COMMUNITY BUILDINGS COMPLEX, NORTH BANK - MAKURDI

By

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D E D I C A T I O N

To the EDACHE FAMILY for their support, love and concern.

To all the good people of the World.

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

This thesis has been made possible by the following personalities:

Mr. Stan Kawka for making me realise early enough the magnitude of thesis. Mr. and Dr. (MRS) Hajnosz my mentors And last but not the least all my studio colleagues for their tremendous contribution.

MSC. THESIS 1980 AUGUSTINE ADA EDACHE

TOPIC: COMMUNITY BUILDINGS COMPLEX, NORTH BANK-MAKURDI

ABSTRACT

The North Bank part of Makurdi which is about a quarter of the whole of Makurdi is an area which is in a pathetic situation. It is really absord that a community which has a projected population of 30,000 in the year 2,000 AD has not been given any thought about the provision of the necessary components that are commensurate with this status.

This part of the town has some unique features that should be considered. The bottleneck of access to facilities in the main town is most grievious. One wastes nothing less than one hour if one wants to post a letter„ As if that is not enough one has to spend an extra amount of one Naira to do this. If one wants to post a letter and prodeed to the bank then to the market and back home one surely has to spend the whole day and a lot of money on transportation.

I have chosen this unique opportunity to contribute in a small way to the development of this part of Makurdi. This is a unique opportunity because the site is ideal (centrally located) and it folios the dictates of the theory behind the design of a Community Building Complex.

The site measurer; approximately 250M x 200M ie 5 Hectares. It is at the junction of the two busy roads in the district providing good mass movement of people to the centre.

SCOPE

The scope of the design is such that the individual components are designed to architectural scale and only one of them (the Multi-purpose Hall) is drawn in details. This is because of the limitation of time. The planning of the whole components to make the centre is an equally important, (if not more) factor in the Thesis.

GOALS AND OBJECTIVES

GOALS

1. To make the Benue State Government aware, by presenting my design to them, of the need for such a complex.
2. To act as a place of socio-cultural integration of the community regardless on ones class, believe or nationality.
3. To generate income for the government by rental feedbacks.
4. To give a healthy environment for a clean competition between workers of the same profession.
5. To create a place where people will want to go, not simply because they can get free services but because it is a comfortable, familiar, friendly and exciting place to be.

OBJECTIVES

1. For the furtherance of communualism.
2. Providing for the promotion of inter-disciplinary co-operation amongst social workers.
3. Creating a forum for the disemination information.
4. Improving social facilities to higher standards and qualities.

SIGNIFICANCE OF THE THESIS

The significance of this thesis is the formation of sub-urban neighbourhood centre separate from the inner city structure. The design is a spacious, relatively unarticulated form of buildings. Functional diversity is aimed at by allocating a large amount of employment to the whole area.

In conclusion, the design is a rather low, small scale, carpet - like townscape not infringing on the surrounding landscape.

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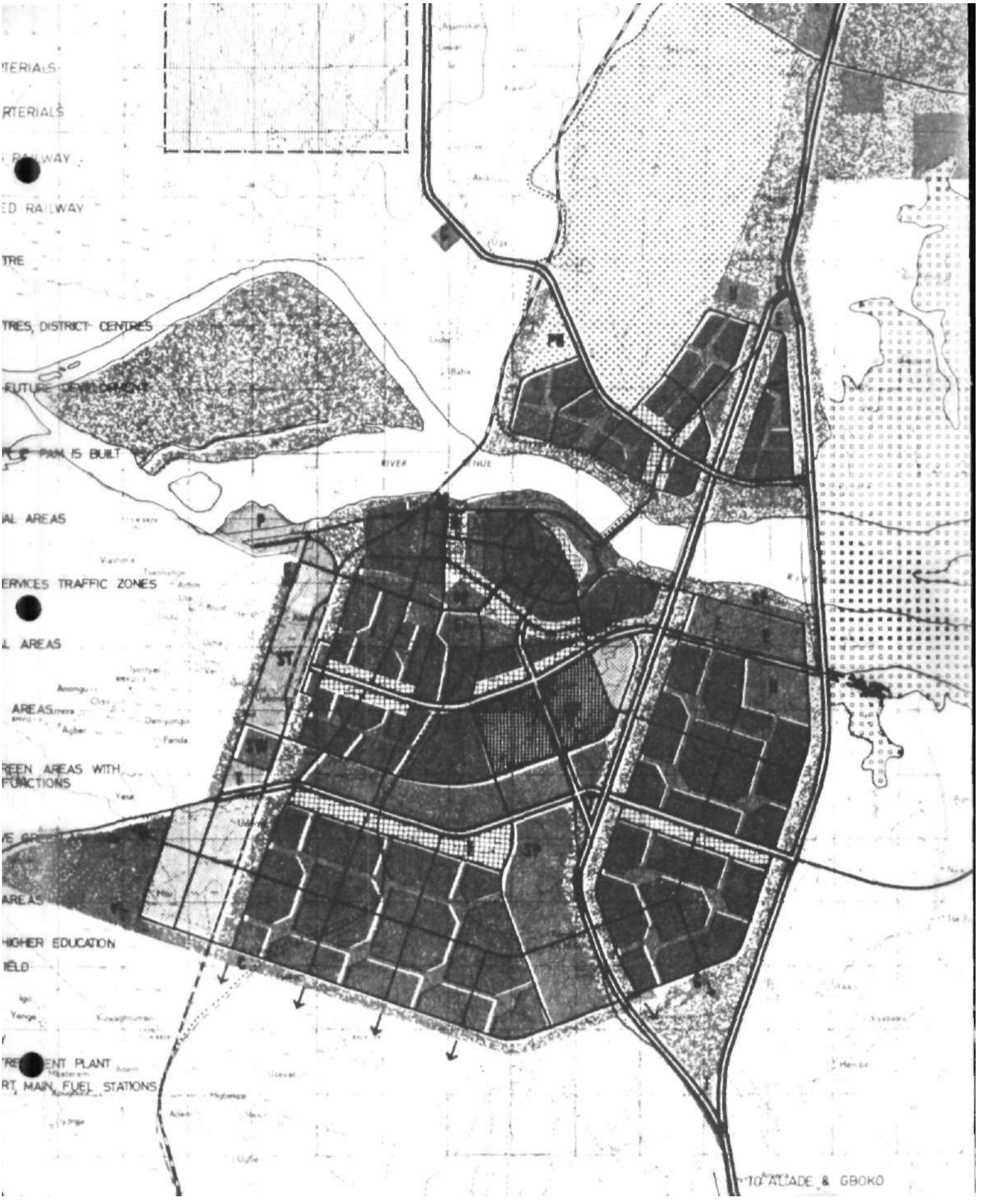
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A BRIEF HISTORY OF NORTH BANK - MAKURDI

North Bank came into existence with the construction of River Benue's Rail Road bridge in 1932. Before this time there was a small settlement very close to the river bank. The shifting river bed and the great difference between the water levels did not augur well with the use of ferries for crossing River Benue. After the completion of the Rail and Road bridge in 1932 the North Bank bridge head generated the usual commercial settlement but it could not develop much further due to reasons that I will enumerate shortly.

As can be seen from the above, North Bank is not a traditional settlement, it developed with the construction of the North-South Road. It was a no man's land so people lived anywhere they felt suitable for their trade. This is very apparant from a map of North Bank. The whole place is not designed therefore it is chaotic. The settlement grew along the road and fattened to the interior only because of access to facilities like the market, bus station etc.

When Makurdi became a provicial headquarters the then public Works Departments started given plots out to individuals for the building of residential houses at the North Bank. Individuals were not enthusiastic about this because amenities were just not there.


TERIALS
RTERIALS
RAILWAY
ED RAILWAY
TRE
TRES, DISTRICT CENTRES
FUTURE DEVELOPMENT
PARK IS BUILT
AL AREAS
ERVICES TRAFFIC ZONES
L AREAS
AREAS
REEN AREAS WITH
FUNCTIONS
AREAS
HIGHER EDUCATION
IELD
ENT PLANT
RT, MAIN FUEL STATIONS
RIVER
TO ADE & GBOKO

Water and light, that are very essential for human habitation were also scarce commodities

When Benue State was created in 1976 Makurdi became the State Capital and this drastically changed almost everything in the town. The main town of Makurdi was not enough to take the influx so this spread to the North Bank. The facilities available in the town were over streached to a breaking point so a thought could not be given to the provision of some of these amenities in North Bank which is just the annex of the main town. But now that the state capital is settling down to business North Bank has started getting its share of some facilities like water and electricity.

It is predicted that the main part of North Bank will reach a stable population of about 30,000 by the year 2000. This prediction is based on the assumed population density of 100 persons per hectare of land.

If one should consider the possibilities of development of the North Bank one envisages a lot of obstacles. Due to the areas being already developed by the Army and MUCAST not much remains for a large scale development if one excludes the possibility of moving further North and abandoning the River-side location, or encircling the army and the proposed University. All these go to add to the arguement that the North Bank

will have a stable population of about 30,000 in the year 2,000 A.D.

PROBLEMS OF NORTH BANK

Before I discuss the problems that face North Bank it is necessary to know the reasons behind the problems.

It is generally believed that since the creation of more states in Nigeria in 1976, consumer spending has been on the increase. The biggest proportionate increase has been in trnasport and entertainment. Spending on most other things has also increased too. More and more working class families have bought, as well as cars, house hold equipment like refrigerators and television sets. This has not been restricted to government working class families alone, there was a tremendous increase in the number of contractors. These contractors made a lot of money by doing contract jobs for the government. This group of people experienced a lot of changes in their life style. A need for contracts with a lot of social, cultural, recreational and Governmental services then arose.

Housing was anothef service that experienced an uplift. More working-class people live in modern homes. More than a quarter of the housing schemes in Makurdi were built after 1976.

Experience seems a fairly good pointer to the main ways in which the extra consumer's income will be spent. The dictum

described as Tocqueville's law - 'What a few have today, the many will demand tomorrow' seems to have been largely born out by events. This might be an over- simplification but it is a pointer of likely future trends in consumption and patterns of life.

What seems to be happening in the North Bank now is a test to the paragraph above. People of the same class and needs live on both banks of River Benue in Makurdi. Now the people of the North Bank dont have most of the facilities that are necessary for a humane co-existence of people in a community. This has brought about the movement of people to the main part of the town for most of their activities. This activities include going to work, going to the Banks, Post Office, Markets and so on. The drainage is also seriously thought about and designed. The design is made simple so that it will not dorminate the human beings who are the users, ie it is in the human scale.

THE DEFINITION OF A COMMUNITY

In a paper written by Melvin Webber and published in the Book "The Future of Cities", A Community is defined as a group of persons who share common interests about the City system. They occupy but most a small part of their attention. He goes further to substantiate that for example, people who live within

a single water shed share an interest in water supply and flood hazards. But except during crisis, such shared interest are relegated to the far corners of one's concerns, partly because we learn to manage most of these systems.

With the improvement of human mobility the definition of a community in the context of place is becoming remote. The community is becoming more and more elastic because the size varies with social class. In the civilized countries and with examples here, the communities most valued by city residents are the thousands of different social groups that are bound together by voluntary association based on common interests attached to occupation, family, religion, hobby etc. As can be seen the communities are non-territorial in character, bringing people together from various localities.

Each social community is held together by a body of values perculiar to itself, and its value set may put it in direct competition with other communities.

Some examples of these social communities are: The Jewish Community, the Christian Community of some particular denominations, the Moslem Community, the Clubs membership all the world over.

In another argument by Peter Willmott in the same book it is learnt that increasingly people, as individuals, rather than as family members, travel longer distances to engage in specialised interests.

According to him all this represents a greater variety and more choice. It represents a qualification of the general picture of growing social Homogeneity. It in turn seems that we are moving both towards a greater homogeneity in certain areas of life and toward an increasing diversity in others.

This same writer went further to argue against himself that all these do not mean that the 'Place community' would stop to flourish. It continues to figure importantly in people's lives. Though its significance varies among other things by age, sex, social class, income and car ownership.

In the Nigerian context, it is ridiculous to some people for one to talk about a community without mentioning tribe, religion or state. This belief is what I stnad against. In many towns in this country today one finds that the indegenes are not the majority, this is a pointer that the towns are becoming muti-tribal, multi-religious and even multi-national in their human composition. This is also the case with who inhabits what parts of the town. Formerly most towns where a sort of partitioned in accordance with one's socio-economic status in the society. This is fast dying away. Residential plots are now given to the ordinary man even in the Government Residential areas (a place formerly reserved for the governmental big shots). If the National Electricity Power Authority (NEPA) line happens to pass besides your house the governor's house there is no way you can be denied light, all things being equal, if the governor has light.

This goes to suggest that the place community definition has come to stay.

COMMUNITY BUILDING COMPLEX

With the above conclusion a Community Buildings Complex is therefore a place where people that live within this same vicinity have a sense of pride to go to regardless of their status, social belief and religious belief. It is a place where because of the integration of different people one, begins to see oneself from outside. One of its service to the community is the stimulation of people to go there for activities and to make them converge for the disemination information. It is a place that should alleviate the suffering of people in terms of services from the government.

The community Building Complex in this context could be defined as the administrative, business, entertainment and cultural centre of the community.

As an administrative centre it is the meeting -place of local government officials and their work place. It serves as the place of work for other officials, professional officer like the legal practitioner's offices, architectural consultancy officers and so on. It should also served as offices for government departments like the police station and the fire service station.

As a business centre, members of the community should be able to go there to buy goods or to search for a bargain. It is also a place for commercial and professional firms.

As an entertainment and cultural centre it is the place where the citizens goes to watch a play or see films; to read or borrow books; to dance or eat good food. It is a place where different groups with particular interests meet together to pursue them - the philantrophic club, the music society and other groups which require for their support of a larger population than found in a single neighbourhood.

The centre is the focus of the circulation system. Its is very important that people should get in and leave with the least obstruction. This lead to the design of elaborate bus stops and car parks.

The principle behind the design should be to have a place that gives the greatest feeling of Urbanity. The spaces should be the most highly organised, the most architectural, and the place that gives the greatest impression of a town environment.

It is desirable to have some over-lapping of junctions, for, if the centre is to be really attractive, an interest an liveliness must be sustained in all its parts. This only happens when there is some mixing of building uses resulting in contrast in architectural character and in the drawing together or people using the centre for different purposes.

THE NEED FOR A COMMUNITY BUILDING COMPLEX IN NORTH BANK - MAKURDI

As one will see in Chapter Two the North Bank of Makurdi is a place that is totally forgotten in terms of amenities that make the human evironment humane. This though should not be the blame of this administration or rather the administrations since the creation of more states in 1976. The administrations before this time neglected the North Bank because they had all that the people that mattered then needed on the main part of the town.

If one should access the needs of the North Bank people in general one would discover that most of the components that could make up a Community Buildings Complex are not there. These components are Religious, Political, Social, Industrial Judicial Commercial, Theatrical, Athletic etc. Those that I consider most important are those that are not necessary income generating but service to the Community. Take for an example the Post Office, What justifications does one have to travel the whole length of over four kilometres just to post a letter. The distance is not only the barrier.

but the bridge. Due to the colonial administration's short sightedness the first bridge that was constructed over the River Benue is not wide enough for two vehicles to use from the opposite directions simultaneously. From practical experience, I know that it takes nothing less than thirty minutes in a private vehicle to get to the town from the North Bank. Add this time to the time one is going to waste in the Post Office and you find out that it takes the better part of the working hours in a day. The bottleneck caused by this bridge is the main cause of the people's suffering. I don't see a solution to these problems in the near future because of the unworkability of alternatives that I will mention below.

1. The possibility of using Ferry across the Benue Rivers as means of mass transportation:

This was attempted before the Rail-Road bridge was built. It was found out that due to the drastic fluctuations in the Benue River Ferry transportation is unworkable. The use of the small canoe, if considered, will also not be viable because of its economy and time wastage. One has to board the bus before and after using the canoe which one also pays for. Right now if one has to consider the charges of bus fares in Makurdi, one pays nothing less than one naira, this was for a return trip.

2. The possibility of using the new Bridge as a linkage.

This will just not work because of the distance one has to cover. Let's use the Post Office example again. From the centre of North Bank to the Post Office is about ten kilometres. I leave the rest of the judgement to you.

Consider the distance, the money one has to spend and the time wastage.

With the above analysis I have come to conclusion that the only way to solve this problem is to have a centre for the North Bank Community. This will go a long way to solving the problems of the residents of the whole community. If this place is centrally located the inhabitants at the periphery of the North Bank can get to it within ten minutes of walking.

THE ENVISAGED PROBLEMS OF SUCH A COMPLEX

The problem that this type of adventure could have is whether the people it is designed for would use it at all. Take the poor for an example, they might feel that the place is design only for the rich and not them. This also goes for the rich who might feel that mixing up with the poor is too much.

This I have viewed with serious gravity in the design. I have tried to solve this problem by putting in necessary components like the Post Office, the Police Station, the Fire Brigade and a Mini market. No one, whether rich or poor would say that he would not go,to say, the Police Station because it is not for his class of people. This because of the set up in the Police Force. A complainant would not be listened to in another station if he or she has one station near to his place of dormicile. This also applies to the other components of the centre. One would not go to the barber in the other part of the town when there are barbers all round him in the Community Buildings Complex.

The design is such that dirtiness has no room. The areas are keep to the barely necessary dimensions to disposal of waste.

The drainage is also seriously thought about and designed. The design is made simple so that it will not dorminate the human beings who are the users, ie it is in the human scale.

CHAPTER TWO

BACK GROUND STUDIES

2.01 Demographic Data

2.02 Physical Surveys

2.03 Climate

2.04 Traffic Survey

2.05 Landuse Patterns

2.06 Utility Services & Community Facilities

1.01 DEMOGRAPHIC DATA

The change of status of Makurdi from a Divisional Headquarter to a State Capital in 1976 brought about a drastic change in the population of the town. This made the sex and age composition, derived from a simple survey, to be strongly influenced by the immigration.

Due to this, the male, female percentage distribution is 57 - 43%. A considerable bulge been noticed in age groug 20 - 29, especially for males, again, a clear indication of a positive immigration - emigration balance.

It is assumed that there will be several influences on future growth some of these are:

(a) Natural increase of the existing population.

(b) Rural - Urban migration, which is certain to remain lagge, but could vary a good deal according to agricultural developments, and the attraction of other centres.

(c) Competition from the growth of other centres, which in the case of Makurdi appears likely to be fairly high, as Gboko and Otukpo towns are rapidly growing centres nearby which might attract population away from Makurdi.

(d) The influence of government administration, which now seems likely to increase as a result of the increase of the area of which Makurdi is the Capital since 1976.

(e) The influence of specific government project, which could be substantial, but may be difficult to forsee more than a short distance ahead.

(f) The influence of tourism, which, in terms of numbers is likely to be comparatively small.

(g) The influence of higher education which could be significant. The size of land occupied by North - Bank in comparison to Makurdi as a whole is one quarter. It is very likely that the population of North - Bank could be safely fixed a ¼ of the population of Makurdi town. But the expansion rate of North - Bank is not the same as that of the South Bank (the Main Town), the ratio ¼ is not likely to work too long on less the University of Technology proposed in North Bank becomes a reality. Working with the above assumptions, Makurdi and North Bank's population will look like this:

Year	Population		
	Total	North Bank	Fraction of total
1978	94,000	23,500	¼
1985	132,300	26,460	1/5
1990	168,800	28,130	1/6
1995	215,400	30,770	1/7
2000	275,000	34,380	1/8

Ref.

1. Based on the 5% increased per annum alternative .

2. Calculated on the basis, of the West model life table level II

3. The decrease in the ratio of the North Bank population is based on the deminishing availability of land.

2.02 PHYSICAL SURVEY

(A) GEOLOGY: According to M.E. OFFODILE'S 'A review of the geology of the cretaceous of the Benue Valley - Geology of Nigeria."

Very little is known about the geology of this area. The Ezeaku Shales and the equivalent Makurdi formation overlie the Albian shales around Makurdi. It consists of a thick mass of cement bedded coarse grained deposits described as the Makurdi sandstone which attains a thickness of up to 900 metres. Its basalt parts are laterally equivalent to the Keana sandstone of the middle Benue area.

(B) TOPOGRAPHY: The built-up areas of Makurdi occupy the higher zones of the Benue-River banks. The gradient of the populated land ranges from 2 to 10%.

The whole Region slopes towards the River, according to the directions of the tributaries.

(C) DEVELOPMENT TREND OF NORTH BANK: There is a natural trend of development in direction with the least resistance. These are along existing roads and their surroundings. The danger of this is unwanted spread and expensive services in the long run.

(D) MAKURDI AND ENVIRONS: The future development of Makurdi's environs will have to be fortified, agricultural production increased, especially in sectors supplying the town. The government is taking care of developing the surroundings of Makurdi as well as the Capital.

(E) VEGETATION: Makurdi maintains the savannah type of vegetation. There are a number of palm trees along the tributaries of River Benue. Trees are usually tall with an undergrowth of grass.

2.03 CLIMATIC DATA

The climatic condition of Makurdi could be described as generally being very hot and humid all the year round. Temperature as high as 100°F are recorded sometimes. This is believed to be the effect of the River Benue.

Average Monthly Temperature in Makurdi in ^{o}C

Months	i	ii	iii	iv	v	vi	vii	viii	ix	x	xi	xii
Max	34.5	36.1	36.1	33.9	32.2	30.5	29.4	30.0	30.0	31.1	32.7	32.7
Min	18.3	21.1	23.9	23.9	22.2	22.2	22.2	22.2	21.7	21.7	20.6	17.2
Range	16.2	15.0	12.2	10.	9.5	8.3	7.2	7.8	8.3	9.4	12.1	15.5

Source: Extract for statistical year book 1972 statistical section - Economic Development and Research Division

From the table above it could be seen that the temperature is maximun for the month of February and March (36.1^{o}C) while it is minimun in the month of December.

RAINFALL

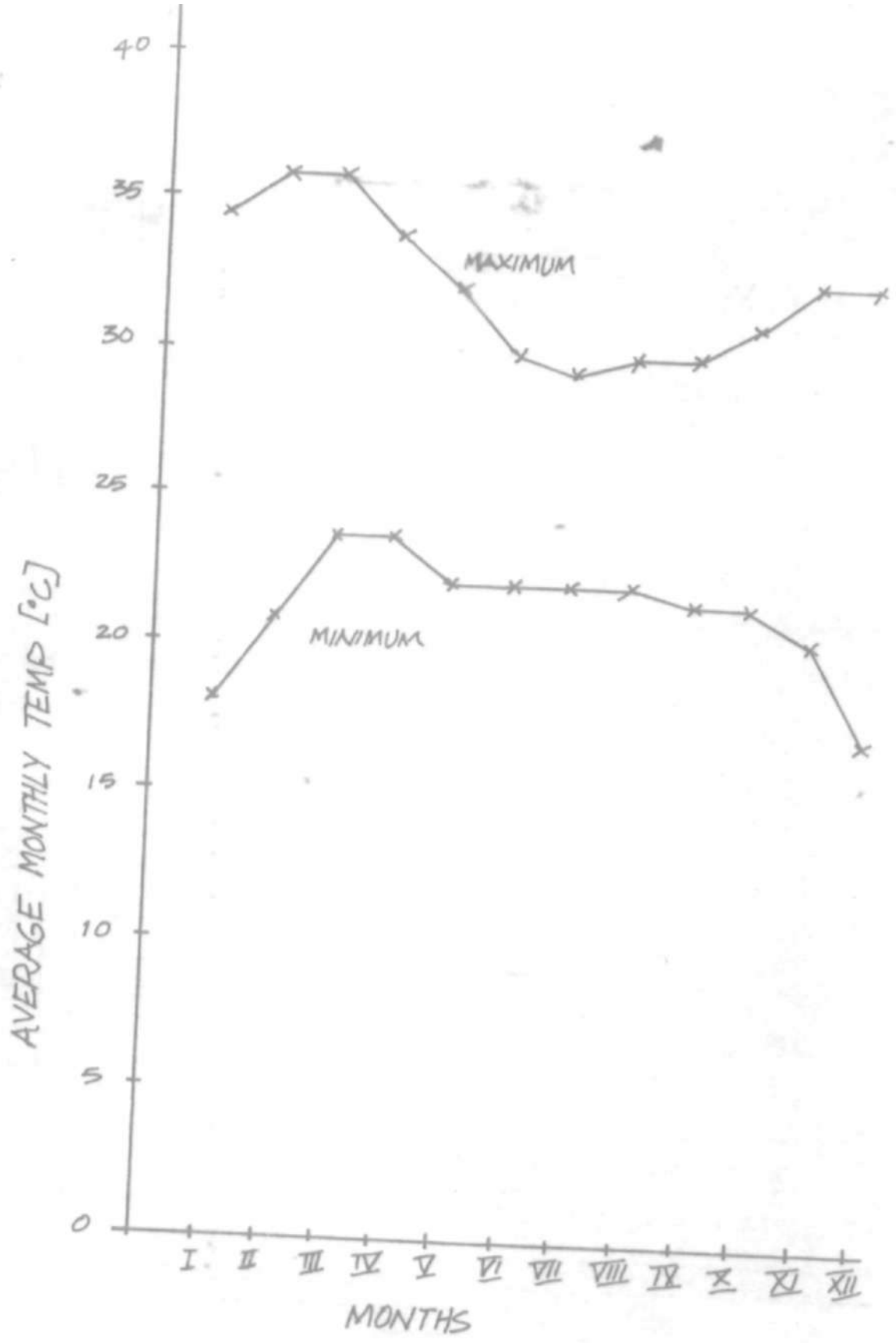
Average Rainfall in Makurdi in CM

Month	i	ii	iii	iv	v	vi	vii	viii	ix	x	xi	xii
Rainfall in CM	0.0	2.3	12.8	11.6	16.8	16.0	19.0	21.7	18.2	10.3	0.0	0.0

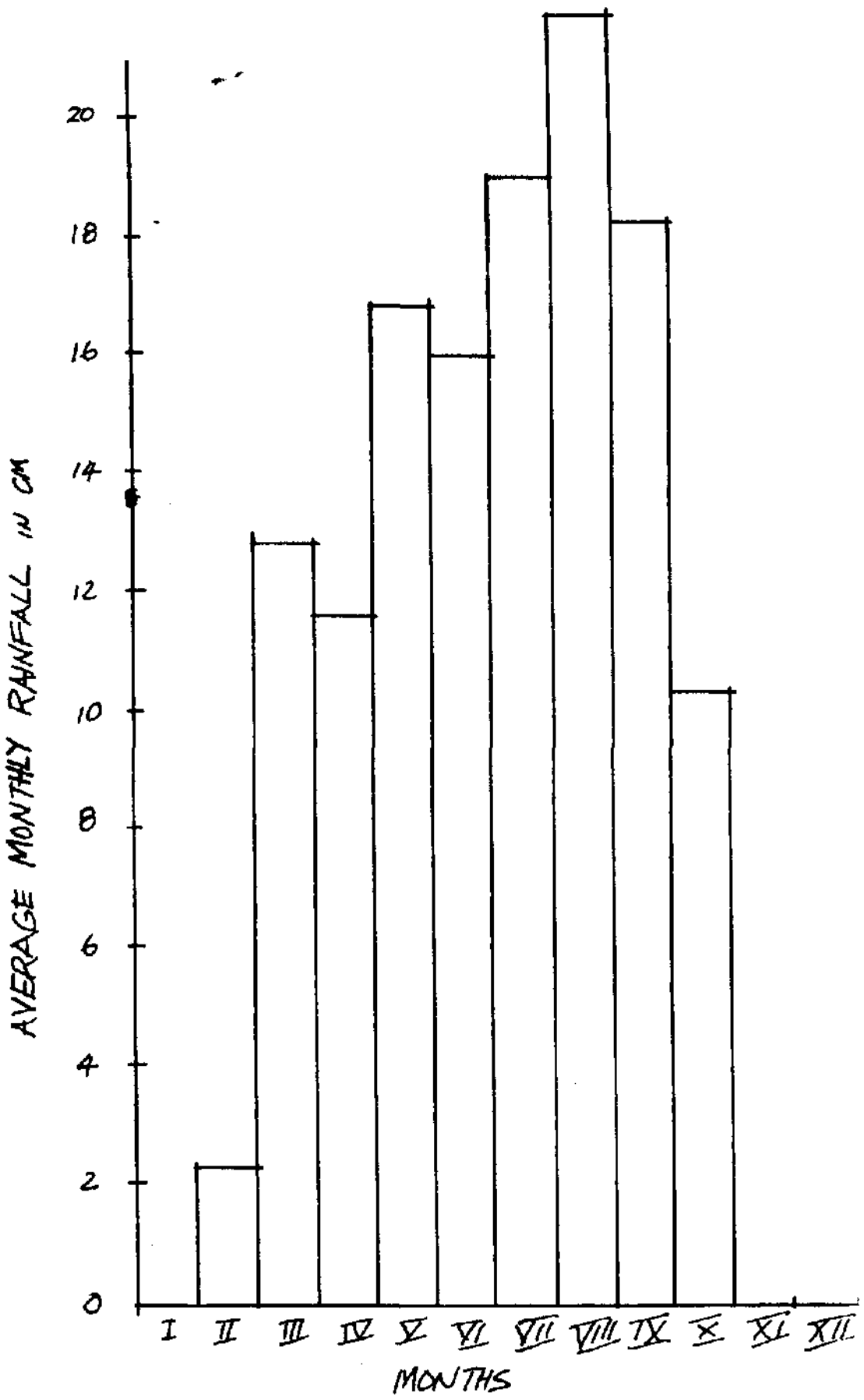
The Rainfall in Makurdi begins in emnest from March and ends in October with the maximun being recorded in August. The Rainfall is the conventional type due to the high rate of evaporation and the subsequent condensation of the vapour.

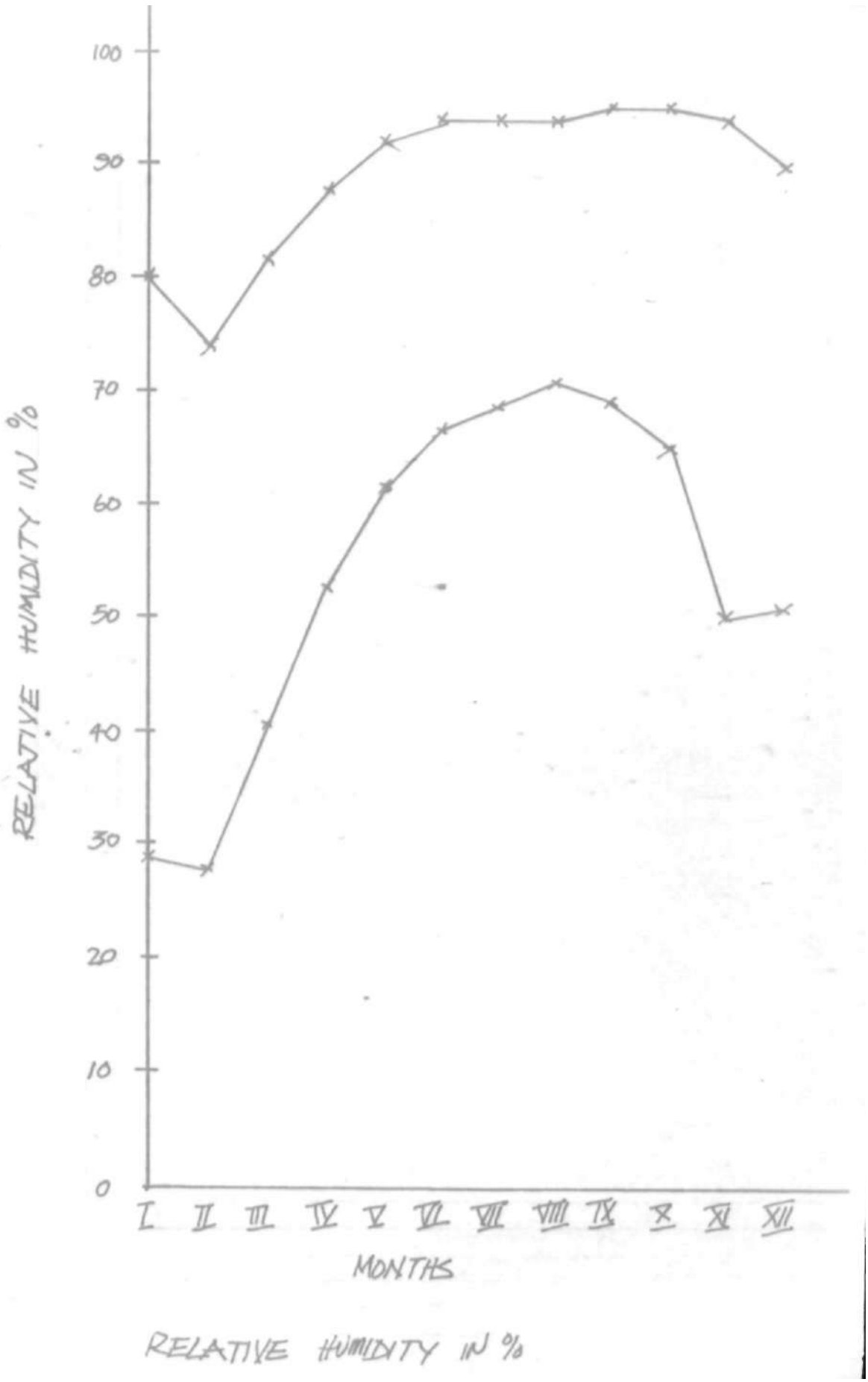
WINDS

There are two prevailing winds experienced in Makurdi; the South West Winds and the, North East winds. the South West winds is rain bearing and so is dorminant as from March to October while the North East winds is the harmattan winds that brings dust from the sahara.



AVERAGE MONTHLY TEMPERATURE


AVERAGE MONTHLY RAINFALL IN CM
0
2
4
6
8
10
12
14
16
18
20
I
II
III
IV
V
VI
VII
VIII
IX
X
XI
XII
MONTHS



RELATIVE HUMIDITY IN %

TRAFFIC SURVEY

The major vehicular traffic route in the North Bank is that which connects it to the main part of Makurdi - by the Rail-Road bridge. The route connects with the by - pass to Lafia at about three kilometers from the bridge. Right now the bridge creates a bottle neck for vehicular movement since it is a one lane, one kilometer length the River Benue for at least fifteen minutes in ordef to get across. The possibilities of an alternative route is not envisaged in the near future because the new bridge is not a faster route to the North Bank either. More so as there is no apparent connection to the town.

The other route second in hierarchy to the Rail-Road bridge road is the one that goes to the military installations. This road goes on to some villages that need the North Bank for their vital needs. This road has some potentials because it is going to the main connecting road between Makurdi and Abuja (the new Federal Capital) it is not until this is done that one may expect a drastic change.

The third Hierarchy roads are the streets. These are the connections between compounds.

LAND - USE PATTERNS

As can be seen from the proposed land use map of Makurdi, the North Bank is proposed to be a purely residential area with a density of the 2nd order. The buildings are expected to be of the one and two storey types. (100 p/Ha).

The proposed site for the University of Technology is also in the North Bank. If this University becomes a reality it will effect the land-use pattern proposed very drastically because that will mean doubling the population of North Bank.

The alternative site for the noxious industries is also at the North Bank. This might generate the necessity of having a shatelite town since the site is a bit far off from North Bank.

The nature of development of North Bank, ie along the major roads, enhanced the mixed land-use pattern (ie residential/commercial) The zone towards the major roads is predominantly commercial with people living in rooms around courtyyards. Only very few of the buildings were actually designed for the functions in which they find themselves now.

Public buildings are few. There is only one major mosque in North Bank. There are a proliferation of churches. It will be observed the most of the christian denominations have their own church buildings, though some of the buildings were converted into church buildings. There are about three primary schools scattered at different places in the district. The V.I.O. testing ground for Makurdi is located in this part of the town. The State's Housing and Urban Development Corporation's Housing Scheme is also in this part of the town though its impact is not much because of its remoteness. Murtala College of Science and Technology (MUCAST) is also located here and a sizeable proportion of her workers are found here. MUCAST is one of the endeavours that enhanced the business of residential building construction in this part of the town.

One discovers that most of the new buildings in the area are occupied by senior staff members of the school.

The Army also plays an important role in shaping the land-use pattern. There are two barracks all located in North Bank. One is the Army School of Engineers Barracks and the other is the Brigades Barracks off Lafia road.

COMMERCIAL LAND - USE

Apart from the mixed land -use pattern the other purely commercial land - use spaces are the markets, the motor parks, the hotels and the roadside mechanical workshops. As at now North Bank relies on the main Makurdi for her everyday needs. There are no banks, post office police station etc. Despite the remoteness of North Bank for the main town it has been totally neglected in terms of amenities that I have mentioned but a few above.

SERVICES

Elestricity was brought to North Bank only after the completion of the new River Benue Bridge. From observations one will see that it is not up to half of the building in North Bank that have light. It is hoped that with the connections of Makurdi to the National Grid this handicap will soon become a thing of the past.

It is ironical that despite its closiness to River Benue North Bank is not adequately supplied with water. This, the authority said is due to the influx of people to the town to after her - status became that of state capital. With the installation of new and bigger water works machinery water will also become adequate.

There is nowhere in the whole of Makurdi where there is a good sewage disposal system. Some individual houses have the septic tank system but this is restricted to governmental buildings and some private houses.

An entirely new sewage disposal system is proposed for Makurdi town, North Bank inclusive. According to the Master Plan proposal by the year 2,000 this will work effectively.

In my design this was given a serious thought and propsals are made to make sure that the centre is properly serviceable at the lowest cost possible. The market is known to pose a lot of problems when services are concerned, I believe my design proposal will give a simple solution to this notorious problem.

OTHER SERVICES

Apart from some few drinking places, in North Bank, facilities for recreation, health, leasure are absent. The banks of River Benue are under utilized but I hope my Community Complex will provide some of these facilities. This is the multi purpose Hall for games,film shows and other social activities and there designed open air areas for relaxation. It is also proposed that the River Bank be utilized for certain sports.

CHAPTER THREE

THE SITE

3.01 The Search for a Suitable Site

3.02 Analysis of the Possible Location

3.03 The Site and its Potentials

IN SEARCH OF A SUITABLE SITE

In trying to choose a site for the design of a Community Building Complex one is faced with two schools of thought. One is the neighbourhood concept while the other is based on the mobility of people. This is summerised as follows:

Because of the increase of car ownership people have become more mobile and they are able to satisfy their interests over a wider field. These people argue that the meeting place required was one which was convenient of access and focal point to public transport routes. To them the neighbourhood pattern in new towns exaggerate the difficulty of cross travel and emphasizes the importance of central location.

In this case it is assumed that since most people are mobile the centre could be at any distance from the users and the rate of mobility increased. The first case assumes that human being should not walk more than a certain distance from one's house to purchase certain things.

With these two theories one of the possible site is any location along the River Benue that overlooks both sides of town, (Site A). Site B is the area above the intersection of the two major roads in the North Bank ie the road passing on the old bridge to Lafia and the one that leads to the Army School of Engineers.

ANALYSIS OF THE SITES

Site A: Advantages

- It commands the view of the Benue River and both parts of the town.
- It could be used as a uniting factor for both parts of the town.
- There is the possibility of using the rail track for transportation.
- It has more potentials for leisure - an integral part of the Community Centre.

Disadvantages

- It is not a central location so getting there will be a problem for many.
- It is expensive to build in the area because of protection against flood and the foundation cost due to the sandy nature of soil.
- There will be a struggle for possession by both parts of the town leading to overcrowdedness.
- It has no natural vehicular/pedestrian access.
- Ther is conflict with the land-use proposals.

Site B: Advantages

- The central location
- Short walking distance from most parts of the town.
- The creation of a feeling of belonging by the users is enhanced.
- There are natural linkages from all parts of town.
- It conforms with the land-use patterns
- It is already a cantre (location of temporary market).
- The location is prominent.
- Nice views because of its hilly location easy access by traffics.

Disadvantages

- The temporary market has to be moved.
- It is too close to the residential areas in certain parts.
- No much room for expansion
- A few structures need to be demolished.

After this analysis site B is preferable. This is because it conforms with the neighbourhood theory of design. It is very likely that this site will ever remain the central part of the North Bank judging from the present developmental pattern.

The present temporary market on the site gives one the opportunity to re-design the market and integrate other functions to achieve a multi functional centre.

CHAPTER FOUR

FACILITIES FOR THE PROPOSE COMMUNITY BUILDINGS COMPLEX

4.01 Proposed Community Structure for North Bank

4.02 Public Facilities at Each Level of Hierarchy

4.03 Existing Facilities

4.04 Detailed Report on Existing Facilities

4.05 Conclusion

THE PROPOSED COMMUNITY STRUCTURE IN MAKURDI

The Neighbourhood concept of design is the proposed concept of design. It is a means of fostering the growth of community spirit. To be able to understand this concept the theory behind it needs to be thoroughly explained.

THE STRUCTURE OF RESIDENTIAL AREAS

Residential areas even if they look alike do not consist of one carpet - like pattern, but created from different separate units. Each of this units has its own place within a hierarchy of elements- which make a town a continously changing and complex system. This place depends mostly on the rank of the centre of a unit and the centre in turn depends on a kind of activities which are performed there and a range of its influence, usually measured in time.

Of course as usually in other complex systems the other elements are involved and all of them are mutually related. The range of influence which means the longest distance people are willing to cover in order to be in a particular centre is related to the means of transport. The walk, the bicycle, car or train, each has its own range and covers quite different distances in the same time.

The number of people who live within the served area depends on density of population which changes with the type of Housing

FIGURE (II-4.2.) PROPOSED COMMUNITYSTRUCTURE FOR ZARIA URBAN AREA

CHARACTERISTIC FACILITIES:

RESIDENTIAL SUBSEKTOR 4.000



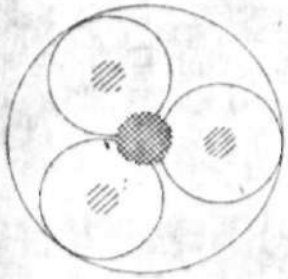
PRIMARY SCHOOL (+ NURSERY SCHOOL)
HEALTH CLINIC
4 SHOPS
TRADING SPACE FOR ± 10 KANTAS
PLAYFIELD

RESIDENTIAL SEKTOR 12.000



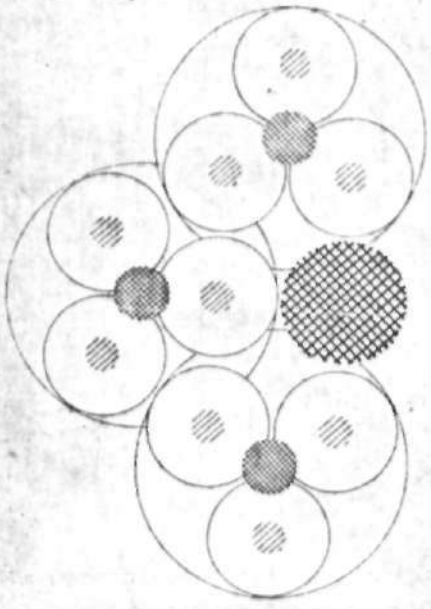
SECONDARY SCHOOL
PRIMARY HEALTHCENTRE
CHURCH / MOSQUE
COMMUNITY CENTRE / YOUTH CLUB
SMALL SHOPPINGCENTRE (10 SHOPS)
SMALL MARKET (50 STALLS)
PLAYFIELDS

COMMUNITY 36.000



BRANCH LIBRARY
POSTOFFICE
THEATRE
SPORTCENTRE
SWIMMINGPOOL
OPEN RECREATIONAL SPACE
MARKET (320 STALLS)
SHOPPINGCENTRE (64 SHOPS)
CATERING RESTHOUSE

DISTRICT TOWN 108.000



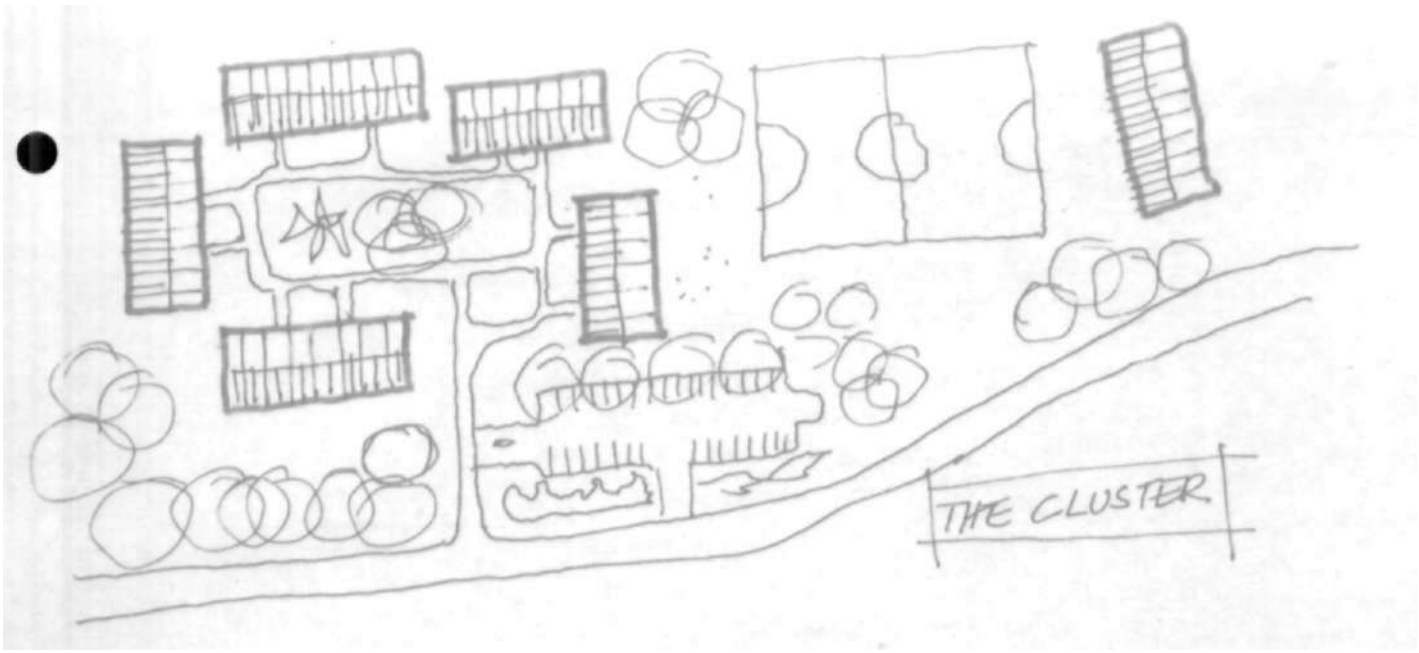
HOSPITAL
COMMUNITY HALL AND OPEN AIR ASSEMBLY
2 COMPREHENSIVE HEALTH - CENTRES
2 CEMETRIES / BURIAL GROUNDS
MARKET (600 STALLS)
SHOPPINGCENTRE (120 SHOPS)
SPORTCENTRE WITH STADIUM
MAIN LIBRARY
MAIN POSTOFFICE
3 CINEMAS
3 HOTELS
ADMINISTRATIVIVE AND COMMERCIAL OFFICES

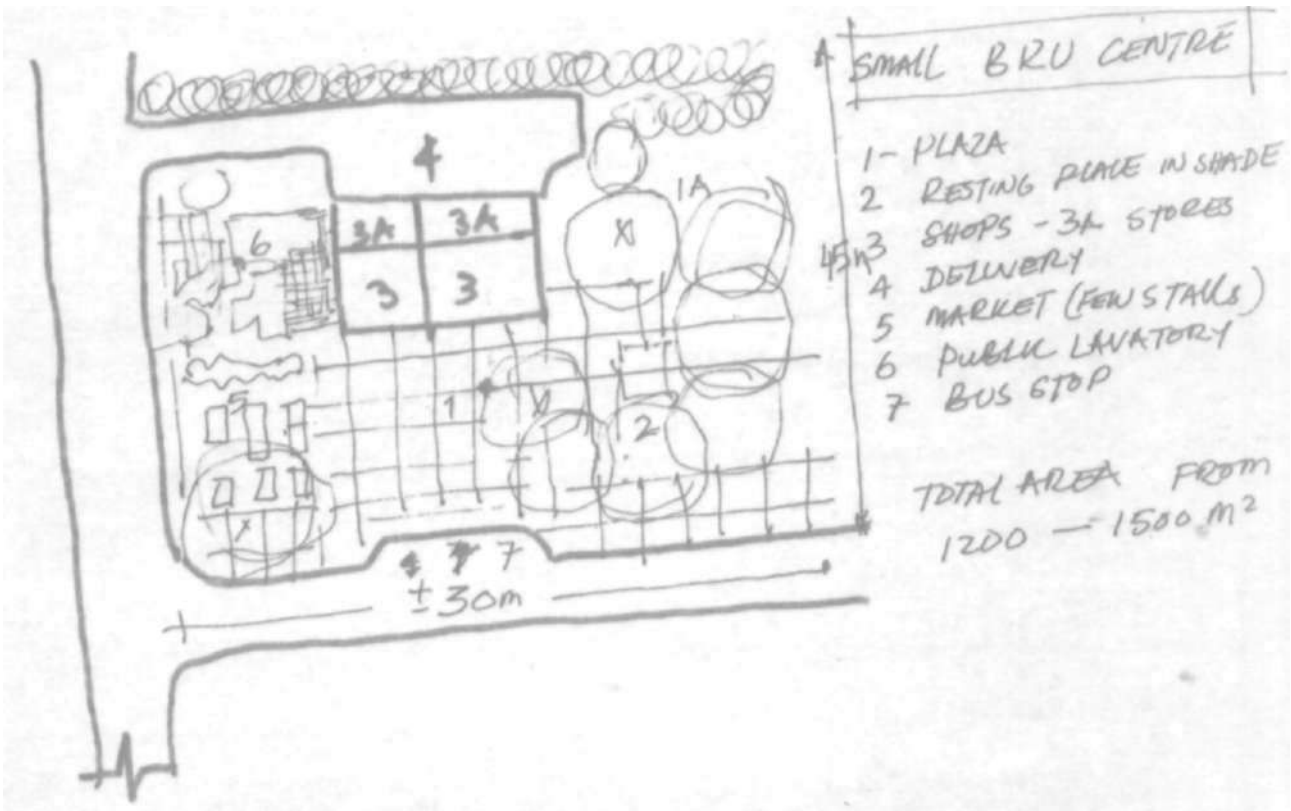
and can be from 10 people per hectare in low houses with big gaŧdens to 600 people per hectare in high - rise apartments. The number of people can influence the function and atractiveness of each centre no less than their purchasing power and traditional baŧkground. The first defines how much people are able to buy and therefore decides about the ratio per inhabitant - how many shops, restaurants, garages etc are needed in the centre. The second influences the kind of those shops and other places. The distances between centres are also important from the competition point of view. Healthy competitions allows for development to better qualities but it can also sometimes result in decline of certain centres which are geographically needed. Too big distance on the other hand eliminates competitions and cause unnecessary and costly travels. Since all these factors are changeable we have to look for something that can serve as a permanent base for classification. The easiest and most permanent will be a speed of walking man, which can define distances between centres of activities without any regards for means of transportation. There are of course differentes between the walking speed of a woman and a child or a young man but we do not risk too much of a fault if an average pace is taken as 4 km per hour. It gives 1 km for 15 minutes or 300m per 5 minutes.

Keeping this in mind it will be possible to described a maximun time of walking in relation to the kinds of needs and by this to establish a relationship between a range and programme of every consequent unit. It means that the basic residential unit should have a size which allows a short walk from 3 to 5 min.

RESIDENTIAL AREAS - STRUCTURAL UNITS

	Multiple of	Radius (About + 20%	Time for Walk in Minutes	Area in Hect-ares	Density of Population (Average)	Total From / to	Population Average	Name	Graphic Description	Remarks
BRU	4 - 7 Clusters	150	2 - 5	7	150	250 / 2100	1200	Bask Residential		
	4 - 7 BRU	350	5 - 10	38	110	1200 / 7500	4200	Neighbour-hood Unit		
RS	4 - 7 NU	800	20	200	90	5000 / 30000	18000	Residential Section		Small Town
RD	4 - 7 RS	2000	30	1250	70	25000 / 150000	88000	Residential District		Medium Town
T					55			Town or City		Any No of form-er Units
A					45			Agglomeration or Conubation		Collect-ion of Towns in one Region


THE CLUSTER


SMALL BRU CENTRE
1- PLAZA
2 RESTING PLACE IN SHADE
3 SHOPS - 3A STORES
4 DELIVERY
5 MARKET (FEW STALLS)
6 PUBLIC LAVATORY
7 BUS STOP
TOTAL AREA FROM 1200 — 1500 m²
45m
±30m

The number of structural units which create a unit of a higher rank depends on different existing obstructions like: roads, railways, natural features like water, topography, agriculture etc. It usually takes from 3 to 7 units to make the next, and the theoretical ranges of their influence are often overlapping. It means that its area is not automatically a multiplicity of the afeas of smaller units.

THE CLUSTER

It is the nucleus of a unit and it is based on social ties not on a common centre. Exists rather in areas with low and medium size housing but on the old type village or rather trys to be its analogy. Consists of about 40 families (house hold), the number which we can remember and recognise as neighbours. It rarely works in big cities where friends relatives and aquentances are dispersed throughout the whole city and closest neighbours might not know one another. Ideally a cluster should consist of a group of houses sharing the same green space, children playground, parking, garage place etc - with a number of people small enough to know each other.

THE BASIC RESIDENTIAL UNIT

This is the smallest basic unit which has its own centre and needs common services, concentrated in the centre. The activities are:

1. Food shop - for everyday need
2. Resting place connected with small tracking space
3. Bus stop and parking bay for a few cars. 4. Primary School.

NEIGHBOURHOOD UNIT

This is defined as an area serviced by a centre that is accessible within 10 minutes of woalk. The main characteristics are:

(1) Limited size which means 300 to 400m from the furthest house to the centre.

(2) Possession of common centre which has a programme appropriate to an amout of people within the boundries of the Unit.

THE PROGRAMME SHOULD CONSIST OF:

(a) Shops of different branches.

(b) Market and a resting place.

(c) Local administration building.

(d) Multi- Purpose Hall.

(e) Small restaurant or Coffee shop.

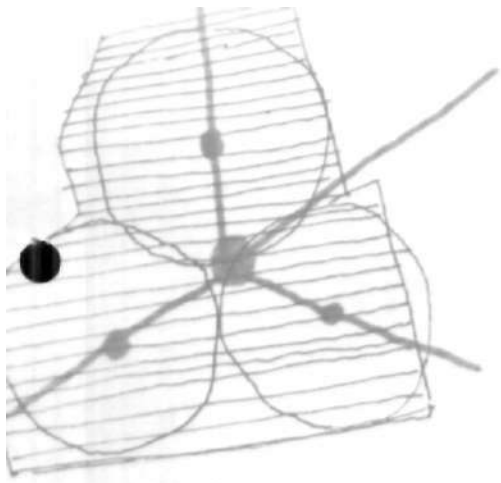
(f) Social activity centre - rooms for clubs, youth organisations etc.

(g) Mosque or church

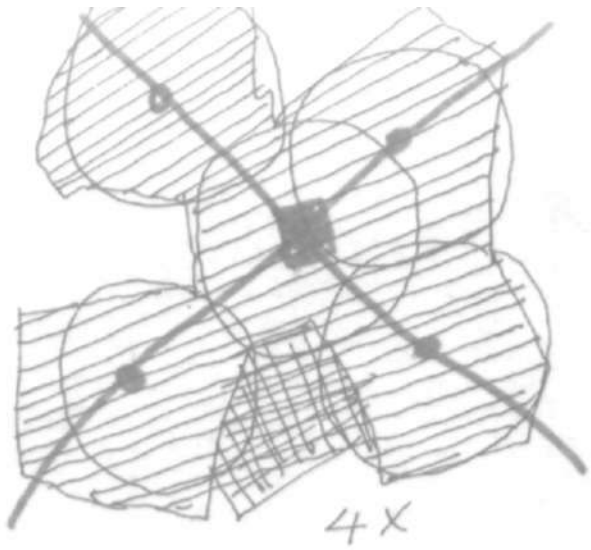
(h) Health clinic.

(3) Open green public areas for sports and recreation.

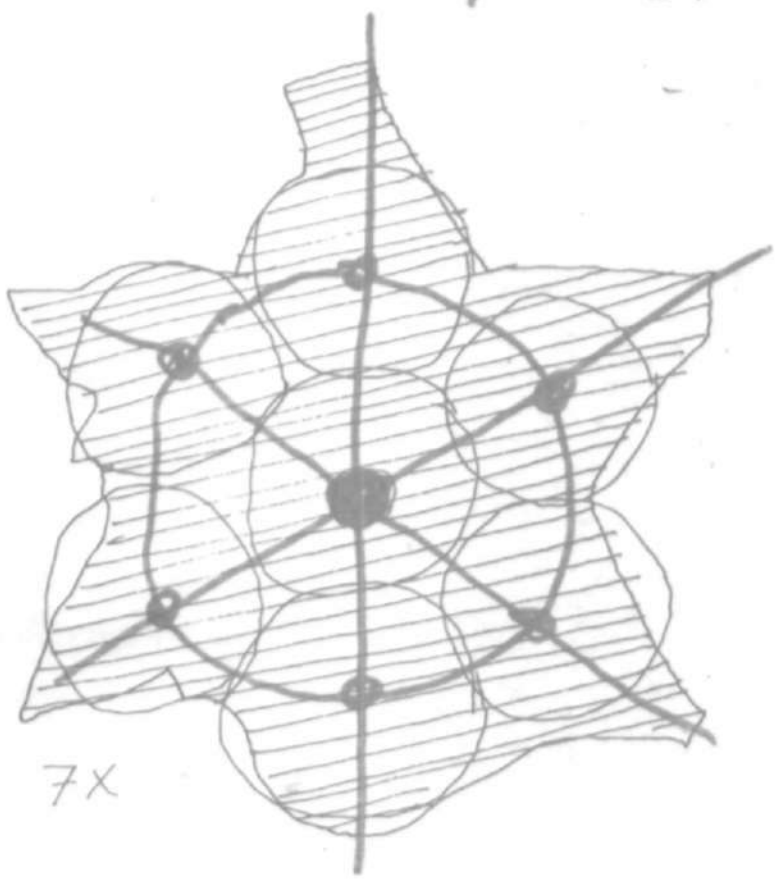
(4) Network of streets within any of the units especially those of a lower level should have only limited number of streets for through - traffic and maximum percentage of local - traffic streets some of them (if possible) being dead - end streets.



3X

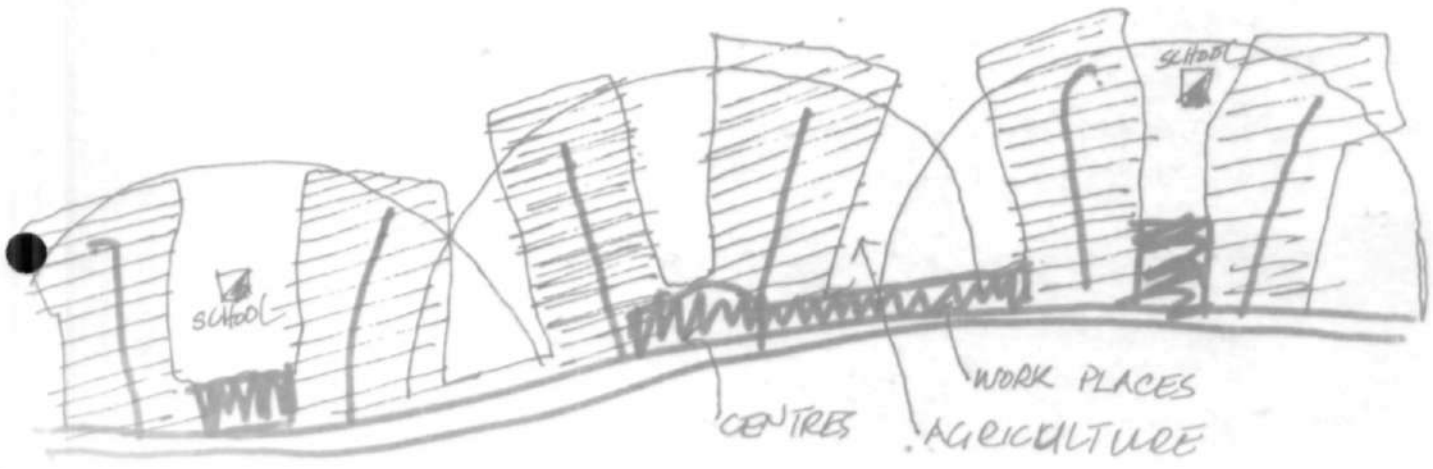


4X



7X

VERY OFTEN THE WHOLE AREA WITHIN A RANGE OF INFLUENCE IS NOT USED BECAUSE OF CONCEPTUAL PURPOSES (SEE BELOW) LIKE CLOSE CONTACT WITH GREEN OPEN LAND & SO



RESIDENTIAL SECTOR (RS)

This unit has the size of a small complete town, and therefore should have all possible activities for its inhabitants in order to satisfy most of their needs. The size of this unit (about 800m in radius and area of + 200HA) should contain also a maximum of work places for its populace. It is non-the-less most logical to talk of the residential sector an integral part of a big town rather than a separate town. This sector can support activities like cinema, theatre, post office, police station, local administration, park, secondary school etc.

RESIDENTIAL DISTRICT

The higher level of a centre surrounded by several sectors with a maximum range of 30 minutes of a radius of 2 km. The population is with 25,00 to 150,000 people. Its central part should have all functions and places characteristic of a medium size town. This type of structural unit should have also all the basic functions like parks and public green areas, school of every level hospitals, fire and police stations etc.

TOWN

Talking about the town, one will say it is the unit with the highest structural unit. This consists of a number of the former units. A town has virtually no limitation as to the population and the land area covered. A town can have any number of units and its size can't be definitely described. It is rather the state of complexity and comprehensiveness of being a complete organism which decides more then a size.

In certain cases we have a system consisting of elements which are hierarchically located and subordinated to one main centre. When the growth of this system through the parts becomes more numerous but the main centre still exists - we talk about AGGLOMERATION. And when other centres grow to the same importance the system can be called a CONUBATION.

An extract from the compiled lecture notes on Human settlements Part 3

By RICHARD HAJNOSZ
Senior Lecturer Dept. of Arch.
Ahmadu Bello University, Zaria.

Existing Facilities In The North Bank - Makurdi:

After the theoretical discussion so far it is worthwhile to note that the North Bank in the year 2,000 A.D. falls within the residential district level. According to the theory of Neighbourhood. The residential district should have all the functions and characteristics of a medium size town. These functions include all the basic functions and others like parks, public green areas, school of every levels, hospitals, fire and police station etc.

Looking at the North Bank case one would see that though population wise it is qualified as a residential district but in terms of amenities it is zero. I will enumerate and described the existing facilities as at now in the North Bank - as they relate to my thesis - with the subdivisions as follows: Commercial, Industrial Political and Social,

COMMERCIAL FACILITIES

The most commercial centre in the North Bank is the market. There are two major markets; one immediately after crossing the rail and the road bridge ie the North Bank bridge head. This is the oldest market in the area. It is an open air market with hardly any structures at all since the structures are make-shifts ones. A good percentage of the traders deal in food stuff with a lesser percentage dealing in manufactured goods. The good product traders are mostly people that harvest the food stuff from the farms and sell them in exchange for the manufactured goods got mostly from the Eastern States.

I suggest that this market be maintained and modernised for a more effective trading. Storage spaces should be provided so that when a traders goods are left over, they could be kept till the next day for a continuous sale. The expansion of this market is not a problem since most of the buildings around it are delapidated and ripe for demolition.

The second market is at the strategic position of my site ie at the juction of the two major roads in the town. This market is a temporary structure built with aluminium roofing sheets used as walls and roof cover. This does not guarrantee for safety and security. Due to this I suggest that the buildings be pulled down and the whole place reorganised to house more elements as designed in my thesis.

The other commercial places are buildings with multi-functional usages. These buildings are found along the two major roads in the town. They include beer palours, shops, provision stores workshops etc. There are some few buildings and compounds that have been entirely converted to commercial usuage. These usages include local hotels that provide for accommodation for a few lodgess. There are also some that are used for workshops like tailoring, carpentry blacksmith goldsmith and so on.

I dont suggest that these buldings be demolished or that the usees be checked out but I believe when the community complex becomes a reality the present users of the buildings will naturally find their way there. With the increase in population the land lords will be compelled to renovate and modernise these existing structures to bring them up to standard for speculations.

INDUSTRIAL

The North Bank has virtually bothing in this respect as at now. Fishing is done is the River Benue but obsolete methods are employed. This method does not warrant any substancial income. It is also a self employment adventure with whoever is in the trade not being able to employ another hand except a member of his house hold.

It is however hoped that in the near future the North Bank will be endowed with some industries because of the site for the location of noxoious industries.

279029

POLITICAL/ADMINISTRATIVE

It is the desire of the state government to set up a local government branch office in this part of the town. This is to facilitate the means of disemination of news to the community. This will also act as the administrative headquarter for all the other state owned agencies in the area.

SOCIAL

This is one of the most important aspects of the thesis since its aim is to improve the lot of the community through both the community and the government.

In the North Bank there are over ten churches but only one or tow have prominence in the landscape. The others are either in rental buildings or buildings that were never designed to be churches.

There are two prominent mosques. One just after crossing the rail bridge and the other further up along the major road to Lafia.

Two clinics are located here. One is the Veterinary Clinic located, one the road that goes in parallel with the Railway and terminates at the clinic. The other is found along the major road. This clinic is inadequate and the location is unsuitable.

North Bank has the highest institution of learning in the state ie. the P.U.T. Arrangement are also under way to convert this institution into a University. The army school of engineers is also located here though this is a bit way off from the centre of the community. This school make a lot of impact on the community in terms of employment and the usage of the available community facilities.

There are three primary schools. The Catholic school, the Army Children School and the U.P.E. School. With adequate expansion these schools can cater for the children population for the near future. There might be a need to build more schools as time goes on. There is also a need for a pre-primary school for those that can afford it ie working house wives. The adult education buildigg should be renovated and put to a better use. Right now it is an abandoned property.

In conclusion it is seen that the North Bank is in dire need of facilities and using my descrition I am going to utilize the opportunity of the site to design a centre that will go a long way to solving these inadequacies.

CHAPTER FIVE

STUDY OF EXISTING EXAMPLES

5.01 Problems of Present Day Community Buildings Complex

5.02 Existing Existing Examples

5.03 Observations And Conclusion

The Problems of Present Day Community Buildings Complex

With the increase in car ownership and the aquisation of refrigerators. The importance that used to be attached to the Community Buildings Complex is dwindling. The housewife no more goes to the market daily, instead she goes only once in a week or even less. The man works at about 10 or more kilometers from his home. All these are made possible by the speed at which human beings can now move around due to modern technology.

In the design of the Community Buidings Complex care must be taken so that a cross-section of the users cut across all barriers of age, status in the society and wealth. This can be achieved by a careful selection of the components that make up the complex. By providing unit shops, many traders will use the centre. By introducing rental offices for professionals like architects, lawyers etc will as well patronise the complex; By providing hair dregsing saloons house wives and ladies will use it: By providing a nursery school the young one will also use it: With all these, one can see that no class of people is left out.

No matter how mobile one is, it is not logical to travel for 5 kilometers to get what you can get ½ a kilometer away.

The location of the centre is a key problem. This and the design of the complex can help out reach in two ways. If the

centre is conveniently placed, it will help encourage people to go there without making extra efforts. If the centre is such that the community is proud of they will go there. The complex should be such that would express the spirit of communual cooperation and encourage further joint effort among the users, It should serve as the activity and convergence centre for the community.

All these problems can be reduced, if not eliminated, by a good design. One problem a student encounters in trying to get life examples of community building complex, is their non existence in terms of shared space in this part of the world. It does not mean that the components that make up community complexs do not exist, but they do in isolation of one another. One unique opportunity we have now is the rate at which the country is developing with new towns being built. This has made land allocation for a whole community complex possible. I believe that in the near future community buildings complexs will become a reality in this country.

CASE STUDIES

(1) The District - Bonhoeffer Centre- In Nuremberg - Langwasser, D

This Community Centre in a newly - built district accommdates four churches.

- A formal 400-seat hall for community services.
- A 100-seat working day church Bell tower, vestry, meeting rooms youth club, accommodation etc.
- An open air courtyard for open air activities and so on.
- Accommodation for the ministers, Parish offices, a Curate and care-taker.
- A social centre with creche and branch of the city mission.
- A Kindergarten and day nursery.
- A shopping centre with doctors' Surgeries.
- Hair dresser.
- Food stores cafe.

This design is appealing from a town planning and from a practical point of view, reaching out in both directions into the green belt to attract passers-by into its low-density buildings but allowing them to leave again if they like.

OBSERVATION

The design is interesting but it cannot work in this part of the world because of the compact nature of it. All the activities take place under the same roof!

(2) SUTTON IN ASFIELD CENTRE

This centre comprises of:

- Sports centre
- Theatre

- M ths and day centre
- Liberal studies
- Adult Education
- Upper School and Youth Centre
- Lower School

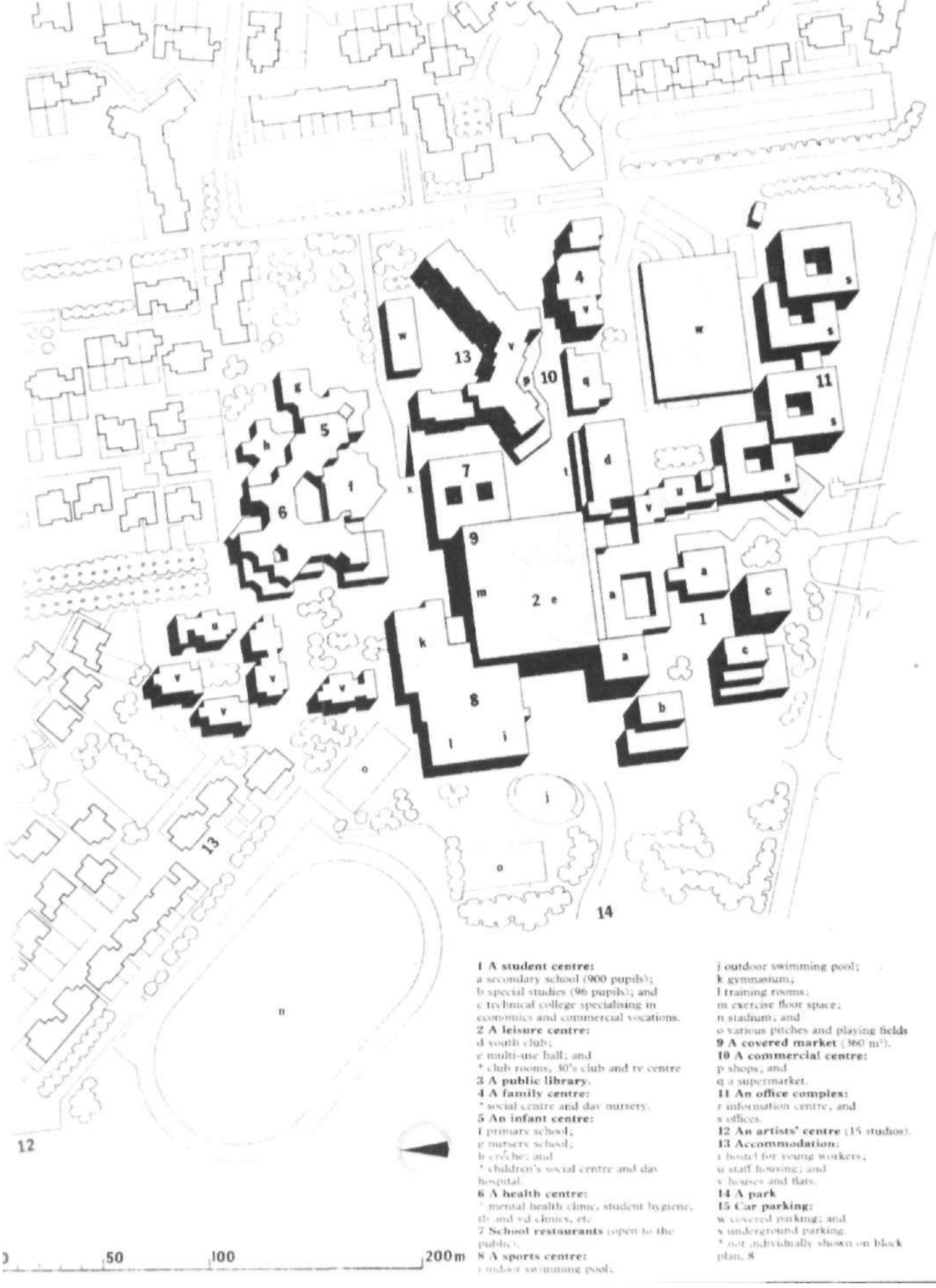
The design of this centre is articulate with courtyards separating the buildings from one another. The centre has combined a community school and a recreation facilities centre into one whole.

This is a functional design because this way most of the facilities provided are optimally used. On looking at the design one discovers that the centre is evenly surrounded by other components that could be considered as the centre's components. These include a market square, a shopping centre, a library etc.

(3) NARVE - LA - VALLEE

In this centre, the educational and community facilities have been planned to form an integral part of the district centre which also include housing and commercial provision.

This design is also articulate with a lot of community open spaces in between buildings.



1 A student centre:
a secondary school (900 pupils);
b special studies (96 pupils); and
c technical college specialising in economics and commercial vocations.
2 A leisure centre:
d youth club;
e multi-use hall; and
* club rooms, 40's club and tv centre
3 A public library.
4 A family centre:
* social centre and day nursery.
5 An infant centre:
f primary school;
g nursery school;
h crèche; and
* children's social centre and day hospital.
6 A health centre:
* mental health clinic, student hygiene, th- and vd clinics, etc
7 School restaurants (open to the public).
8 A sports centre:
i indoor swimming pool;
j outdoor swimming pool;
k gymnasium;
l training rooms;
m exercise floor space;
n stadium; and
o various pitches and playing fields
9 A covered market (360 m²).
10 A commercial centre:
p shops; and
q a supermarket.
11 An office complex:
r information centre; and
s offices.
12 An artists' centre (15 studios).
13 Accommodation:
t hostel for young workers;
u staff housing; and
v houses and flats.
14 A park
15 Car parking:
w covered parking; and
x underground parking.
* not individually shown on block plan, 8

The complex is comprised of:

1. A student centre
2. A leisure centre
3. A public library
4. A family centre
5. An infant centre
6. A health centre
7. School restaurants
8. A sports centre
9. A covered market
10. A commercial centre
11. An office complex
12. An artist's centre
13. Accommodation
14. A park.

This centre is out of scale when it is compared with the requirements of a sub urban community like the North Bank Community in Makurdi.

(4) ABRAHAM MOSES CENTRE

This centre was design with a phylosophy of providing separate buildings to house main groups of activities. This enriched the circulation pattern, giving enclosed links crossing open pedestrian streets, a high level foot bridge (linking upper

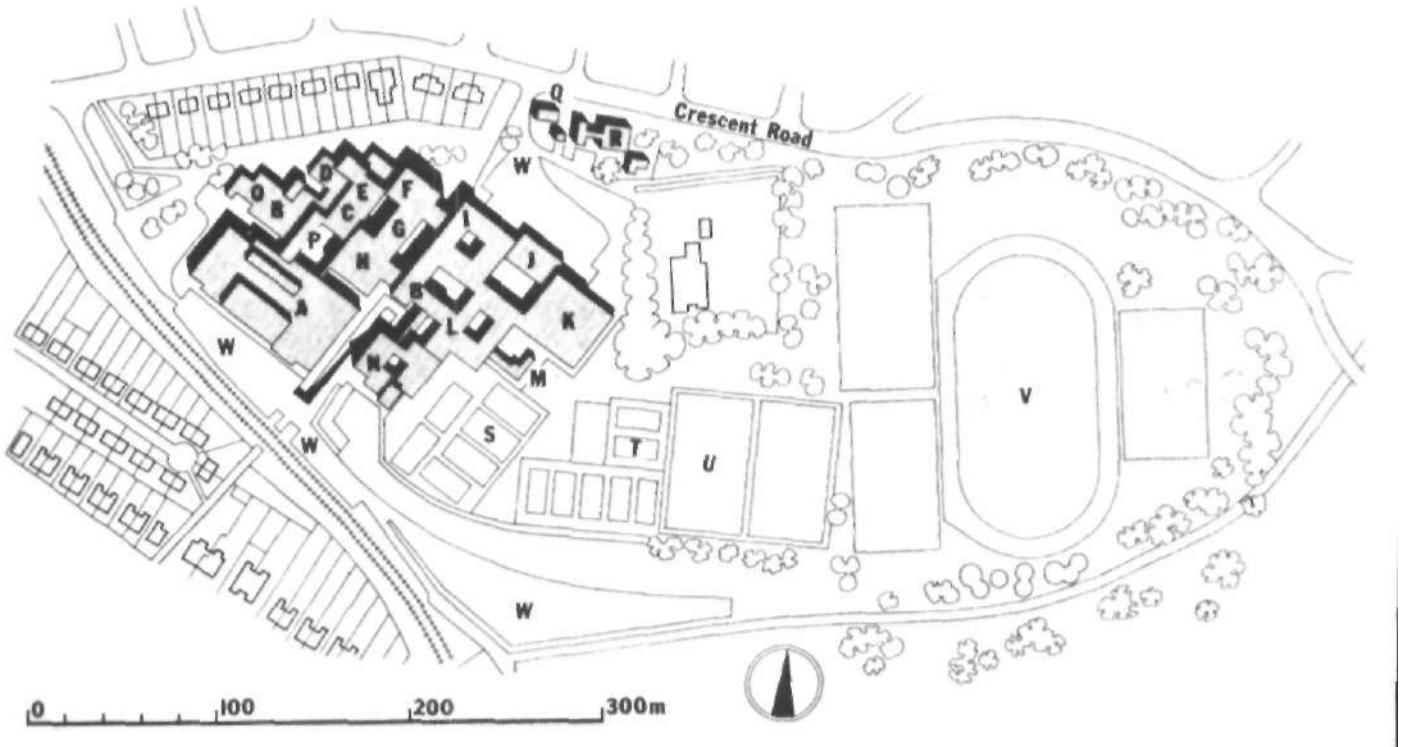
Abraham Moss Centre

Cheetham Crumpsall, Manchester

DES Development Group in association with the Manchester City Architect

The Abraham Moss Centre, **12**, *was completed in October, 1974. The buildings occupy 8½ acres of a 32 acre site, formerly allotments and an industrial tip,* **13**. *The buildings are in CLASP construction, clad in white precast panels.*

The philosophy of providing separate buildings to house main groups of activities has enriched the circulation pattern, giving: enclosed links crossing open pedestrian 'streets'; a high level footbridge (linking upper school and sports centre) and an underpass below the railway and out into the community. The views along main pedestrian routes are interrupted either by simple, but effective landscaping, or the steel stanchions under the linking bridges. The interiors are very different, both architecturally and socially, from the interior. On one 'quiet' Friday some of the activities observed were: a play group, a crèche, a lady pensioners' choir, normal school lessons, combined 'A' level and adult education classes, pensioners luncheon club followed by dancing lessons (with card school in attendance), the mass donation of blood (in the theatre), the printing of 'in-house' circulars and texts, swimming lessons, a clean-up in the central kitchens prior to blast freezing the next three months supply of meals, along with the mixed use of restaurants, coffee bars, the youth club, library, and the beauty and hairdressing school.



12 *Abraham Moss Centre: block plan.*

Key
A Indoor Recreation Centre
B Kitchen and Restaurant
C Theatre
D Music
E Drama
F Adult Education Centre—Office Studies
G Humanities—Administration
H Library
I Youth Wing—Arts and Crafts
J Engineering
K Science and Maths
L 13-15 Base



school and sports centre) and an under-pass below the railway and out into the community.

The programme of the centre include :

1. Indoor Recreation Centre.
2. Restaurant.
3. Theatre.
4. Music, Drama
5. Acult Education.
6. Administration.
7. Library.
8. Youth Wing.
9. Engineering Department.
10. Club.
11. Residential Unit.
12. Play Fields.

In conclusion, the principle of sharing and joint use of the planning of community facilities and planning of community school can have radical effects not only on planning solutions but in the fundamentals of site selection and the relationship of the site to the general urban fabric of the community served.

With this study I am placed in a better position to assess and evaluate the needs and the feasibility of the design project I am undertaking.

CHAPTER SIX

DESIGN CONCEPT ZONING CIRCULATION- PARKING AND GROWTH

6.01 TRAFFIC CIRCULATION AND PARKING

6.02 ZONING

6.03 DESIGN ALTERNATIVES DESCRIPTION OF PROGRAMME

AND

6.04 SCHEDULE OF ACCOMMODATION

6.05 STRUCTURE OF THE DESIGN

INTRODUCTION

In an article written by M.C. Cunninghan and D.F. Savoie in KISTICS Vol 39, No.232 of March 1975. They wrote this about form.

Form has been described as the intrinsic character of anything and that which imposes this character". Form is wrought by a set of component elements (shape is one such element) and the interrelationships among those elements. Urban form is the result of response, either designed or vernacular to system of forces which comprise a context. It is never arbitrary. Within the context of any given moment of history, as described by its sociocultural, political economic, physical environmental, and psychobehavioral characteristics, form is both real and rational. However, due to variations in afferent and efferent impulses connecting the human organism with its perceptual environment, form as reality is not synonymous with perceived form. Intersions, motivations, personalities, and values of an individual transform his experience and its meaning.

Form is welded to time and to a complex set of contextural variables. Yet, designers continue to borrow indiscriminately of elements from the past without regard for linkages among the elements for example, what is the economic and political significance of the brick paving in the Piazza del campo in Scena?

How has the history of the space of this campo been related to its shape? How does the climate and location of the site and the culturation of a people affect the use, of the site. The answers to these questions are lessons of history which have not been learned by the architects of the Boston City Hall Plaza or the massachusetts State Service Centre. If the Piazza del Campo were built today, it might be paved with common asphalt;

This is the argument that my design is based on. I dont think it is proper for any architect of this time to design for a multi-racial community and then impose a particular cultural, and socio-political set of values on them. Society is changing cultures change with it and time is moving. Technological advancement dictates our limitation in design with repect to materials.

This does not mean that despite the location of the centres one should not respect the architectural culture of the area. To this end I have tried to harmonise my design with the existing structures around the site. There is a limitation to this. The cost of land in the central part of the sector dictates that one should maximize land usage. My design is a compromise with all these factors.

The vehicular traffic is restricted to the periphery of the centre. Parking is done not directly off the major road but one drives through a drive-in before getting to the parking lot. This way bottle necks due to collision are reduced since only two accesses are available to any parking lot. There is a possibility of moving from one lot to the other incase one lot is full. This way the external traffic is avoided. Delivery is done to the kitchen and the super market by lanes that are not used frequently so the question of traversing the centre does not arise. From the description so far it is noticed that every attempt is made to keep vehicular access completely extraneous.

The site is completely, traversed by pedestrian movements and it is also surrounded by residential area. I have designed the centre in such a way that the whole place is completely pedestrian. The centre is designed as an environmental area ie an area having no extraneous traffic and within which considerations of environment (aspects directly or inderectly affected by the presence of the vehicles)predominate over the use of the vehicles. This complex is not therefore free of traffic but only these essential to each area would be permitted. In conclusion an attempt has been made to keep vehicles and pedestrians in segregation.

ZONING

Community buildings complex or community centres are generally zoned into three distinct parts.

(i) The Arena or community space

(ii) The services zone

(iii) The community projects zone.

The arena is a public area open to passers by (whether or not they are visiting the services centre). It is shaped in such as was to encourage public discussions (both formal and informal) and equipped with walls for posters and notices.

The services zone houses all the essential services provided for the community in the complex. It is directly accessible from the arena and it is visually linked to it.

The community projects territory has offices for local government, and for sub committees which have control over the various functions that take place within the complex.

The arena or piazza acts as link between the other two. In my design I have two zoning concepts.

(i) For an active utilization of resources these sones are apparent.

(a) The quiet zone

(b) The buffer zone

(c) The noizy zone.

The quiet zone is located close to the residential area and the activities here include, the local government offices block , the health clinic, the police station and the nursery school. These are separated from the noisy zone by the piazza which is the buffer zone. The noisy zone comprises of the mini market, the departmental store and the multi-purpose hall.

(ii) The second concept is that of making the open space ie the community square or piazza look enclosed by tall buildings. In this way the feeling of being in the wilderness does not occur more-over since it is a community square I do not anticipate that only few people would use the space at any give time. With this concept tall buildings are located close to the square to give it an identity. Where tall buildings are not located tall trees are used to enclose the space.

When there are several civic buildings it is important that there should be adequate space round them for large trees to be planted to separate their forms. An informal grouping in which the architectural forms can mingle with these of the landscape design is the most satisfactory (from the book town design by Fredrick Gilbert).

The right angle is used to relate the buildings in space. In this way an attempt has been made to treat each building as a monument.

As one walks round the group, the horizontal lines appear to vanish to common points thereby giving the forms an affinity. This type of layout does not attempt to define a space (although it will be all to the good if it does) so much as to relate the buildings in space and to do this a fairly open site is required so that one may walk round both outside and between the group and appreciate the way the composition comes together and falls apart again in perspective.

Since my site is flat the right angle is the controlling influence on the layout.

DESIGN ALTERNATIVES

These are two design atternatives open to a designer of a community Building Compex:

(a) A compact design which attempts to house all facilities and services within a building.

(b) A disperse design.

The dispersed design alternative is the chosen one for my design because of this advantages;

- This sort of design comprising of series of open and built up spaces is the reflection of a dominant features of tradition architecture in this area.
- It is suitable for the climate because its loose nature offers one the chance to exploit the use of natural ventilation;

- A clear separation of the defferent functions offers one the chance to solve the individual problems they pose efficiently. It also makes for easy integration of the design.
- It is possible to carry out the building process in phases depending on availability of funds and the needs of the community.
- Simple building materials and construction methods can be used.

DESCRIPTION OF PROGRAMME AND THE-
SCHEDULE OF ACCOMMODATION:

The Local Government offices and the Community Library:

Due tp the emphasis on the administration building it is sitted into a recession to make it stand like a three dimensional object. Most of the ground floor is open. This allows for a free movement to and from the centre. It also improves the visual sight line into the outside. On the top floor is located the community library. The library is here because of the close interagency co-operation needed between the offices and the library.

LOCAL GOVT. BRANCH OFFICES	Staff Reqd.	Approx. Area (Sq. Metres)
Finance and Revenue		
Executive Officer	1	20
Secretary	1	11
General Office	3	15
Store	1	10
Health & Social Welfare		
Health/welfare Officer	1	20
Secretary	1	11
General Office	3	15
Store	1	20
Education		
Schools Inspector	1	20
Adult Education Officer	1	11
Secretary	1	11
General Office	3	15
Store	1	20
Information		
Information Officer	1	20
Secretary	1	11
General Office	2	11
Store	1	10
Planning and Development		
Planning Officer	1	20
Secretary	1	11
General Office	2	11
Store	1	10

	Staff Reqd.	Approx. Area (Sq. Metres)
Chief L/G Chairman		
Chief's Office	1	25
Local Govt. Chairman's Office	1	20
Secretary	1	11
Conference Room	1	32
Clerks	2	11
Store	1	20
Community Service Centre		
Professional advice room	3	45
The Community Library		
Adult Reading/Borrowing	150	225
Children's Section	100	150
Library Work/Shop	5	100
Clerical Officer	2	10
Equipment Store	1	10
Librarian	2	15
Public Toilet	4	12

The Multi - Purpose Hall

As the name suggests this is a build with a lot of functions and it is used by a veriety of people.

It has a separate entrance from the community square to reduce the confusion at the square. It can be used for a general gathering of up to 1000 people. Because of this numbers basket ball and any game that needs a space less than the basket ball court size can be played in it.

This hall is a place of general assembly, used for events of interest to the whole community. Club Rooms are also provided for the use by various clubs' meetings.

FACILITIES ENCLOSED

- Multi - Purpose Hall for 1000 people
- A Club Room with adjustible partition wall.
- Welcoming entrance and a provision of opportunity to display information about current activities like social events.
- A reception desk for enquiry and for an efficient control of access to the centre.
- A games room connected to the outside games space.
- An Office space for the administrative workers.
- An entrance lounge for exhibitions, notices and annoucements.
- Two changing rooms
- A store big enough to accommodate all the chairs.
- A preparation room
- A reception hall and box room
- A Snacks shop

THE MINI - MARKET

This is a shopping centre entirely reserved for retail trading. There are about 30 shops of the size 6 x 5 metres. There are six shops for artisans and their workshops are located at the top.

There is one big Departmental Store with hair dressing saloon at the top. The shopping complex is of a small size to control the neatness and orderliness of the whole centre.

To the Northern part of the site is located at the main entrance to the centre for easy identification and delivery. There are three categories of the Restaurant in the centre.

i. Waiter Service

ii. Self Service

iii. The Snacks Bar

Another aspect of restaurant work mentioning here is the Kiosk. Due to the hot nature of Makurdi I decided to locate many Kiosks along the walk pavements of the entire complex. In these Kiosks petty trading like the sales of minerals, cola, cigarettes etc are predominant.

FIRE SERVICE CENTRE

This is located at a very strategic position on the site. This is to facilitate the movement of the fire vehicles within short notices. The programme includes:

Administrative Offices

Hall (apparatus and equipment)

Fire alarm and Communication

Maintenance and Supply

Repair pit

A Watch Room

Assembly Hall

A Locker and Wash/Room

Store Room

Hose Drying Tower

A Wash down and practicing Courtyard

POLICE STATION

A Police Station is provided in the centre to maintain out law and order in the Community.

Reception/Constable	8	15
Inspector	1	12
Sergeant	1	12
Investigation Branch	2	12
Telephon and Radio Communication	1	12
Locker Roo/Toilets	10	20
Public Toilets	4	12
Storage of Properties		30
Male Cell and Toilet	2	12
Female Cell and Toilet	2	12

POST OFFICE

The Post Office is located on the ground floor of the Rental Offices Building.

Post Office		
4 Phone booths	4	8
Run Counter	4	20
Public Reception	60	48
Post Master	1	12
Sorting Room	5	100
Toilets	4	12
Switch Board Operator	1	10
Telegraph and Delivery Room	4	40
General Office	2	10

THE PIAZZA AND THE WALKWAYS

The Piazza is a consciously designed community open space with so many functions. These functions range from very serious activities to relaxations. This space is used when the Hall in the multi-phrpose hall is too small to be used. Occasions like political rallies could be staged here. Cultural festivals, Religious celebrations etc are functions for these space. Relaxation benches are located at the periphery of the piazza to form a demacation between the piazza and the walk ways. The piazza is also terraced to offer good views from all sides.

Since this is a community complex the main accesses to the centre are about 10 metres wide and they are lined with trees and in some places with walls of building to create beautiful vistas. Some of the walkways are covered for a more confortable emergency communications.

The rental offices block is a block that could be let out to professional firms like Architectural Consultancy, Legal Consultancy etc.

HEALTH CLINIC

The health clinic is a small clinic mainly used by the users of the centre. It is not meant to be the only health centre in the town. All serious cases should be taken to the hospital for intensive care.

Waiting Hall/Records	100	120
Examination Room	3	30
Doctors Room	2	20
Nursing Sister	1	15
Dispensary, Lab./Store	3	60
Store	1	12
Public Toilet	4	12

NURSERY SCHOOL

Since the centre is at the heart of the residential area I decided to place a Nursery School there, bearing in mind that

there are several school in the town as a whole. This is a place children go before they are ripe for primary education. It is located in the most green area of the site. It is also at the quiet zone.

THE DESIGN STRUCTURE

One of the guiding factors in the structuring of the design is the site's shape and size. The location is another determining factor.

No multi - functional space can be successfully design for Makurdi without the use of open spaces and the use of trees for shading. This is due to the temporature throughout the year. The atmosphere is very hot and humid so life is more enjoyable outside the room.

The size of the land gave me the opportunity to a sort of sprawl on the ground, the highest building being about 10 metres, yet achieving the same importance that the complex deserves. With the special type of arrangement achieved the whole centre becomes a monumental piece of architecture.

As I stated earlier on, the design structure is an informal grouping in which the architectural form can mingle with those of the landscape design.

Due to the backwardness of the people I do not envisage the possibility of using the prefabrication system of building in due course instead I recommend the use of bricks for the construction of the walls and timber rafters for the roofing structure. Brick has been in use in this part of the world for a very long time now and so with careful supervision a master piece in architecture is imminent.

CHAPTER SEVEN

C O N C L U S I O N

7.01 LABOUR

7.02 FINANCE

7.03 ADMINISTRATION

7.04 PROPOSAL FOR THE FUTURE

BIBLIOGRAPHY

LABOUR

Since the construction is mostly of brick I believe the Labour available in and around Makurdi will suffice. With a good Organisation the State Government can get the Labour necessary for the construction of the mult-purpose hall where a little bit of sophistication is needed. This is because of the use of space frame for the roofing structure and the acoustios standards to be achieved here.

FINANCE

Most of the buildings are enterprising , so I believe who ever puts in money to build the centre will get the money back in due course. On a careful study of the type of community found in Makurdi it will be very difficult if not impossible to solicit for a communual effort from the people. The people look at the government for everthing in terms of amenities. This is not the case in the Rural area though the Urban case, interest groups vary. It is easy for the Moslem Community to build a Mosque say, and likewise for the Christians to build a Church. When it comes to the building of a Police Station it is almost impossible to get an interest group cutting across the community.

This attitude must change. I feel one way of changing it is to provide a forum where the community can meet to get to know one another's problems. With this communual interest could be generated and progress achieved. This will also enhance the peaceful co-existence of all the people in the community.

Since the North Bank comes under the umbrella of Makurdi Capital Development Board I believe these building projects could be undertaken in stages by them. This is quite feasible because the Housing and Urban Development Corporation has under taken the construction of housing units for people. The Market, the Rental Offices, the Departmental Store, and the Restaurant coud be built by the Board while the others are built by the government. The proceeds from the enterprise then go to the Urban Development Board. This way the whole complex could be built before the year 2,000 which is my taget year of completion of the project.

ADMINISTRATION

I suggest that the complex has its own administrative body. This body should consist of all the interest groups in the centre with a Chairman from the State Headquarter. The office of this administrative body should be located at the local government office block.

This body should take charge of the administration and execution of all the projects in the centre.

FUTURE PROPOSALS

With the site frame work which I have designed any architect that is going to design any of the unit to detail will definitely find it easy. This is because what is left to be done is just the working drawings since all the design sketches have already been done by me. The design of the whole complex is loose, each building has a character. In this way any building design that respects the height limitation will obviously fit into the complex.

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