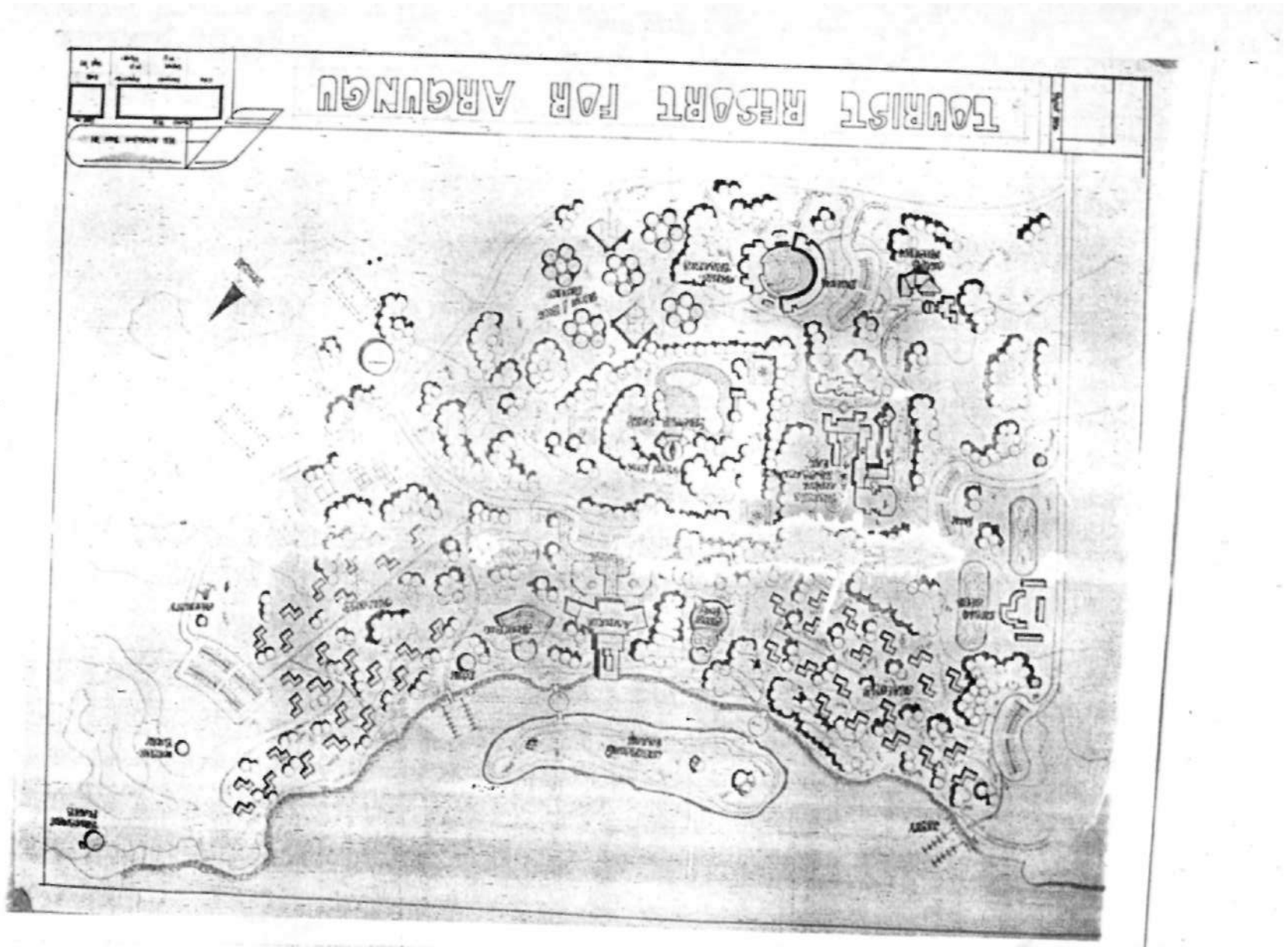


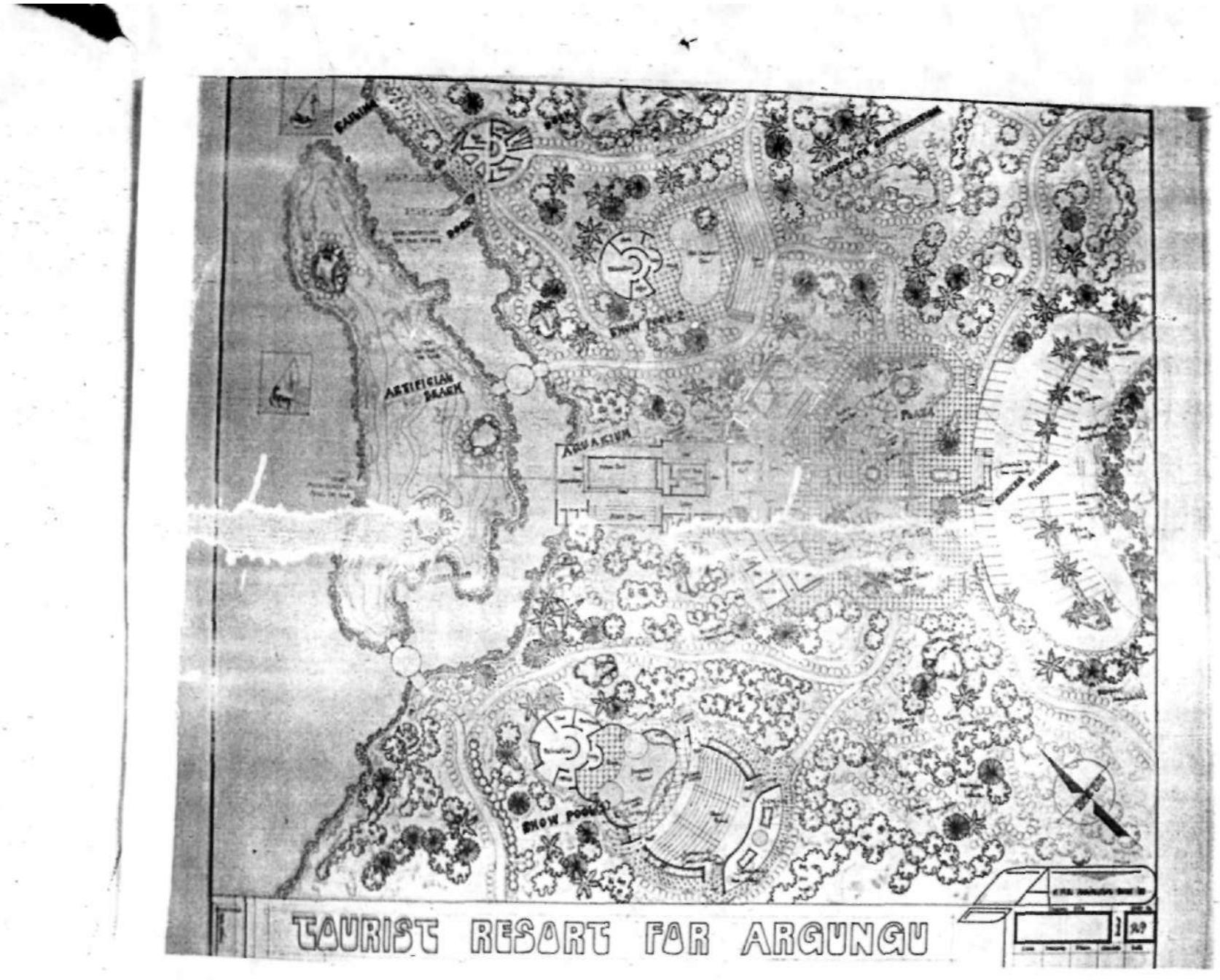
L a n t a n a  camara

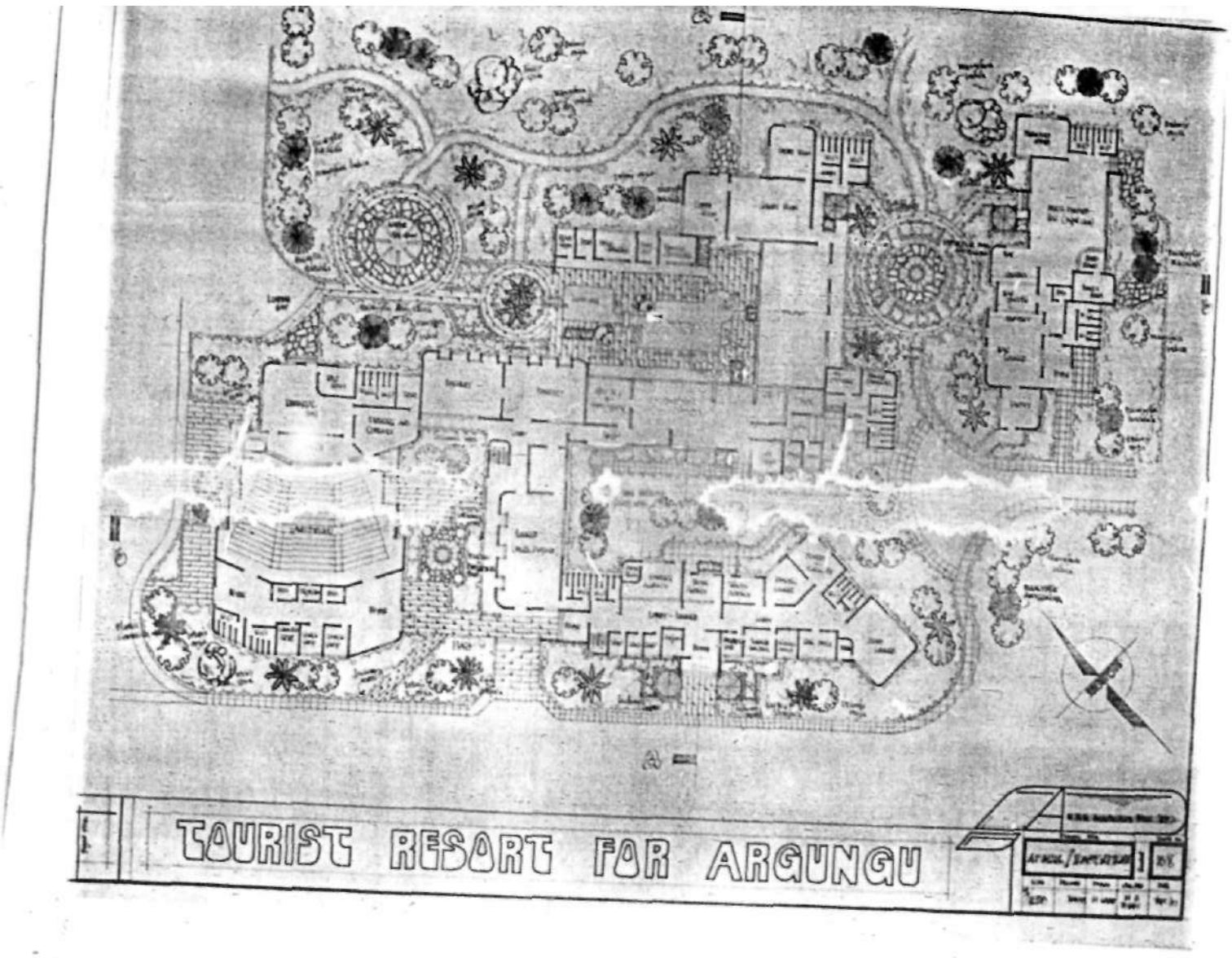
Fast growing evergreen straggly shrub
Usually grows to 2m high but becomes
rampant with excess irrigation.
Leaves medium green with rough texsture.
Dense flat-topped flower heads of
small turbular flowers,,orange, pink,
yellow,red.
Draught resistant altrogh needs
moisture until established.
Withstands full sun and any type of soil.
Best grown as dense hedge, clipped often.

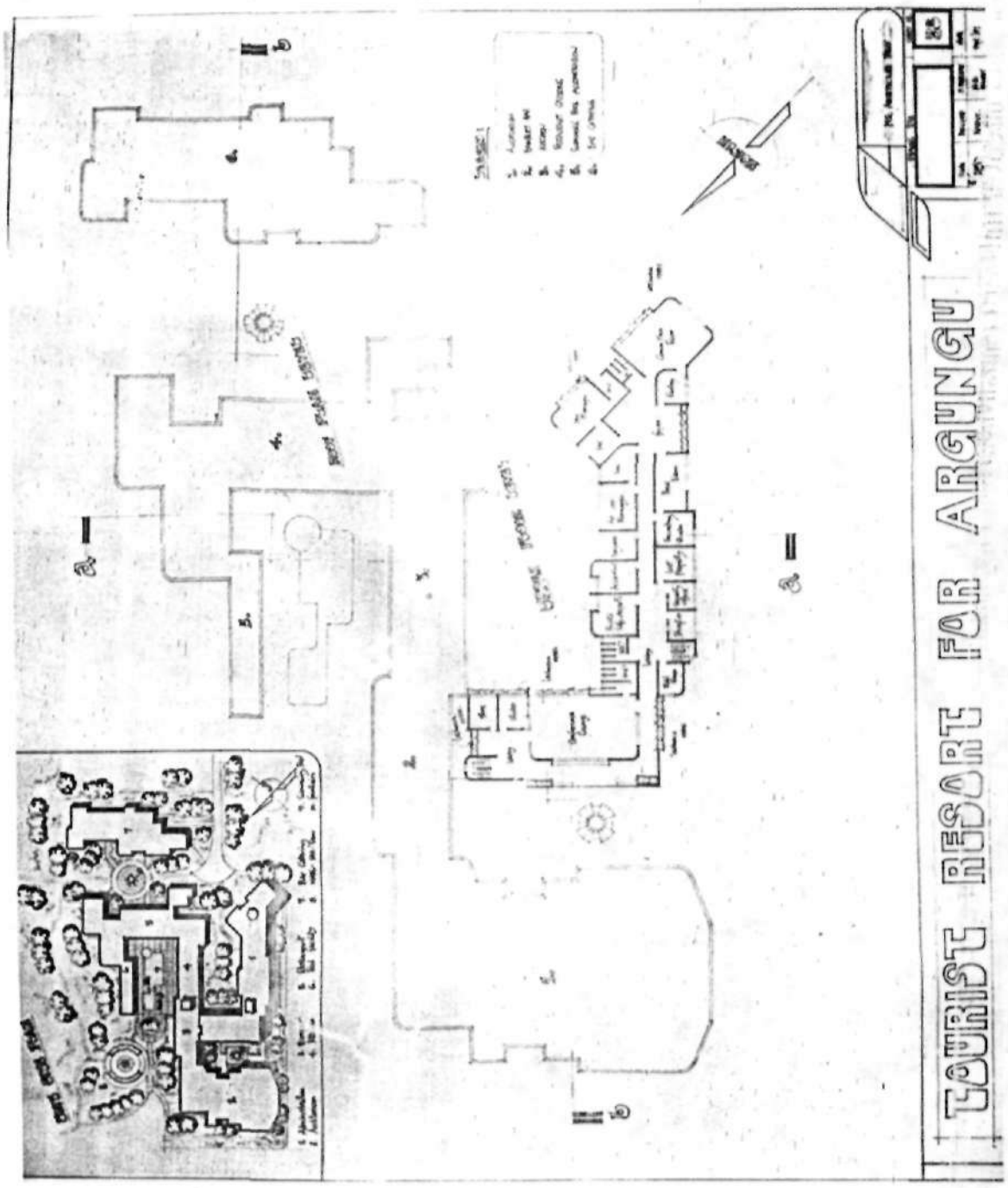
L o c h n e r a  rosea

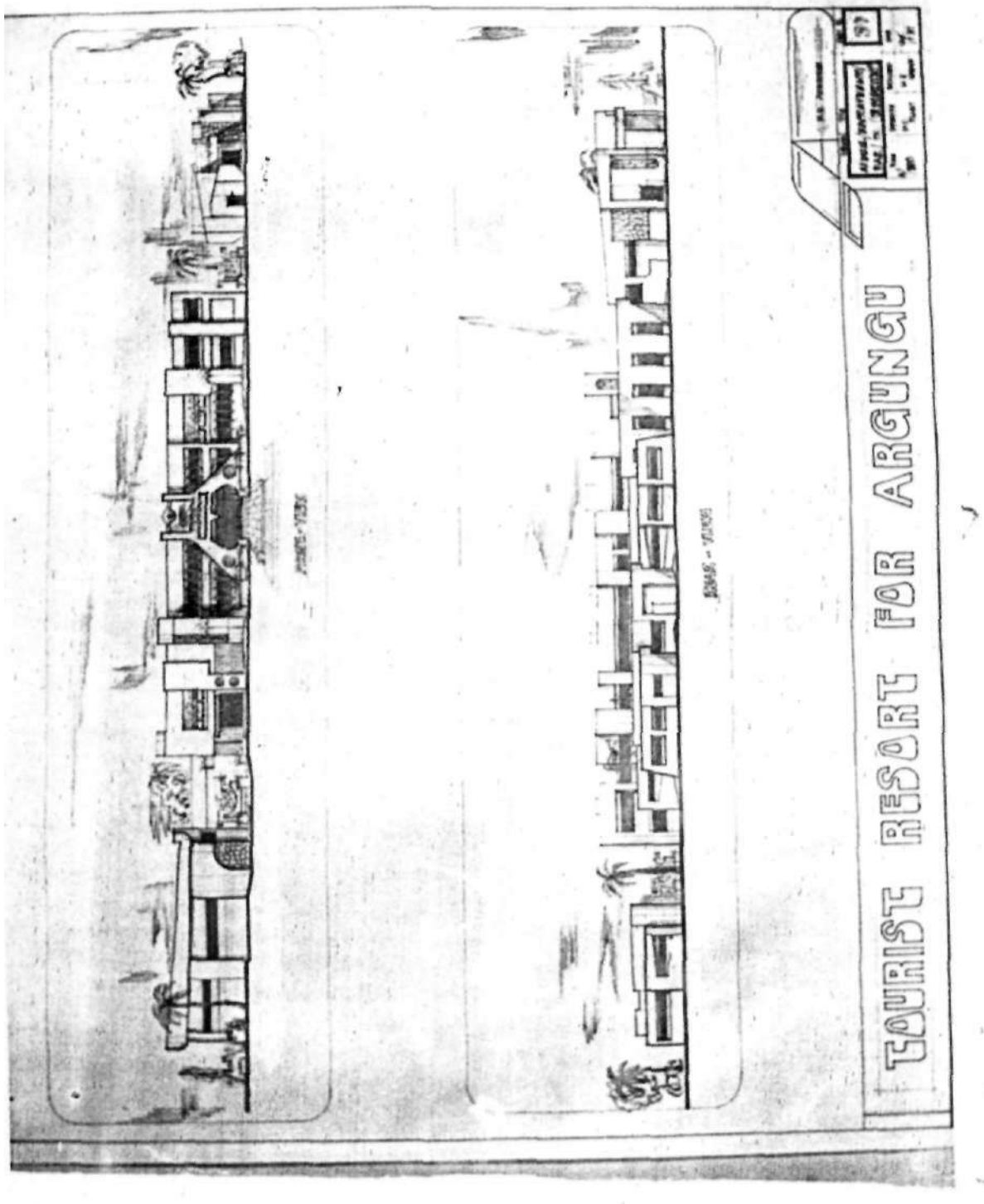
A low, bushy plant with erect sprays.
Flowers all the year,
white or pink varieties.
Suitable edging for paths, borders.
Widely tolerant to soils.
Preferes sun.

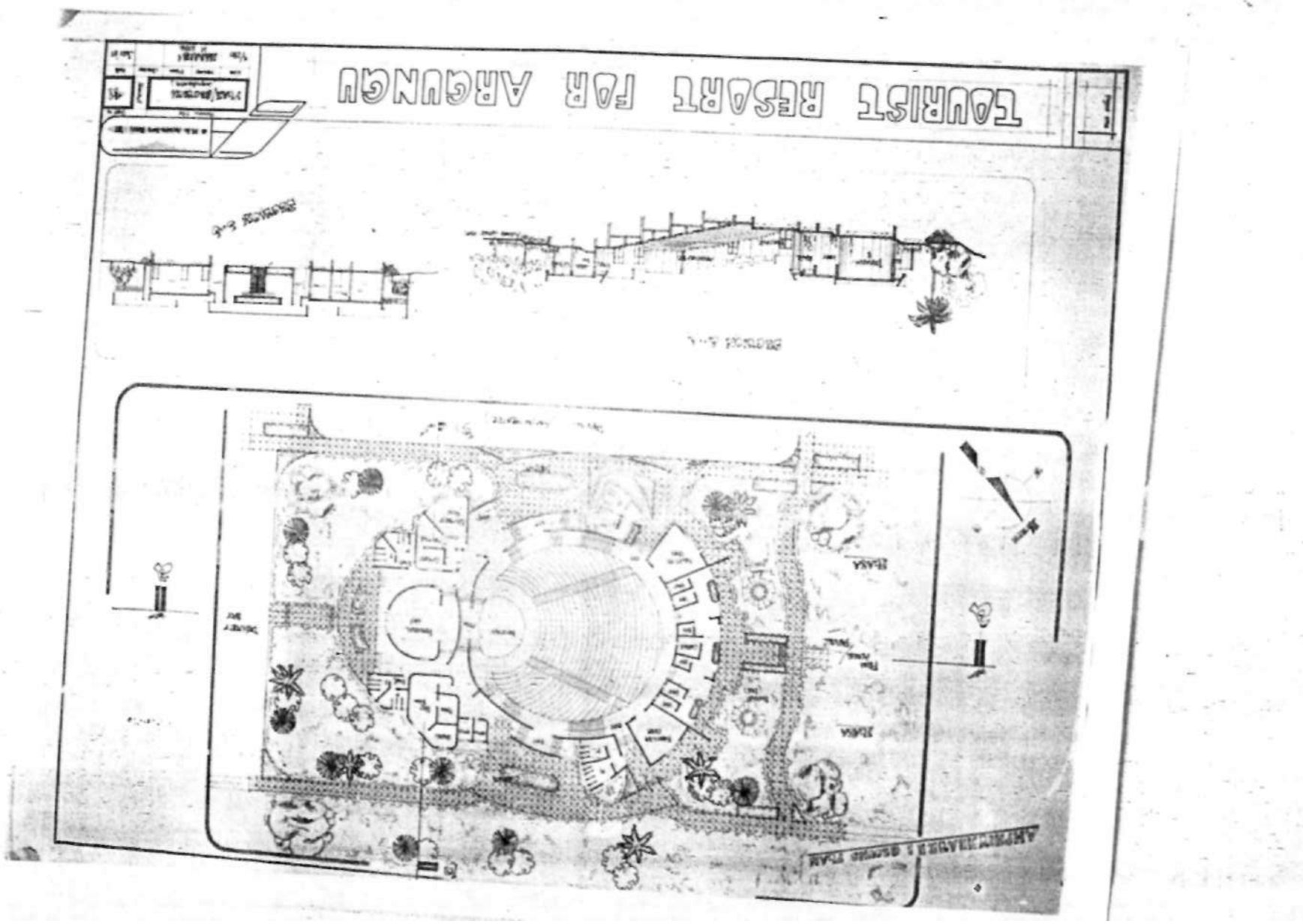

TOURIST RESORT FOR ARGUNGU

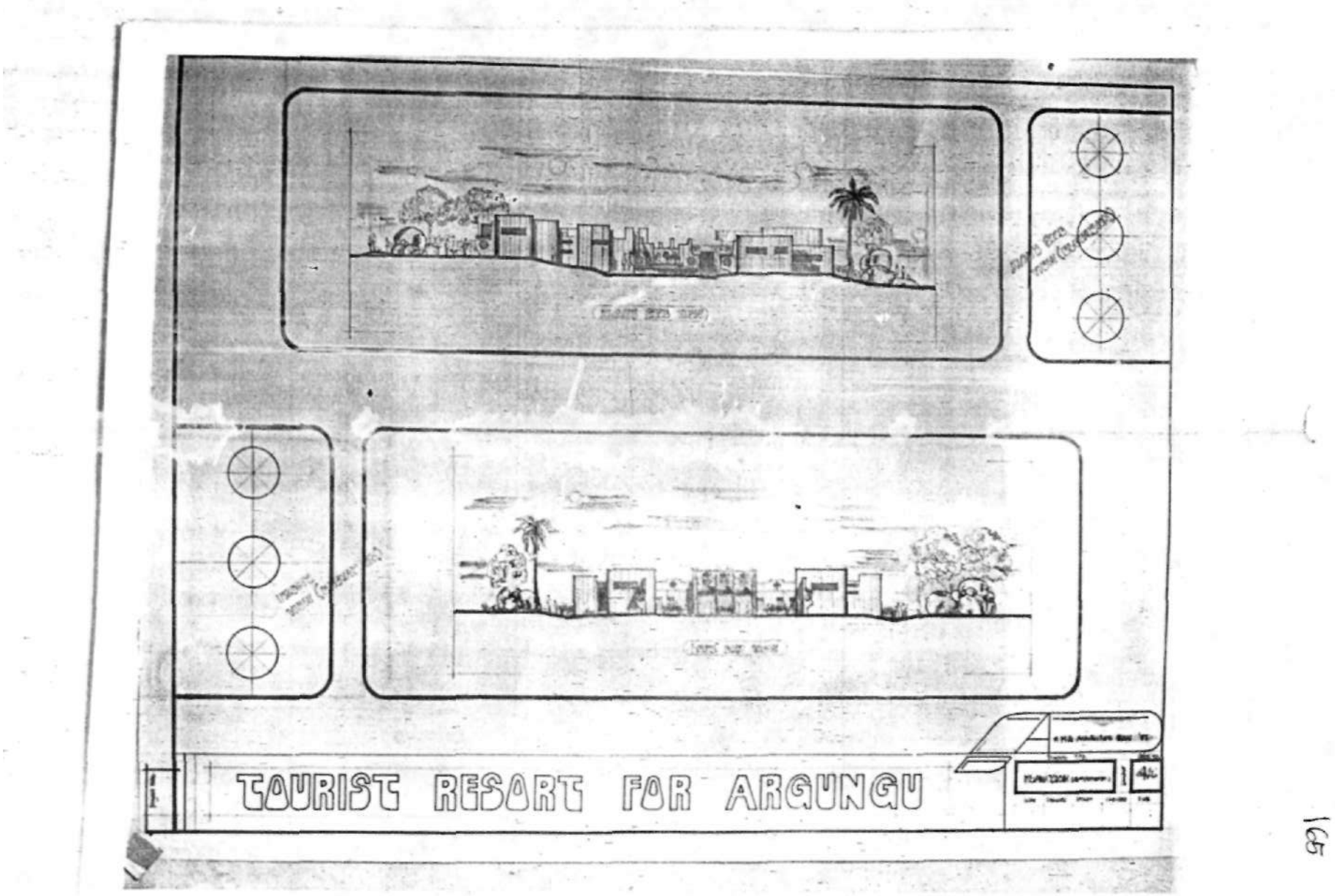

PARKING
PARK
ARTIFICIAL BEACH
SNOW PARK
AQUARIUM
PLAZA
TOURIST RESORT FOR ARGUNGU

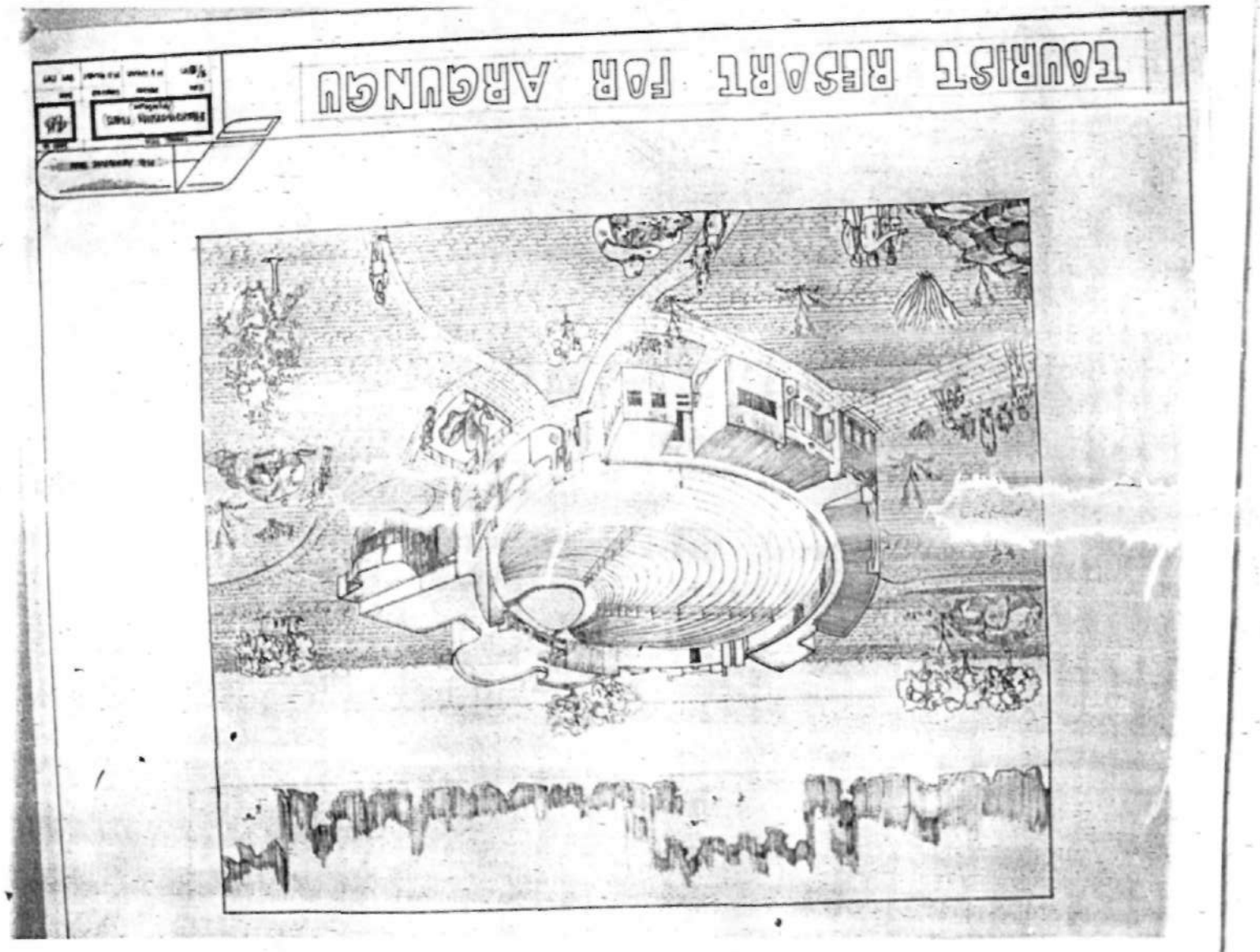

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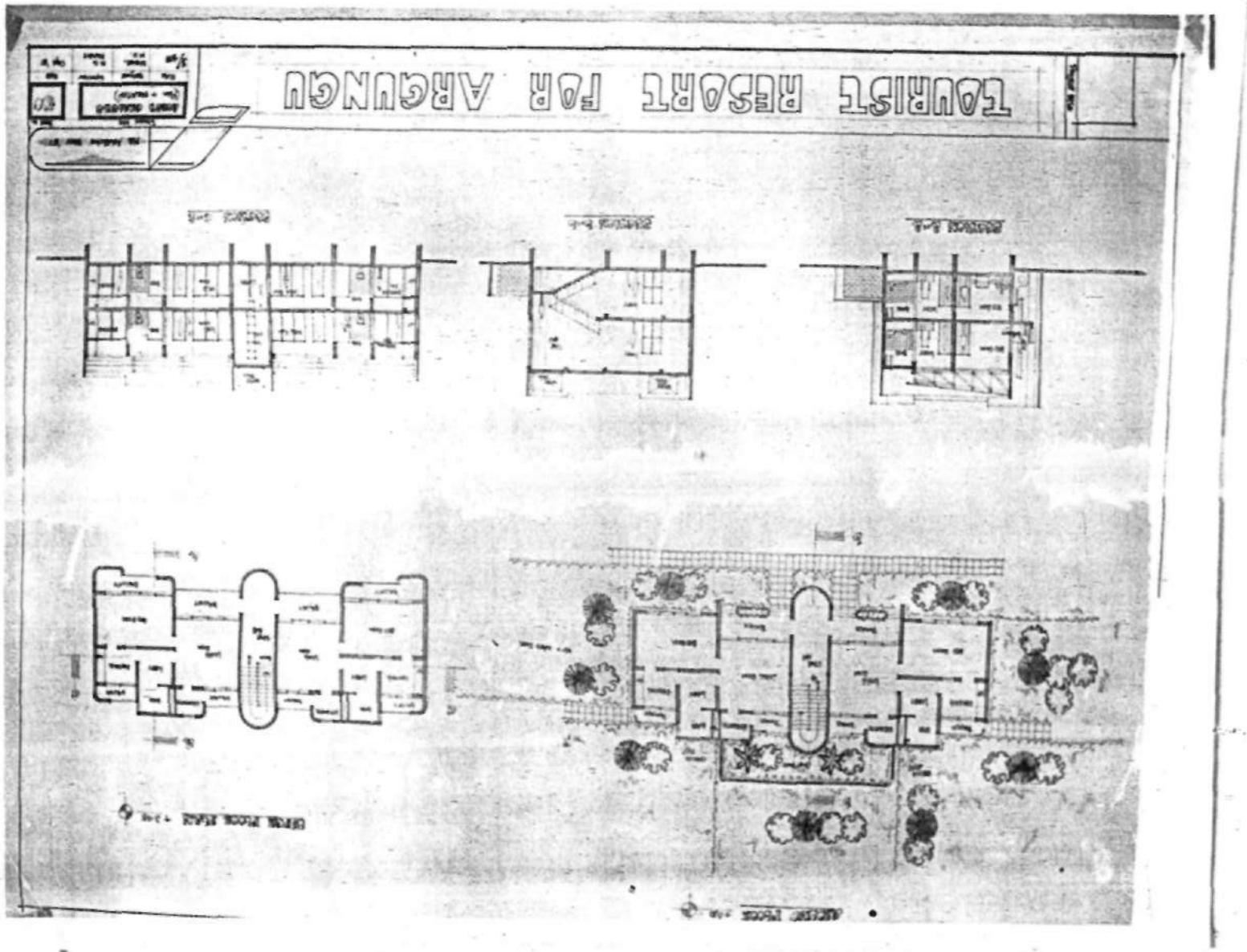

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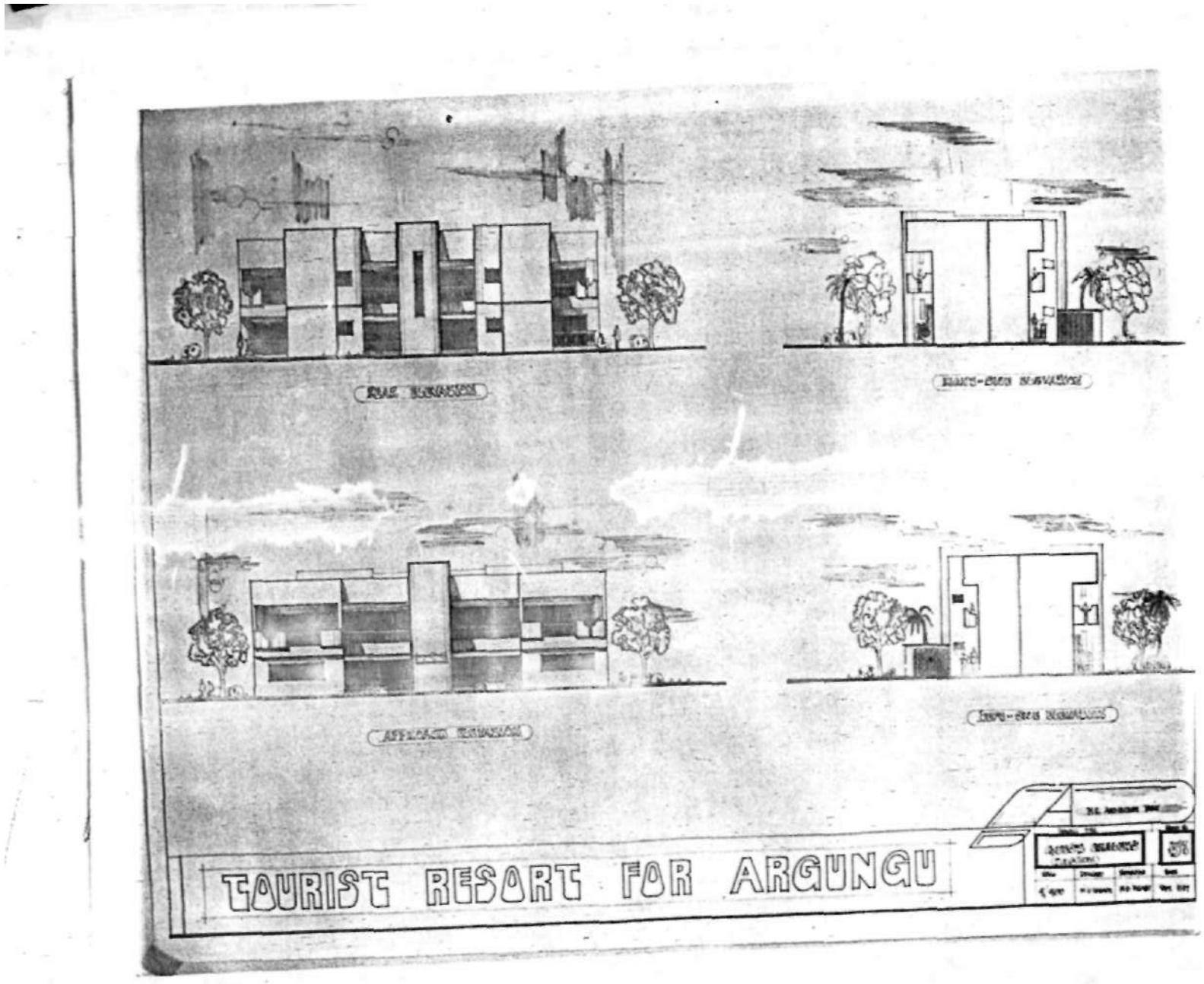

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