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B Y

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ON

INTEGRATED RURAL DEVELOPMENT CENTRE
"A RURAL IMPROVEMENT PROJECT",

IN

ACCEPTED BY

. . . . . .

HEAD OF DEPARTIiENT
ARCHITECUTE.

EXTERNAL EXAMINER/S

DATE.....

D E D I C A T I O N.

Dedicated to my late father ATTAH OKPANACHI and mother OKEBE OKPANACHI, both whom departed this sinful world when their presence and ecouragement were mostly needed. May their souls rest in Perfect Peace, Amen.

And above all to God Almighty for his guide and protection over his children of this sinful world.

QUOTABLE QUOTATIONS:

" SCHOOL LEAVERS HAVE BECOME DELINQUENTS BECAUSE OF POVERTY, FRUSTRATION, UNEMPLOYMENT AND LACK OF PROPER CARE. MANY YOUTH HAVE LANDED THE UNENVIED TITLE OF "LAY - ABOUT". THEY TURN THEIR VENOM AGAINST THEIR ELDERS, STEALING FROM THEM AT BUS - STOPS, IN SHOP CORRIDORS AND MARKETS. THEY HAVE GONE TO WASTE" .

W. HOPPERS.

QUOTABLE QUOTATIONS.

" IF RURAL PEOPLE OF DEVELOPING COUNTRIES ARE HELPED TO HELP THEMSELVES, I HAVE NO DOUBT THAT A GENUINE DEVELOPMENT WILL ENSURE".

E. F. SCHUMACHER (1973).

QUOTABLE QUOTATIONS

" If Countryside life is to be made attractive, facilities, similar to those in our urban areas are of importance to foster the life of a community, "WHAT IS GOOD FOR. THE GOOSE IS EQUALLY GOOD FOR THE MICE" .

Kimmy O.(1986)

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ABSTRACT.

INTEGRATED RURAL DEVELOPMENT CENTRE!

" A RURAL IMPROVEMENT PROJECT".

In Nigeria today, the problems of slums, unemployment, squatting and other social maladies have been manifesting itself in the urban centres. These social maladies have reached such an alarming rate that life and property in the cities are in perpetual atmosphere of insecurity. A critical approcisal of these maladies shows that thoy actually originate from the rural areas.

The problems confroting our rural societies are just numerous and ranges from low income level - which is below survival margin$_r$ unemployment among youths, - due to limited employment opportunities outside the agricatural sector, low life expectancy - due to lack of health care services, illiteracy and lack of other social amenities. Their means of economic survival is agriculture, supported with such crafts as weaving, pottery, leatherwork and blacksmitting, which are all practiced with the most primitive technology and ideas. These phenomena which

present a picture of "the wretched of the earth" tends to perpetuate a vicious cycle of poverty and under-development within the rural areas.

The unattractive nature of our country-side, has resulted to a great influx of rural immigrants to the urban centres, mostly young school leavers who come to seek jobs. The jobs often non-existent. Having failed to realize their dreams, these youths become frustrated. They resort to all sorts of anti-social behaviour including loss of self-conficence, prostitution, alcoholism, drug addition, smuggling and other forms of crime.

The scheme intends to raise the general low level of the living conditions of the rural populations, throuGH the improvishment of the agricultural sector, and the provision of more economic base to serve as means of alternative employment opporpunities for the rural population in one hand and the provision of social, health and recreational facilities to serve as incentives to boost the moral of the rural societies.

The primary objectives of this scheme are thus:

(l) To prodive employment opportunities, through the

establishment of small scale industries as alternative source of income 5

(2) To improve on the system of services that directly support agricultural productions

These services are:

Farm Services - Farming and marketing techniques;

Public Services - Education and information Services$_f$ Social, health, and recreational facilities;

Infrastructures .. Roads aid more houses$_0$

(3) To organise the supporting system and make it work in the most efficient manner, so as to improve the lives of the rural dwellers without in any way imposing urban culture on them.

The scope of this scheme will be limited to the provision of facilities that are relevant to the peoples daily survival and that will serve to improve the quality of life there upon of the rural people.

The primary architural significance of the scheme is to create and harmonize a development base with adequately planned and suitably designed environment that will envolve institutional, industrial, social and recreational apparatus.

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INTRODUCTION.

It is generally believed, that a society is an evolving one and not static. For any evolutionary processes to take place, changes must occur. Changes occur when new ideas or invetions are introduced to take the place of existing situations, or when innovations are made on existing ideas. When changes occur, then development can be said to have occured or taken place. There are many fields and avenues through which a society can develop;- through population growth, physical growth of the natural environmental setting, the general living conditions of the people there-in and in the social as well as the economic well-being of the generality of the community. Thus, development can only take place when and only when one or all of the above conditions take place.

The author take indepth study and consideration of lives as experienced in the rural areas of this country and felt that something should be done to alleviate the situation there upon. At this point, it must be emphasised that development and changes can either be negative or positive, Negative, when the expected average condition of things are deteriorating beyond pardon and recognition. The situation of thing in our rural areas shows that it has negative tendency towards development.

Every aspect of life therein is on the down ward trend. The pain here starts from the fact that all these are happening to our rural areas while billions of our hard earned Naira is either stolen, embezzled or unaccounted for properly. Huge amount of money are also spent on our urban cities to cause slums, and unconducive atmosphere for people to leave in; in the name of development.

It is the author's belief, that meaningful development in Nigeria can only take place when emphasis on developing our saturated urban centres is shifted to the rural areas where life is on a sympathic condition.

For easy reading and understadding, the text have been divided into two parts. Part one which is further sub-divided into three chapters deals with the situation of life as experienced in the rural areas of this country. Part two which has two chapters deals with proposal for development in the rural areas taking into condaration their needs and wants.

In part one, chapter one, attempts were made on defining what a rural society looks like, what potentials they have in stock despite the enormous problems facing them, what government have been doing since independence to make

life there conducive for leaving. Attempts on defining rural developments were made. Studies on various areas that need to be developed were also taken into consideration. Some of these areas which are dealt fully in the text includes; the role of continuing education on rural development, the concept of skills training for rural areas.

Studies were made on the structure of rural occupation and how it affects employment opportunity for our rural dwellers; with emphasis on our rural young graduates. The role of rural youths as regard rural development was also dealt with. The effect of rural youths migration on the rural setting were also considered.

The approach to development of the rural areas took its turn and was fully analysed. This dealt with how the situation in the rural areas could be tackled by both government agencies and voluntary organisations as well as the contribution expected of the community themselves.

Chapter two took consideration of the regional setting of the chosen project location. Areas taken into consideration include, the geography, historic background, population, rural services and economic activities of the area.

Chater three went wide to study similar development approaches as undertaken else where in the world. This studies went to Kenya, Tanzania, Zambia, Zaire all within

the African contient. Still not satisfied, studies were further made in Peterborough, Manchester, and for away China. Knowledge and experience gathered from this study broadened the auther's idea greatly.

With full idea and knowledge on what is to be done to make life in our rural areas appreach comparable standard with its counterparts elsewhere in the world, part two was proposed.

Part two chapter one dealt with the various community needs such as economic, educational, socio-cultural/ recreational, health and communication facilities.

Chapter two deal with the setting and management of the village centre. This took into consideration, the population of the area, location criteria, management and finances to be incured in the centre. It went further to discus the various elements of the centre suggesting space requirement for different activities within the various units and components making up the centre complex.

The last but not the list in the text deals with the design approach. This spells out how the complex will be planned so as to be affordable by the community, with their financial resourse in mind. This last thing in the text is highly challenging, and so what the author have done is to set the ball rolling for the incoming generation to continue contribute from where ever he might stop to see that life in the rural areas are changed and developed through architectural led approach.

CHAPTER 1

RURAL DEVELOPMENT.

(1) RURAL SOCIETY.

.1. DEFINITION - The rural society is often described in spatial and behavioual contents. Although, there is no universally defined population figure for a rural community, the Nigerian census of 1952 described a rural community as a settlement with less than 5,000[1] inhabitants. Similarly, the 1963 census recognised settlements with less than 20,000[2] inhabitants as rural.

From the social science point of view, the rural societies are decribed in terms of some characteristic patterns of relationships. According to Philip Mbithi (1974)[3], such relationships are characterized by a high degree of interpersonal intinacy. Social order is based upon concensus of wills and supported by folk ways, more and religion, high moral commitments and dependancy on reciprocity norms, kinship obligation, neighbourhood ties and high degree of communalism.

.2. POTENTIALS - In Nigeria today, more than 70% of the total population live in rural societies. The primary occupation here is subsistance agriculture; supported with such crafts as pottery, weaving, leather work, black smitting and handicrafts. The rural society also serve as the main source of food for our urban areas. They provide such staple foods as yam, garri, maize plantain etc. They also provide the raw materials for the industries viz -cocoa, rubber, groundnuts cotton, palm oil and palm kernel.

Rural Nigeria have alot to offer in the development of the nation economy if attention is given to its resources and life there improved upon.

3. PROGBLEMS OF RURAL SOCIETY - The major constraints facing the rural societies is that of neglect in terms of development. Inspite of their contribution towards social and economic welbeing of this nation, they are denied of the basic amenities such as good access road, drinkable water, electricity, health care facilities and recreational facilitiess Industries are either non-existance or grossly inadequate. Of recently, unemployment among rural youths and its subsequent effect - rural - urban migration by youths, have added a new dimansion to rural problems. Rural youths provide over 70% of the labour farce required in the agricultural sector of the rural economy. Their mass exodus to the urban centres in search of better living conditions, better education and better employment opportunities have left the rural economy in still worst situation than before.

Also the general income level is below survival margin. The life expectancy of the rural dwellers is very low. These phenomena which present a picture of "the reached of the earth" tend to perpetuate a cycle of poverty and under-development within the rural societies.

These problems facing the rural dewellers are summaized by one emient scholar as - "the most dominant and common features of Nigeria are poverty, unemployment and inequality in income and social amenities, paritcularly in the rural sector.

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The transformation of these handicaps, at the base, is the key to any meaningful programme of development and social change.[4] The problems of our rural societies have long been well documented, yet efforts have not being made to arrest the situation by past governments since independence.

Record has it that our former colonical masters contributed significantly to rural under-development in Nigeria. The neglect of our rural communities is historic / and dates back to the export-oriented economy of the former colonial masters. The primary aim of the colonialists was to exploit the nations resources including rubber, timber, cotton, groundnuts, palm produces. It is for the easy exportation of these national resources from the hintelands to the coasts that necessiated the establishment of mail lines and road net-works in the country by the colonial government. Consequently, only towns and villages along these network of roads and raillines experienced defelopment. Throughout the colonial era, development policies centred on towns and cities where the colonialists lived and worked for the betterment of their home and mother country and to the detriment of the host country - Nigeria. With this kind of obnoxious policies, development of rural Nigeria was relagated to the back-ground, hence the situation of life in our rural area today is a matter of concern for the present government.

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1:4.: GOVERNMENT POLICIES ON RURAL DEVELOPMENT SINCE INDEPENDENCE.

In realisation of the harm caused to the rural communities by this criminal neglect by the colonial government, the past governments in Nigeria since independence, have made some conscious efforts towards improving the living lots of our rural dwellers. These efforts are reflected in the various national development plans and annual budgets.

It appears that these development plans especially the first through the third, having striking similarities or are more or less reproductions with only slight varietions.

Where as the first plan had to do with the consolidation of our hand earned independence, and was bedevilled by poor financial resources, the second and third plans were during the mythical and so much published "oil boom". The buoyant financial background facilitated our up surge in the country's earning from petroleum. This prompted the country to embark on a large number of expensive infrastrustual projects.

This seemingly rosy financial position of the country was short-lined so that the atmosphere become quite pessimistic as a result of drastic detrioration in the volume and price of the country's oil production. The construction boom which the oil wealth had thrown the country into was urban-based and this encouraged agricultural stagnation, inflation, and importation of goods and services.

In a nutshell, emphasis on our development have been on material things rather than people, in terms of creation rather

than evolution. Thus, our misplaced prorities have always made use to livo in fools paradise.

In the fourth development plan (1980-85), efforts were made at taking stock of the previous experiences with a view to ostensibly correcting our errors. In so doing our palnners for the first time, felt that there was need to adopt a new strategy.

For the first time, attemtps were made to define development in more realistic manner. Chapter 3 paragraph 7 of the guidelines (objectives, overall startagy and prorities) states that "True development must mean the development of man the unfolding and realisation of his creative potential, enabling him to improve his material conditions of living through the use of resources available to him. It is a process by which man's personality is enhanced and it is that enhanced personality creative and organised and disciplined which is the moving force behind the socio-economic transformation of any society".[5]
It went further to state that, "a developed society is one that is capable of re-current self-renewal, one that is capable of borrowing from other societies without becoming merely initative and thereby losing its own soul. Each society has therefore to envolve its own pattern and its own life style consonant with its cultural heritage and traditions".[6]

The stipulated criterion for measuring development were given as the extent to which the common man's interest in the availability

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of drinking water, educational facilities, good roads, life expectancy, coric intake which are physical targets rather than the previous criteria of aggregate of gross domestic products capital formation and financial expenditure, incurred in the [illegible] of the projects.

The objectives of the fifth development plan were to remain basically the same as those of the fourth viz:-

(1) Self-Sufficiency in basic food commodities on which the nation currently incur considerable expenditure in foreign exchange that could otherwise be used for importation of capital goods, technology, and management that are in short supply locally; (see table).

(ii) Increased production and processing of export crops which a view to increasing and further diversifying the country's export base and foreign [illegible].

(iii) Modernisation of agricultural production by the infusion of improved technology and management so that the sector can be more responsive to the demands of development in the other sectors.

Recently President Babangida, in his 25th Independence anniversary broadcast to the nation, made a firm commitment that,

> " It is our hope that we break the vicious circle of hope and despair, faithful and doubt, effluence and poverty, stability and chaos which has characterised the past quarter century of our national life. He went further to

.../

state the fundamental objectives of this regime are reconstruction, social justice, and self-reliance"[8]

Another aspect of his broadcast in his remark as regard rural development. He did confess that for too long, we have perpetuated the neglect of our rural population". The President promised to accord primarcy to rural development through agricultural-led industrialisation of domestic non-agricultural resources.

For the first time, the government is committed to the principle of citizen participation at all levels of decision making. To effectively pursue this, the government plans to utilize local government system for the encouragement of grassroot mobilization, community governance, and self-fulfilment.

The government is also committed to the provision of greater employment opportunities in order to bosst aggregate labour real income and reduce excessive inequities of income.

As regard food and agriculture, government promised to shift emphasis from large-scale to small scale farmers, from large scale irrigation projects to a net work of small earth dams, and tube wells for medium sized farms and from import dependence to internal sufficiency.

The extend and scope of which the above spelt objective of the 5th development plan will be accomprished depends on the measures adopted to ensure that resources in the rural economy are adequately funded. Financial obligation has to be made at

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the approprate stages of the implementation period. With agriculture as the main occupation in most rural areas, attention should be paid to its modernisation in order to afford more yield and subsequently increase the income of the rural farmers. This will go a long way in improving his living standard and those of his family and dependant relatives and others alike.

1.5 RURAL DEVELOPMENT: Rural development attracts as many definitions as the number of people interested in the subject - such definition is usually according to each individuals perception of what rural communities should look like. Everett Rogers [x9] defined development as " a type of social change in which new ideas are introduced into a social system in order to produce higher per capital incomes and levels of living through more modern production method and improved social organisation". Others have it thier own way. John T. Ayakga[x10], defined rural development as a process whereby series of changes take place within a given rural population with the aim of improving the living conditions of such a population: it involves modernization, re-education, and implies changes in human attitude replacing a sense of dependance arrangement of that environment". One striking point to note is that both definition emphasises on improving the living lots of the rural earea through modern means offered by technology.

Rural development is therefore a sort of policies or goals with two him ends, First, it must encourage the promotion of the well being of the poor rural majority. Secondly

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it must ensure the production of a surplus of a size and nature that will enable the fulfilment of a resonable part of those natural requirements that are not exclusively rural.

Rural development involve the mobilization and development of the whole range of resources in rural areas within the broader context of national, economic, social, cultural and political advancement, to the ultimate end of improving the lifes of the rural dwellers.

Agriculture, been the basic occupation of the vast majority of the rural society, the improvement of agricultural productivity merits high prority in any sensible rural development programme. The improvement of agriculture, is not just, the application of science and technology into the existing land use system, it depends on the active and willing participation of the rural farmers and other rural dwellers.

Mobilization of human resources through education and technical training is very essential for agricultural change and development. Also important is, the prevision of cash incentives, creation of the infrastructure essentials to a modern agricultural-industry markets, credit, processing facilities and above all, fair stable prices for agricultural produces.

Improving the general living lots of the rural society is the sole aim of rural development. This is to be accomplished through the provisions of employment opportunities for all. More intensive cultivation can help reduce rural underemployment, and

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but it cannot solve it all. The ever growing population and its pressure on the limited available land is creating an ever greater need for off-farm job opportunities to absorb the excess rural labour force. This excess labour force are usually the youths who out of frustration migrate to the urban areas to seek white cola jobs - these jobs often non-existence, hence they meet greater frustration, that later make them susceptible to crime and various forms of juvenile delinquency. The new jobs must be generated in the rural areas themselves, thus, unavitable, should use as much as possible, the available rain materilas existing locally.

Rurala development seen in wider perspective shows that it is much more than agricultural and economic growth in the narrow sense, but a balanced social and economic development, with emphasis on the equitable distribution as well as creation of benefits. Among the goals are the generation of new employment, more equitable access to arable land, more equitable distribution of income, wide spread improvement of health, nutrition, and housing, greatly broaden opportunities for all to realize thir full potentials through education.

Rural development is based on three principles, self-help attention to felt-need" of the community, and attention to development of the community as an integrated whole. The emphasis here is on the identified'felt needs'of the comunity. Rural development should be centred on the felt needs of the community and none should be treated or developed in isolation.

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Development, depends upon the human agents, which itself needs to be developed through learning. Education and Training process enable human potentials to be explored and brought to their development refinement and maturity . Learning and Teaching are as old as man, and will continue for as long as man survives. . Not only have they been the means of his survival and ascendancy over all other creatures but the fundamental curiousity of man and the derine for creativity makes the learning process on inseparable pcirt of the satisfaction of human needs.

1.6.1 CONTINIUNG EDUCATION AND RURAL DEVELOPMENT.

A review of our present educational system is necessary for proper and effective rural development programmes. Our present formal educational system alone, as it stands today, can not help much in this situation. Every school going child is a potential Emigrant'[11] This follows from the fact that those that succeed either find that there is so suitable jobs for them in the rural areas, or even find it difficult to re-adjust themselves to the village life often having been exposed to urban life during the course of their studies. Most unfortunate, is those who could not go beyond the primary school level-drop outs - most of them having left the farms for at least six years and worse still having tested school experience, may develop special personal problems and the result is frustration. They may run away to the urban centre is search of job opportunities which they might never find.

In rural development planning programmes, it is of important to consider training elements that devlop the skills

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needed for productivity as well as components that acts to improve the quality of life of rural populations.

Training Programmes for rural areas can be broadly categorized under three headings.[2]

- those that prepare specific target groups for effective involvement in the economics life of the community and by extension, the country.
- those that are designed to improve/strengthen peoples daily-life skills, on such subject as health and nutition, home making and child care, home repairs and improvement, etc.
- those that upgrade the skills of existing producers, so that they can make available an extended/diversified improved range of commodities/food stuffs/ good and services.

1:6:2 THE CONCEPT OF SKILLS TRAINING FOR RURAL AREAS:

The need to forge better links between training and employment is especially critical in rural areas where the markets, or the potential to develop one, for "newly acquired skills" is generally unknown. To be successful, training should take into account employment opportunities and generation of employment. Any training that fails to satisfy the needs of the rural dwellers may actually increase migration toward the urban centres. The training should be

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seen as an overall skill - formation process aimed at assisting rural makers to increase effectiveness in earning a living, reduce the drudgery of work, managing family life and participating in community development. Trainees must perform those activities, which are relevant to them within specific rural life conditions and locally available resources. Training content, methodology and instructional material must derive from the "know-how" requirement of rural activities and from the learning characteristics of the target population.

1.7 THE STRUCTURE OF RURAL OCCUPATION

The success of rural training programmes has often been limited because training has failed to focus adequately on the preparation of workes to deal with problems encountered in the rural workplace in their real-life situations. The understanding of the characteristics of rural occupation is essential in planning, organizing and implemneting training programmes for rural workers.

The economic applicability of rural workers occupational abilities varies from season to season. A farmer with carpentry skills may work as a cenpenter during the off-agriculture season. Where farming is the majority occupation for the area, a training programme may combine agriculture with the development of artisan skills, or the reverse may be the case.

Majority of rural workers are self-employed, meaning that, a diversity of skills at different levels of applicability are necessary. It will be an added advantage for rural workers to

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have the ability to conform to multiple-skills working requirement in order to improve their living conditions, increase productivity or expand their personal competence.

It is thus necessary and advisable that the training programme for rural occupation should vary from person to person and from setting to setting according to the activity itself, the background of the worker and the conditions under which the activity is to be performed. The training recieved should be that, that can be put to immediate use rather than the skills that are required in the open employment market. The training should not necessarily be designed to assist workers to meet national occupational certifications requirements.

Self-employed rural workers are producers and managers at the same time. There is a need to provide more than technical skills training. A knowledge of bookkeeping, accounting and marketing capacities so as to increase economic efficiency is essential.

8·1 RURAL YOUTHS AND RURAL DEVELOPMENT.

The United Nation Organisation defined youths as persons between the ages of 15-25 years old. [13] Nigeria, in other hand defines a youth as a person between the ages of 15-30 years old. In most third world nations, youth comprises about 20% of the total population and rural youths may represent 60-90% of the youth population depending on the country.

Problems arises in putting all rural youths into a single group. Some group will have greater opportunities for education and jobs, for land ownership., and adequate health care, others which constitute the majority; come from the poor segments of the community and are much more likely to be denied those opportunities thus remaining poor and powerless. By identifying speificiosocio-economic groups among rural youths and among all rural peoples, it becomes possible to focus activities more specifically toward them and thereby widen the opportunities for successful' programme and development in the rural areas.

One major characteristics of youths is their expectation for the future - for improving their lives and those of their families and communities. All these expectations, create a dilemma for many rural youths, a dilemma, that is one of their major characteristics - the decision to migrate to urban areas or to remain in the rural areas. This decision is an individual or a family one, and it has shaped the demographic character of all regions. In short, rural youths are often considered a "problem" because of their migration in huge numbers to towns and cities.

8.2 RURAL YOUTHS AND MIGRATION:THE SEARCH FOR OPPORTUNITES.

A through examination of the reasons why rural youths migrate to urban centres can help provide a basis for focusing future youth activities in order to meet their real needs. Economic has been the over whelming reason for youth migration. In rural areas, job opportunities are limited, and often

.../

seasonal and low paying. Income from agricultural produce is low and this is often compounded by added constraints of limited access to land and agricultural services facilities. Increased educational opportunities is another factor responsible for youth migration. " Yet it is not simply that towns are more attractive for jobs, social services and social life but rather, that yourth do not find the alternatives to encourage them to remain rural, even when many prefers to do so" [14]

In the 1960s, migration was seen as been beneficial to urban and industrial development, in most cases, migration is now seen as a problem, said to cause crowded urban conditions and its associated slums, and in some areas depleted rural communities. Unemployment is described as youth problem, implying that the cause is youthful migration. This attitude is a problem in itself. When migration is expressed as a problem, - a problem of expanding city populations, unemployment and deserted rural communities, - policies and programmes formulated for youth will often be designed to reduce the "problems".

There have been programmes to resettle urban youths in rural areas or provide skills training oriented towards the urban consumer market. The record indicates that these programmes are usually unsuccessful in creating viable, alternative rural settlements or in creating practical skills needed in rural areas. By examining rural youths and migration, in a more positive way, it is possible to identify widening opportunities that are occuring as a result of migration and that can provide openings for innovative projects.

Leaving the rural areas is not always a favoured choice, for many young people, economic circumstances more often push youths out of their rural societies. A preference for rural life still remains strong with many migrants. Urban employment is a necessity rather than a choice in many cases, but it offers an opportunity to acquire cash in order to return home and establish farms, business, or families.

The good aspect of migration is that it exposes the rural youths to the world of technology and the possibilities offered by machines for changing the conditions in which rural youths live.

Rural youths are eager to take up the challenge of participating in activities that will improve their condition that of their communities and nations. It remains for national governments and other interested organisations and agencies to complement the challenge offered by rural youths. In order to meet that challenge, changes will have to occur. At one hand land, there will have to be major structural changes to promote land redistribution and settlements, equitable access to services, empowerment of the poor through participation in decision-making and the pursuit of measures to alleviate the struggle caused by poverty for daily survival. At another level, programmes and projects that focus on or incorporate rural youth will anticipate these wider changes by providing practical skills for employment and income-generation by creating a support base(ie - credit and equipment) for the application of these skills, and by encouraging joint action by youth in order to take advantage of their communal spirit and utilize limited resources more effectively.

../

9 RURAL INDUSTRIES AND RURAL DEVELOPMENT

It is now generally realized that agricultural development by itself can not produce the basis for sustained economic growth in African countries without industrialization. Industries are needed to absorb part of the increased agricultural outputs, to supply modernizing agriculture with most of its inputs, and to supply manufactured goods in demands among rural and urban communities.

Small-scale industries can play an important role in rural development. Such industries can provide employment for redundant agricultural labourers, thus, helping to retain them in the rural areas and reducing the flow of migration to over crowded cities. The cooperative movement can greatly facilitate this process of rural industrialization. Small producers may establish a processing factory or a finishing plant (for handicraft) under their managements. This could ensure a steady market for their raw materials, better pricing through processing or finishing and elimination of middlemen.

The advantages in incoperating rural industialization lies in the fact that a closer interaction is established between the agricultural and industrial sectors with benefit to both the producer and consumer. It has the effect of establishing and retaining in rural areas commerical and manufacturing industries based on local raw materials, skills, and demands.

.../

9 APPROACHES FOR IMPLEMENTATION.

In the past, strategies of community development and agricultural extension have not achieved much success in solving the problems of the rural poverty, unemployment and inequality in Nigeria. Although they are essential for the developments of the rural areas they are inadequate to cope with the enomous size and complexity of the problem of promoting economic and social progress of the rural sector. Actions need to be taken on several fronts simultaneously in an integrated manner to break the vicious circle of poverty in the rural sector.

Rural development requires a multi-approach and not single purpose schemes such as community development and agricultural extension. It requires the application of the knowledge and skills of all the relevant national and international services in a co-operative and in an integrated manner.

Thus, to improve the quality of life of the neglected rural majority in Nigeria, programmes of Agricultural Production, health with a more efficient rural health delivery; investment in rural non-farm activities; nutrition, education and training- both formal and non-formal; rural electrification; co-operatives, water supply; rural credit; entertainment; and road construction, should be planned and implemnted in an integrated manner with due consideration for projects that actually support and interlock with one another in an overall rural development plan. This is the integrated Approach.

.../

The integrated approach to rural development is a highly structural and systematic exercise in which all the components of the system of development are considered as equally important in playing their role in the development process that is planning, implementation, and review of programmes. It has the following objectives as its requirements:[15]

(i) The mobilization of both human and material resources to cope with the complex problem of rural development;

(ii) the stimulation of active participation of the rural community for whom the programme is designed;

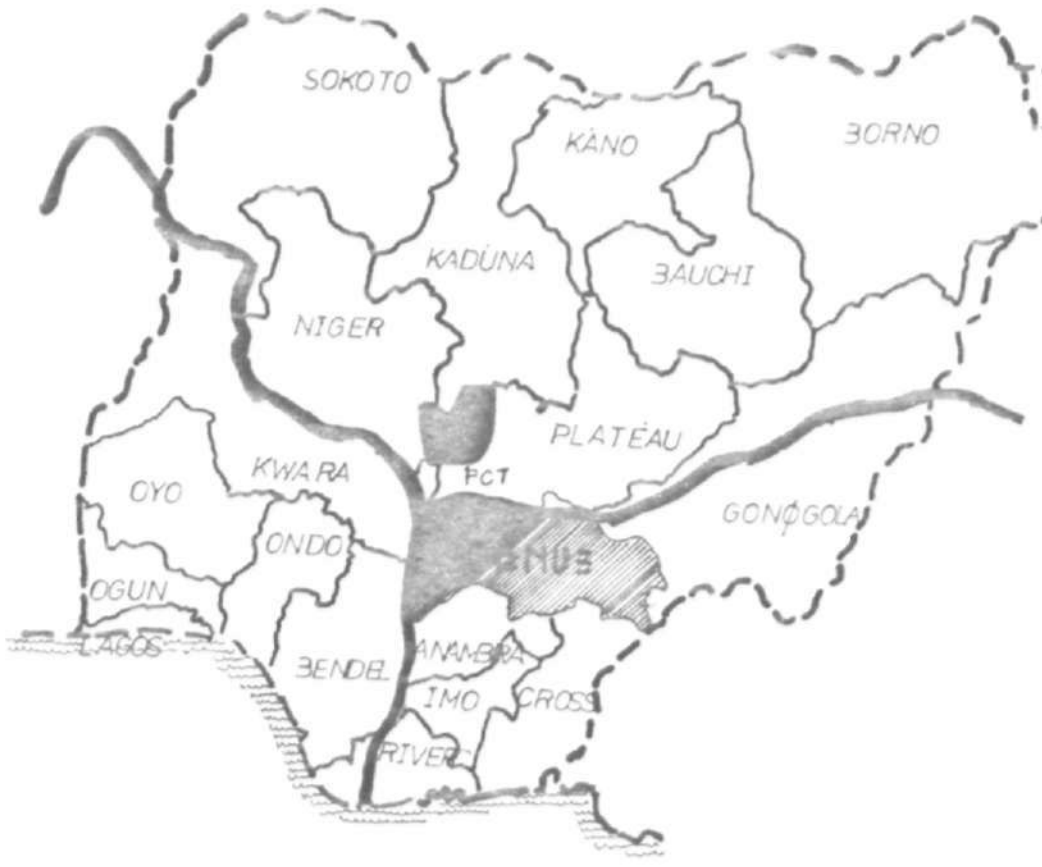
(iii) the provision of services and facilities related to housing, health, recreation, social welfare, religion and the like;

(iv) the rural people must have plitical power, so that decision makers will no longerneglect" rural interests while pursuing other political interests.

For effective planning and implementation, an integrated rural scheme calls for equal participation of all; statutory bodies and organisations and co-operative bodies.

FOOTNOTES

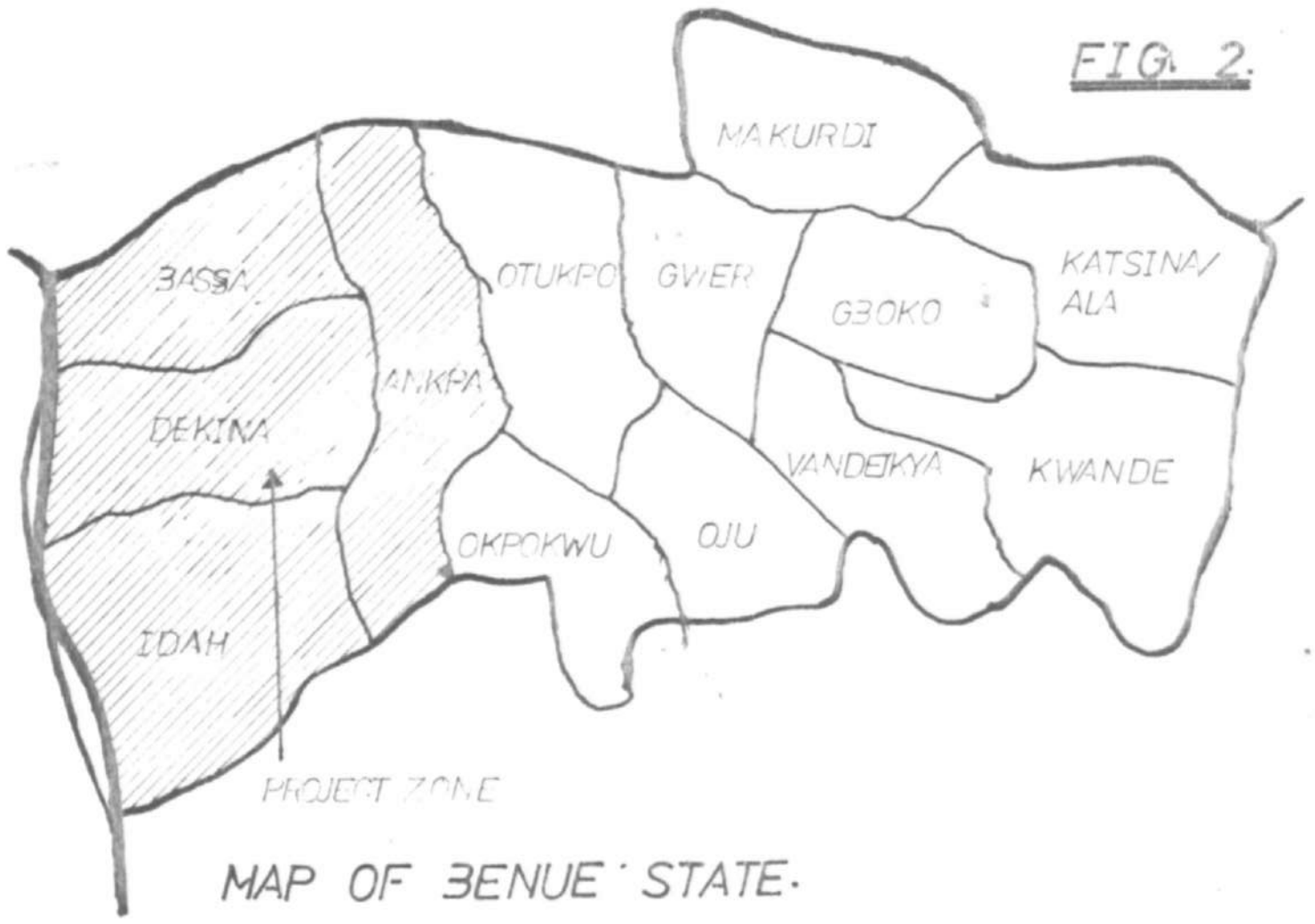
1. Nigerian cenusu report of 1952
2. Nigerian census report of 1963
3. Philip Mbithi:
4. Dupe olatunbosun: On Nigeria's Neglected Rural Majority.p,1
5. Nigeria's Fourth National Development Plan 1980-85 pp.
6. ibid pp
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8. President Ibrahim Babagida's twenty fifth Independence anniversary broadcast to the nation.
9. Hunter Guy: Modernizing Peasant Societies, Oxford University Press; London, 1969. p. 321
10. John, T. A. Paper: Local Government and Promotion of grass-root progress in the fifth National Development Plan 1986-1990. p4
11. Tahir, Aj Seminar: Education and Architecture Synthesis. 1976. p.2
12. - FAO: Training for Agriculture and Rural Development, Rome, 1984 pp.
13. ibid. pp
14. ibid pp
15. Dupe Olatunbosun: On Nigeria's Neglected Rural Majority. pp



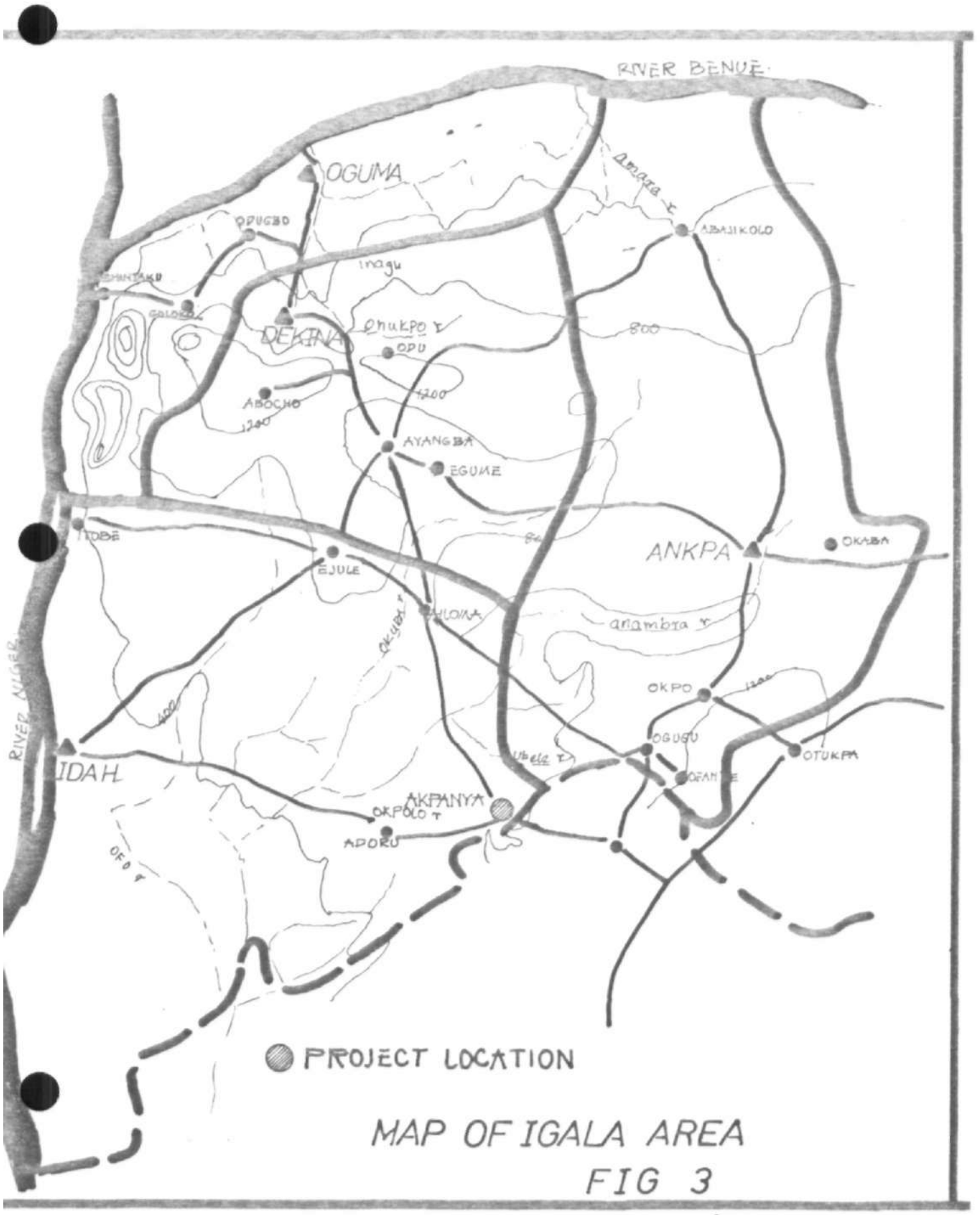
MAP OF NIGERIA

FIG 1

FIG. 2.



MAP OF BENUE STATE.



MAP OF IGALA AREA

FIG 3

CHAPTER 2

REGIONAL CONSIDERATION.

1. GEOGRAPHY.

Benue State of Nigeria measures 48,330.8 square kilmetres ( ) see figure i:3:1. Benue State shares common boundaries with Plateau State to the north, Anambra and Cross River States to the south, Gongola State to the east, and Kwara and Bendel States to the west. The State is strategically located and plays an important role as the linking points between the North and South of the country.

Benue State was created in 1976 by the Murtala regime; and comprises the Igala speaking area(formerly in Kwara State), the Idoma and Tiv people (both formerly in Benue Plateau State). The State consists of thirteen local government council areas. The Igala speaking area has four local government councils and form the core of the study area; thus much of the data are collected within the study area alone. These local government council areas include[3]: Ankpa, Bassa, Dekina and Idah local government areas. These areas share common cutural hesitage in addition to the common language spoken. This similarly in every respect have simplified the study to such an extent that one location was chosen and relevent data's collected.

Akpanya Village, the experimentation location of the centre lies at the Southern part of the study area.

2. CLIMATIC CONDITION

In general, the study area has a tropical Savannah climate. As with other parts of the country, the area has two main seasons: the wet and dry seasons.

.../2.

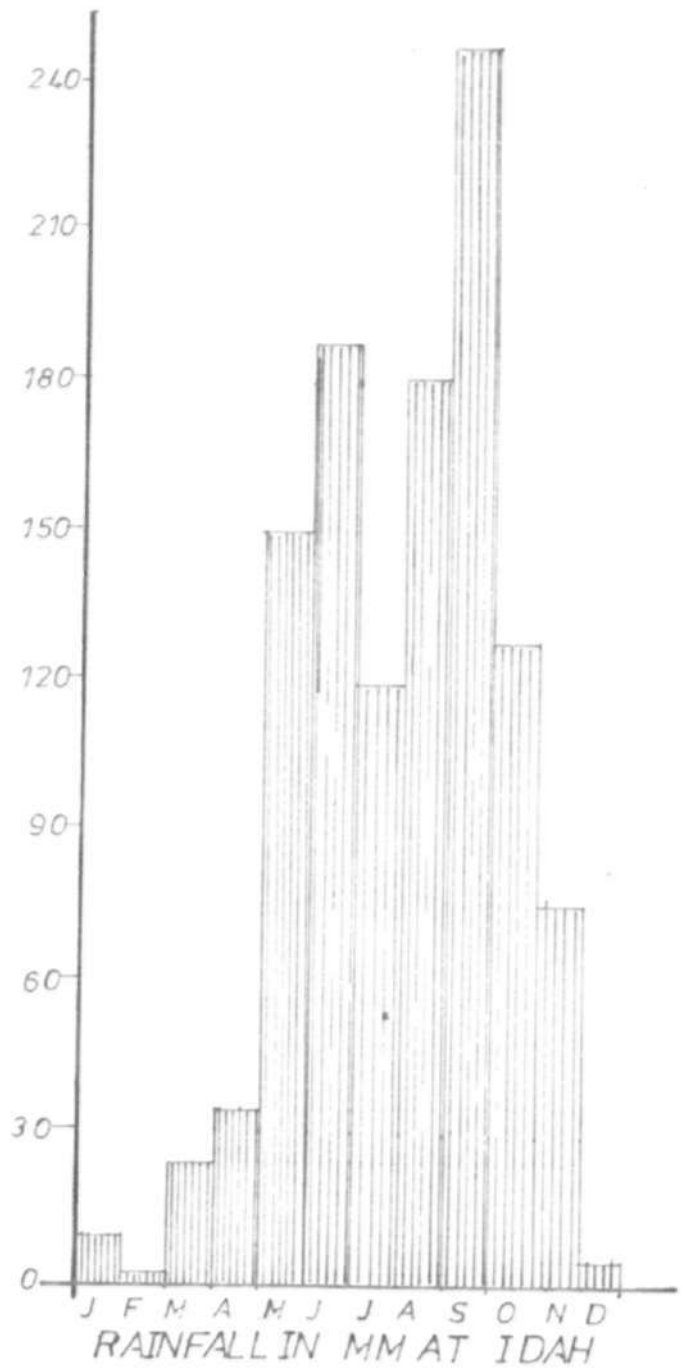
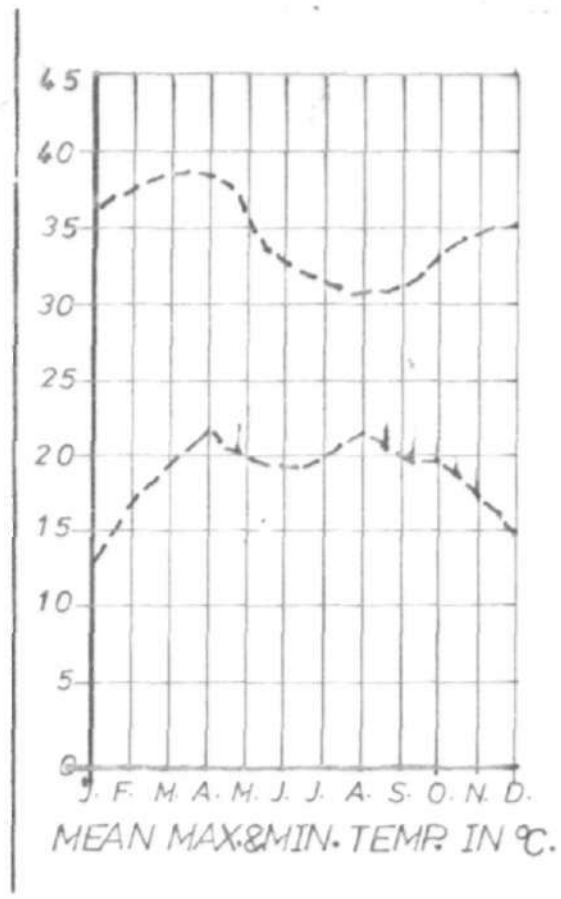
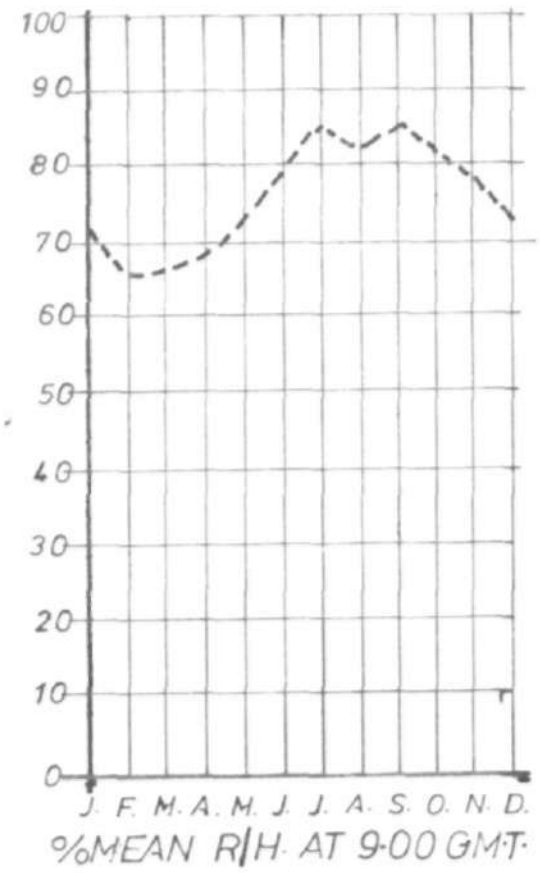

240
210
180
150
120
90
60
30
0
J F M A M J J A S O N D
RAINFALL IN MM AT IDAH

FIG. 4.





TEMP& R H CHART FOR LOKOJA.
FIG.5

2:1 RAINFALL:

Generally, heavy rainfall is recorded in the area, this being due to the geographical location of the area. Rainfall make the beginning of the wet season which normally state from May to October. During the wet season, southmesterly moisture laden winds blow from the equatorial rain belt and brings rainfall to the area. The area has a maximum rainfall of about 2000mm and a minimum of 1000mm. The annual rainfall recorded for Idah is shown in figure 2.14

The other season experienced in the area is the dry season: the harmattan period. This season normally start from November to April. This season is characterized by a dust-laden wind which blows from the northeast accross the country.

2:2 TEMPERATURE:/ RELATIVE HUMDITY.

The temperature of the study area is moderate and it is greatly affected by the two seasons experienced in the area. Temperatures decreases slightly during the wet season, with a corresponding in relative humdity. The dry season is usually a period of high temperatures. The exact time of the year varies according to the area, but February to April is generally the hottest period. Figure indicates the average maximum and minimum temperature and relative humidity for Lokoja, of which the study area can be referred to as similar in every respect.

3 VEGETATION:

Vegetation is the tropical savannah type. It has the usual characteristics of tall elephant grass and woody forest of the savannah vegetation. The extent of vegetation cover is extensive as large area is covered. Noticeable trees includes palm, iroko, mahogony etc.

4 SOIL PROFILE.

The soils are coarse- to medium - grained and quite extensive. The gently sloping plains are partly cultivated with trees over a large area, indicating a thick soil profile. External drainage is predominantly through surface run-of and because of the gentle slope, infilatration is good and a large amount of sub-surface water is available. Water is available. Water could could be obtained from the false- beded sandstone which is a good aquifer. These areas could be used for construction purposes provided measures are taken to off-set the tendency of the soils to shrink and swell.

5 GEOLOGY

The area is composed of the Imo-clay shale group, false-beded sand stone and upper coal measures of the paleocene age. The false-beded sand stone formation which is composed of coarse grains is 450 metres thick. The geology of this area might contain aquifers which could serve as a potential water supply to the town.



MAP OF AKPANY.

FIG 6

CHAPTER 2

2B THE AKPANYA VILLAGE.

2B.1 PHYSIOGRAPHY OF LOCATION.

Akpanya is situated in the Southeastern part of Idah Local Government Council area of Benue State, adjacent to the border with Anambra State, bounded by Anambra River in the west with some large villages surrounding it.

Akpanya is about 56 kilometres from Idah town.

The altitude of Akpanya is about 370 metres above sea level. The surrounding land form consists of two plains, one higher than the other, and separated by an area of step slopes with up to 25 percent gradients. The land rises gently northwards along the Ejule road, but is generally flat to the east and west.

2B.2 HISTORICAL BACKGROUND.

Akpanya consits of a number of hamlets and villages. Before the advert of the missionaries, the people were already settled. This community was founded by a hunter of Igala origin and it is believed that the town derived its name from a stream called "Akpanya" or "OjiAkpanya".

3 CATCHMENT AREAS:

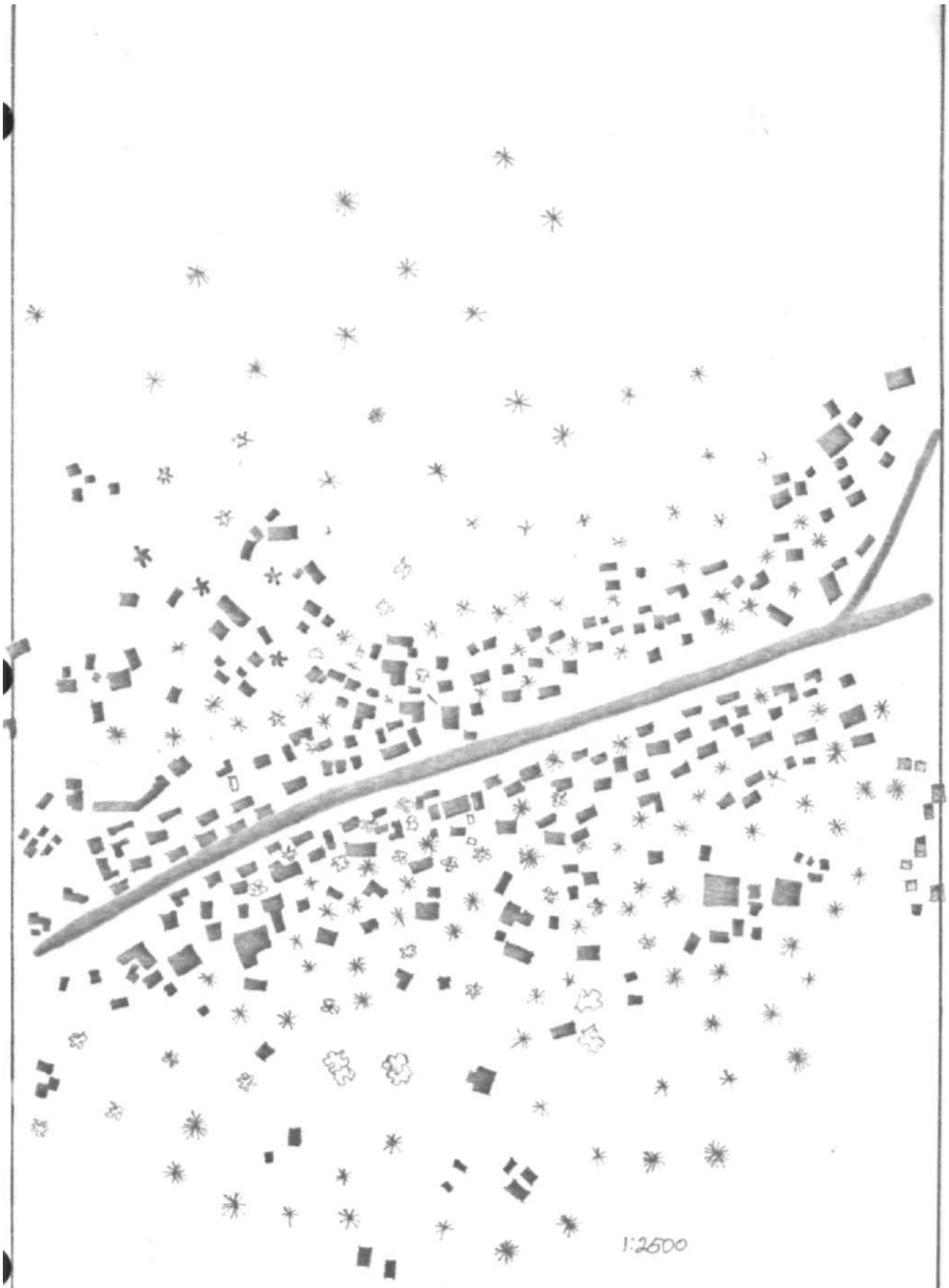
Akpanya is serving as a socio-economic focal point to a number of smaller hamlets and villages around it. The numerous educational institutions(2 post primary and 15 primary schools), a large market,(the third largest in the Local Government) are among the attractions that Akpanya has for these neighbouring settlements.

According to the 1963 census of Nigeria, the population of Akpanya village was put to about 13867.[1] It should be noted that Akpanya as a village is a composite of smaller settlements all within a maximum distance of five kilometres apart.[2]

As a border village, Akpanya attracts people from neighbouring villages in Anambra State, in addition to its neighbours within Benue State. The table below gives the population and approximate distance from the selected project location within Akpanya village.

CATCHMENT AREA, POPULATION & DISTANCE FROM CENTRE.

ZONES	SETTLEMENT	POPULATION	PROJECTED POPULATION	DISTANCE(KM
	ABBEDO			4-5
	AJOBI			4.0
	OJI-AKPANYA			2.0
AKPANYA	EBA	13,867		2.0
	AGBOKETE			3.0
	UBELE			2.5
	OGBOGBO			-
AMAKA	AMAKA	3,546		4.0
	IGABIJE			2.5
TOTAL		17,413		



SETTLEMENT PATTERN OF AKPANYA

FIG, 7.



AKPANYA COMMUNITY SECONDARY SCHOOL AKPANYA. a



L.G.E.D. PRIMARY OGBOLIGBO b

PLATE I

4.4 LAYOUT AND LAND-USE.

The village has no proper planned layout. In each of the various settlement areas, the land is sub-divided into smaller lots with footpaths. The settlement pattern is linear along the major roads.

The village is predomiently residential. Small commerical activities also take place in some residential houses. Major commercial activities take place in the market squares. Each settlements in the village has a smaller market. The largest market in the village is on the souther edge and holds every four days intervals.

The market is generally open, with corrugated iron roof. Various items are on sale in the market days. The market attracts buyers from neighbouring towns and villages in both Anambra and Benue States.

4.5 RURAL SERVICES (EXISTING)

The level of social amenities in the village is poor. The existing facilities includes:

(a) Educational:- The village has two post-primary insitutuions; a government secondary school and a community secondary school. This two schools are adequately serving the village and its envrious as secondary education is concerned.



AKPANYA DISPENSARY. a



AKPANYA CATHOLIC MISSION b

PLATE II



AKPANYA MARKET

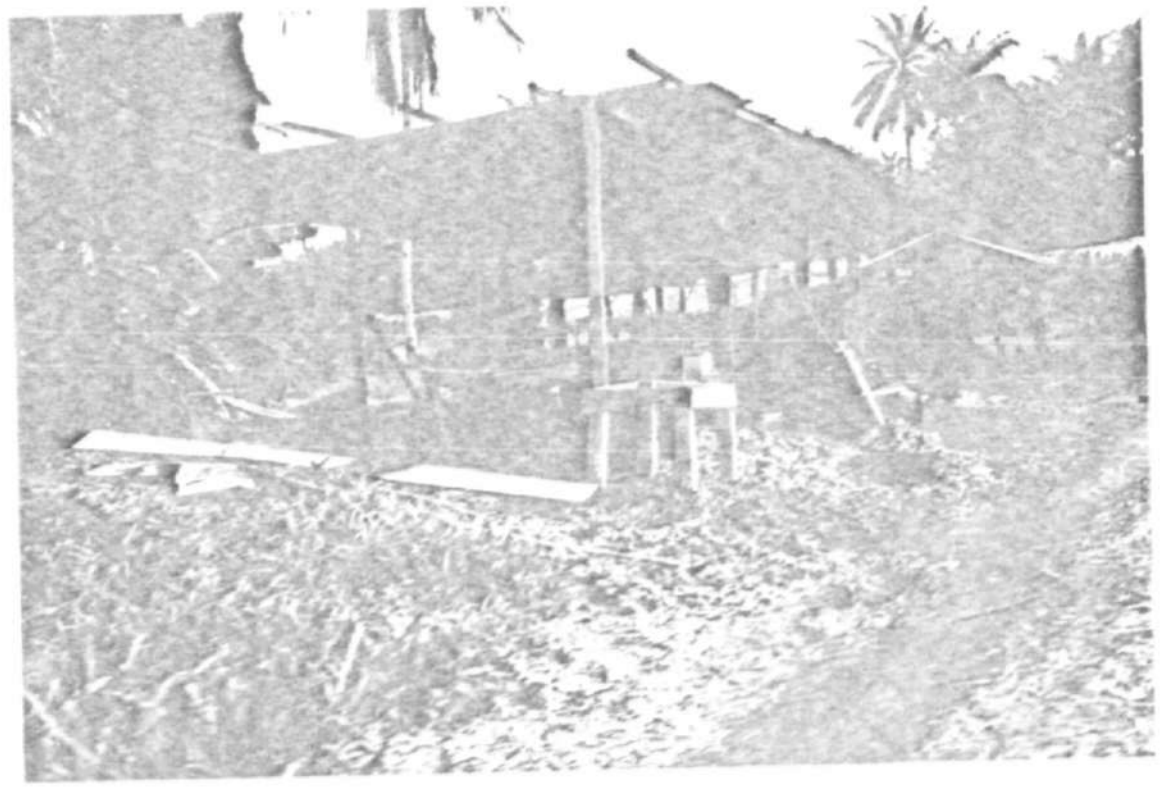
The village also has about fifteen primary institutions within its catchment areas. This is equally enough for the needs of the community.

The problem here lies on the usefulness of the products of the various institutions to the overalll development of the community in one hand that of the individuals in other hand.

(b) Health Services:- The only health institution in the village is a dispensary. This is grossly inadequate for a population of about 35,000 inhabitants.

(c) Markets The village has a large market called "Ede Akpanya". This market is the third largest in Idah Local Government area. It is held once in every four days interval. It attract buyers and sellers from the neighbourhood from Benue State as well as Anambra State.

(d) Community Halls:- There is no community hall in the village and its environs to house any social activities. Even though there exist various social organisations like; Akpanya Welfare Association, Akpanya Youth Club, Orgbaligbo Youth Club, Akpanya Social Club and various women organisation, all with varying interests, they all make use of the school premises for all meetings and other activities.



CARPENTER'S WORKSHOP a



BLACKSMITH WORKSHOP b

PLATE IV

(e) Postal Service : There is no postal service in the village nor elsewhere within its neighbourhood. The provision of postal services in the village will go a long way to solve the acute communication gap between the village and the local government headquarter.

(f) Small Scale Industries: There exists some small workshops for the following trades: Carpentry, tailoring, blacksmith, metal andfabricationwrok, and other local crafts. These workshops are individually owned and are poorly organised and managed. There is need to reinforce the existing situation through technical, business advice and training. Ecouraging and facilitating co-operative participation in the rural economy will also contribute in improving the living lots of the rural population.

6:1 POPULATION AND INCOME

As earlier given in this cahpter, the present projected population of Akpanya is approximately 23,000. The projection is token from the 1963 census figure which put Akpanya population as 13,867. The projection was computed by assuming 2.5% annual increment. Similarly, the total population of Akpanya and its catchment areas in 1963 is 17,413 and using the same 2.5. growth rate, this will grow to about 35,000 by 1987.

6:2 POPULATION STRUCTURE.

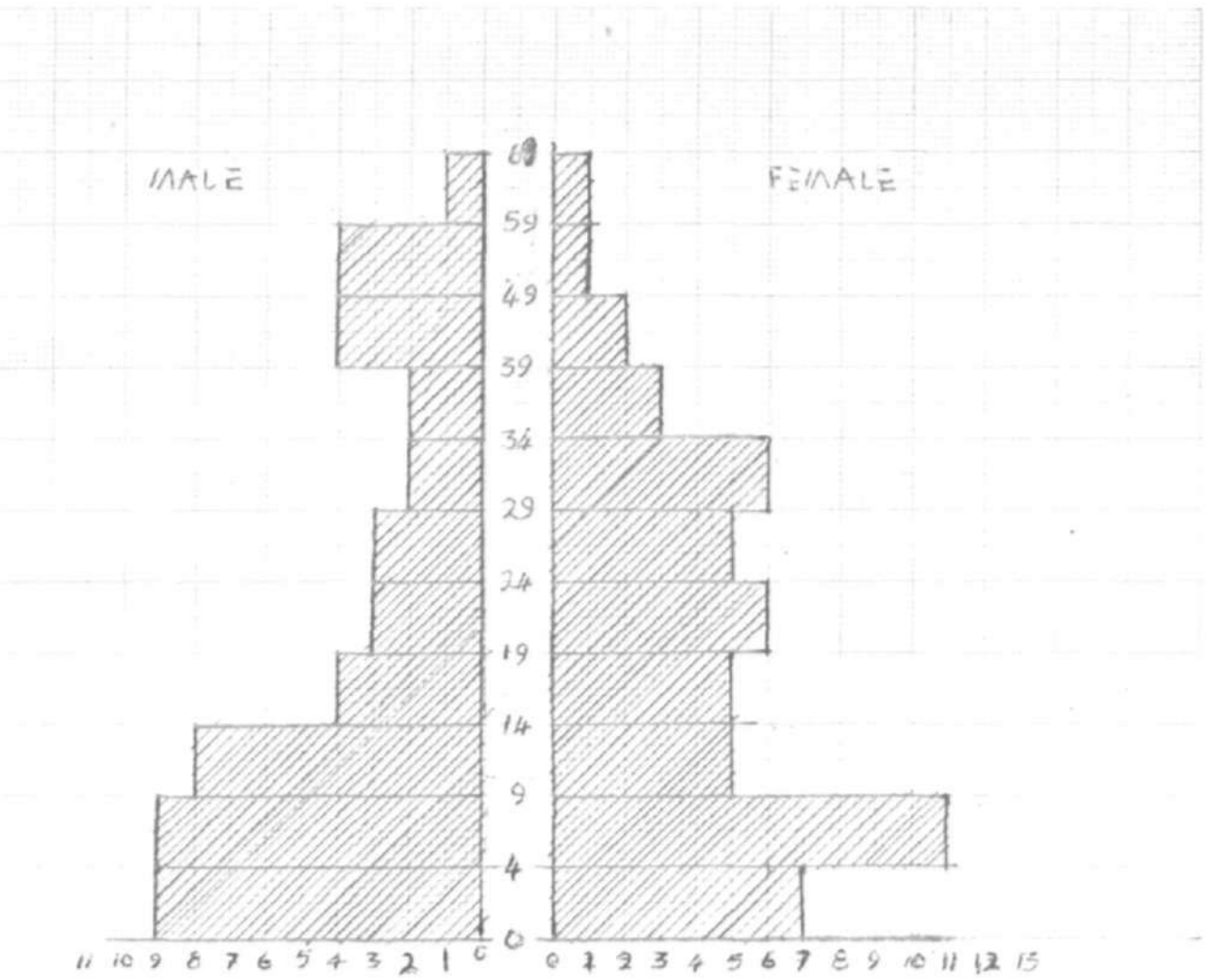
The information on population structures comes from both the consultant's sample survey of 1974 and the 1952 census figure.

POPULATION STRUCTURE - AKPANYA (1952-1974) Table 3:2

YEAR	15-49 GROUP		TOTAL POP.		UNDER 15.		50 and above.	
	% of POP	SEX	DEPHENDANCY RATIO	SEX RATIO	% OF POP	SEX RATIO	% OF POP.	SEX RATIO
1952	58	109	72	111	-	-	-	-
1974	48	64	119	90	49	112	6	216

The table reveals that the percentage of the 15-49 age group to the total population declined from 58 percent in 1952 to 45 percent in 1974. This is expected from the slow growth rate between 1952 and 1963, with its implied immagration, the uncertainty on what happened between 1963 and 1974. One possibility is that there was an increase in Birth rate, resulting in an increase in the under- 15 Age Group and thus reducing the preportion of the population in the 15 -49 Age Group.

3The was decline in Sex Ratio for the 15-49 Age Group indicating males migration from Akpanya to the urban centres in search of employment and better living conditions. The Sex Ratio for the over 50 age group is high. The under 15 age group has



AGE GROUP.	% OF TOTAL POP.	
	MALE	FEMALE
0 — 4	9	7
5 - 9	9	11
10 — 14	6	5
15 - 19	4	5
20 - 24	3	6
25 - 29	3	5
30 - 34	2	6
35-39	2	3
40-49	4	2
50-59	4	1
60-69	0	1
	48	52

POPULATION: AGE AND STRUCTURE, 1974.

TABLE 3.

normal sex ratio. For the whole town fell below 1, suggesting possible migration.

Population: AGE & STRUCTURE 1974. Table 3:3 Fig.4.1

Observations; (i) There is a greater proportion of females to males in the 15-40 age group.

(ii) There is also a greater proportion of males to females in the 40-60 age group.

FUTURE TRENDS.

The future population of any area depends on the combined effects of:

(i) Natural increase or decrease

(ii) Migration .

ESTIMATED FUTURE POPULATION-AKPANYA(1963-200)

Table 3:4

YEAR	ESTIMATED POPULATION	GROWTH RATE %
1963-1970 n	13867 -16480	2.5
170-1975	16480 - 18640	2.5
1975 - 1980	18,640 - 21,090	2.5
198- - 1985	21,090 - 23,860	2.5
1985-1900	23,860 - 24,450	2.5
1900 - 1995	24,450- 25,060	2.5
1995 - 2000	25,060 --	2.5



FARMER AT WORK a



LUMBERMEN AT WORK b

PLATE V

In the village, the two age groups made of 15-25 years and 25-34 years are the most important age groups, they are the youth and the parents of the children. They form 16 percent and 14 percent of the population respectively and therefore there is need to provide for this group all the necessary encouragement required of them to carry out their vital role of bringing up the community.

6:3 ECONOMIC ACTIVITIES:

(a) Agriculture is the main economic activity of Akpanya villagers and it is carried out on a subsistance basis.[48] Thus besides the few wage-earners in the village every other person is a farmer but because what one gets out of the farm can hardly feed and cloth him through the year, most people find a secondary occupation to keep them busy especially during the dry season when there is very little work to do on the farms. Main crops produced are yams, cassava, rice, guinea corn and beans. These items are produced for local consumption, only surplus are marketed to nearby villages. Cash crops include groundout, cotton, millet, and palm produce.

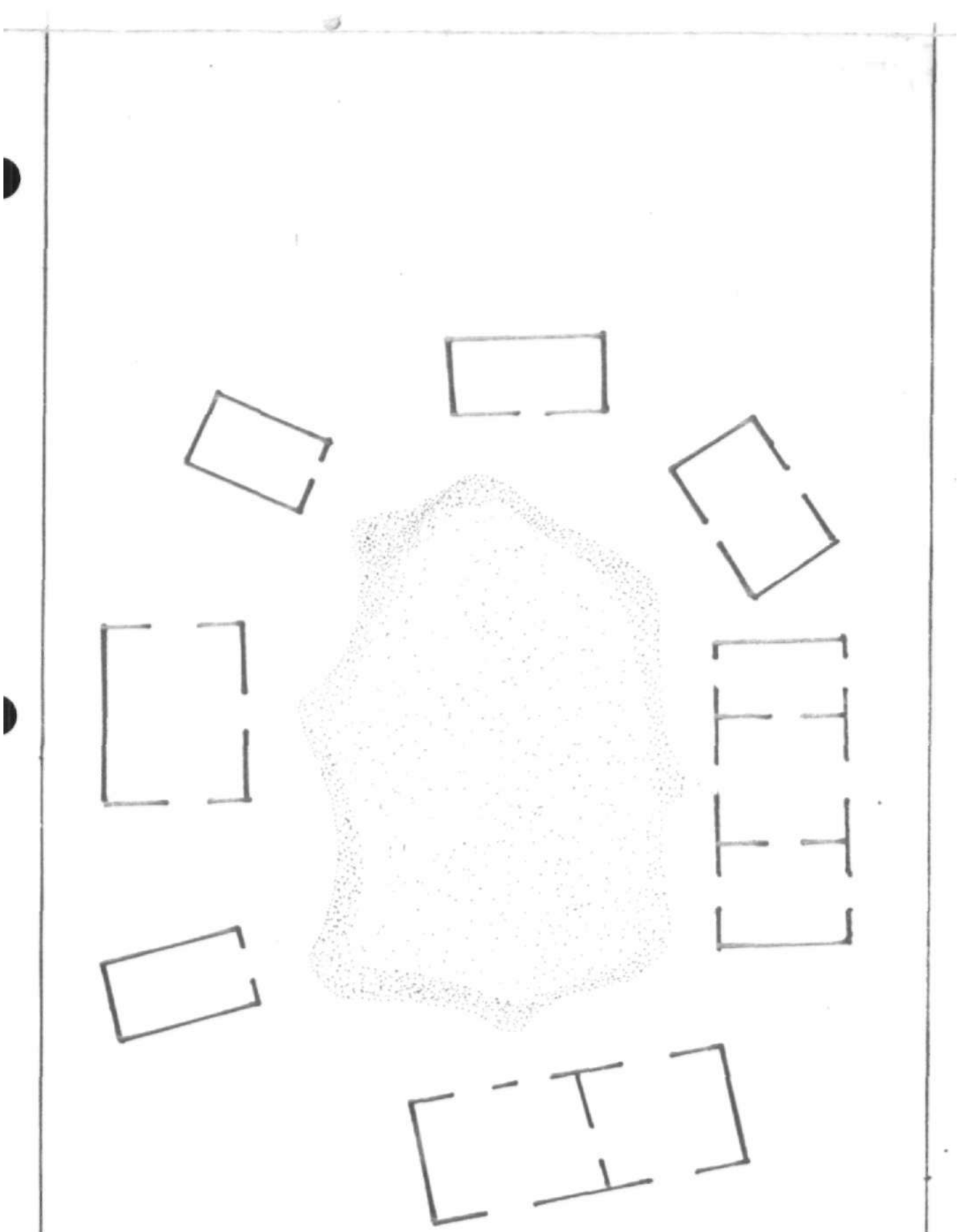
(b) Tailors - Few professional tailors like in the village most of them especializing only in traditional sewings. They are thus not patronized by the youths, the youths in turn speed extra money on transportation taking their

clothes for modern sewing to the towns. The result is that both the tailors lose due to limited knowledge on the modern sewing techniques, while the youths lose for their taste for modernity.

(c) Carpenters - Only three are living in the village with their two assistants. They lack the skill required to attract much business. When special carpentry and joinery work is to be done in the village, one has to travel all the way to Nsukka in Anambra State to seek their assistant and help.

(d) Local Crafts:- Other local crafts exists in the village. These include; blacksmithing(two persons), local leaners (nine in number), barbing (four persons) and alot of other subsidiary trades undertaken especially during the less busy period of the dry season, when there is little or no work to be done in the farms.

(e) Shops:- There are numerous shops in the village whose activities ranges from the selling of provisions to clothes and medicines depending mainly on satisfying the villagers needs. These few individuals are responsible for providing most of the house-hold products required by the villagers and they go out to the bigger towns both within and outside Benue State to bring in supplies. These people usually experience hardships and risks due to lack of good transportation system and bad roads.



TYPICAL COMPOUND

FIG 8 1:150

(C) Traditional Buildings.

Traditional Architecture in this area is mainly concerned with house designs. This can be attributed to the fact that man's struggle for shelter started with some efforts to screen himself from the effects of weather and harmful animals.

1. **HOUSING:** Housing is still designed to suit cultural heritage and traditonal technology and in accordance with the available building materials within the locality. Most of the houses are rectangular in shape.[15]

Social customs, Economic and Climatic factors affeet housing type in the area. Each dwelling house is adopted to the family structure.

Notable changes in housing type in the area is imperative. Modern houses are now been built by the well-off in the society.

2. THE COMPOUND: Family Structure again play important role here and it affects the general layout of compounds greatly.[16] Three distinct types of compounds can be distinquished.

(a) a one man compound without a wife;
(b) a one man and his family; and
(c) an extended family compound.

The later is more common in the area.



MUD WALL CONSTRUCTION a



MUDWALL AND THATCHED ROOF HOUSES b

CONSTRUCTION MATERIALS

PLATE VII

The compounds are laidout in a linear pattern along the road network.

A general characteristic of most compounds is a large courtyard. These courtyards are used for relaxation in the evenings and for social gatherings during festivals and other related ceremonies.

(3) Construction Materials and Technology.

Construction materials in the area includes grass, bamboo(palm), india bamboo, timber and reeds from the forest. These materials are locally available in large quantities.

(a) Walling Elements: The most common materials for wall construction is mud.[17] Sometimes well fabricated palm bamboo, indian bamboo and Ichara are used for walling elements. The mud walls normally last longer than the most and hence it is prefered to others. The main houses are constructed of muds, while places for animalshed kitchen and tilets are constructed of other material. The mud walls are either scruped smooth or plastered with cement mortar.

(b) Roof Elements. The most common roof is the thatched type.[18] The thatching materials is usually grass. The roof framing consists of wooden rafters usually produced from the forest; and bamboo purlins from palm fronts;

or split indian bamboo. The rafters and purlins are held together with tie-tie rope got from the forest and palm fronts.

In recent time the taste of the people have started to change with the presence of new construction materials. Wall construction is either of special made soil-cement block[19] or sand-cement block. The roofing materials is corrugated iron roofing sheets, with timber framing. Two types of timber are in use, one produced from trucks of palm tress and the other from Iroko trees.

Most of this materials are readily available and cheap as well. The construction techniques are been learned seriously and in near future they would have no problems as to the application of the new building materials.

FOOT-NOTES

1. Benue State Statistical year book 1973.
   * Figure 1, map of Nigeria.
2. See Figure 2.
3. See Figure 3
4. See Figure 4
5. See Firure 5
6. Nigerian Population Census Report 1963
7. See table 1 page 29
8. See Fiure-7
9. See plate 1
10. See plate II
11. See plate III
12. See plate IV
13. Adoru and Akpanya Master plan(1974-2005)
14. See plate Va
15 See Figure 8
16 ibid
17 See plate VII a
18 See plate VII b
19 Discussed fully in chapter 3 of part two.

CHAPTER THREE

1 4 RESPONSES TOWARDS RURAL DEVELOPMENT: CASE STUDIES.

Most developing countries both in Africa and in Europe are realising the significance of incorporating the rural areas in their Development processes. Some attempts towards this realization have already been tried by some few countries while yet others are on the planning stage. From the studies undergone on the various responsenses, it is crystal clear that Education[1] has a very crucial role to play in the overall development in general and that of the rural areas in particular. The main purpose of rural education is to provide education that will have development effects on the people in rural areas; that are working either in agriculture, services, crafts or the Agro-Industries. The followings give an idea of such responses in Africa and other contients.

1.1. THE VILLAGE POLYTECHNIC PROGRAMME OF KENYA.

The village polytechnic programme was initiated in 1969 and at present there are about 280 VP operating throughout Kenya. The programme falls under the administrative responsibility of the ministry of culture and social services. At the local level, the VPs are administered by management committees working through a manager whom they appoint.

.../

VPs are founded by communities and in the first instance the communities are expected to show their commitments by making available the facilities required for the training programmes. At this stage, the ministry is likely to make available certain technical advice on matters such as appropriate training disciplines, tools and equipment requited, and so on.

After certain prior obligations have been met, application can be made for the village polytechnic to be formally registered and if accepted, it qualifies for further assistance. At this level, the assistance accorded may include payment of salaries, supply of some tools and equipment, support toward meeting re-current expenditures and so on. Currently, a number of village polytechnics are being strengthened and this programme allows for the construction of additional workshops. The programme is also actively suuported by a number of international agencies. Some 6f these agencies. Some of these agencies supply volunteers to work as instructors, while others assist in the supply of tools and equipment.

In a nutshell, the stated objectives of the programme are directed toward self-employment in the rural areas although some graduates do seek employment in urban areas, while others apply their skills on part-time basis, with agriculture as their primary source of income. Any one village polytechnic is likely to operate training programmes in three or four of the following.[2]

.../

- brick work/ masonryi
- carpentry/joinery
- black smithing;
- car mechanics;
- plumbing and pipe-fitting;
- leather work
- house suiring;
- tailoring
- home economics
- typing.

The training is intended to be on a production basis where the items made are sold or services rendered are paid for on a commercial basis.

Graduates from village polytechnic are motivated to form into work groups and thereafter engage themselves in production activities on a cooperative basis. Many such work groups have been formed and a reasonable proportion are operating effectively.

2. THE POST-PRIMARY TRAINING CENTRE PROGRAMME OF TANZANIA.

In this programme, workshops are annexed to primary schools and youths who are unable to gain entry to secondary schools can move directly into the programme if they so wish. The programme, is operated by the Ministry of Education and it is considered as being part of the basis education cycle. The

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programme was initlated in 1974 with the stated objectives of:[3]

- training school-leavers from standard 7(aged about 12) in two-year courses in one of three trades offered;
- developing skills, talents and attitudes useful for self-reliance and emplyment;
- reducing the tendency for school leavers to move to the urban areas to seek work.

The courses offered included:[4]

carpentry and joinery:

masonry and brick work; and

domestic science

with about 50% of the time table allocated to practical work.

1.3.3 THE YOUTH-TRAINING -CUM-PRODUCTION PROGRAMME OF ZAMBIA.

Unlike the other two programmes described above, the Youth-Training-Cum -Production Programme offers an orientation" type of training. The programme is administered by the Ministry of Youth and Sports and is designed to provide a limited number of young people with the skills necessary to work in an agricultural environment.

The Curriculum is designed to embrace a range of disciplines with the emphasis on agriculture. Training is given to all the learners in animal, vegetable and crop husbandary; with supplementary training in carpentery,

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handicrafts and home economics, as appropriate. The programme is not, therefore intended to prouce artisans in the way that the two previously mentioned programmes are on the other hand, the intention is to produce graduates who can perform agricultural based functions in a better and more effective manner.

4 .. ENDOGENOUS RURAL DEVELOPMENT PROJECT IN ZAIRE:

4 PROJECT DESCRIPTION.

The development populaire(DPP) is an institution for rural development that embraces and promotes several activities dealing with economic, social, and cultural development. It has its headquaters at Idiofa, a rural town of some 20,000 inhabitants, but its influence extends over an area of 60,000km^2 inhabited by more than 687,900 people. It functions under the responsibility of the Bishop of Idiofa as the development activity of the Diocese. Many of its associates and beneficiaries are recruited without discrimation as regard their religious offiliation.

4.1.4: GEOGRAPHICAL, HISTORICA AND SOCIOLOGICAL BACKGROUND.

Idiofa, the DPI location, is a township in the province of Bandundu. It is about 170km away from the nearest big town Kikruit (which has 150,000 inhabitants)and about 500km to the South East of Kinshasa, the capital of Zaire. Idiofa, is inhabited by several different tribes, the majority being the Ambuns.

An Ambuns, Pierre Mulele, led a rebellion against the

.../

Central Government from 1963-65. This rebellion led to the complete destruction of Idiofa. However, Idiofa has been rebuilt in the spirit of self-reliance. These people have since developed the spirit to depend upon itself with regard to its future. A local Ambun proverbs says " The Ampan can run to Angola; where can the Ambun run to[5]?" i.e. The Ambun have to resist and find ways of surviving where they are.

This element of national character is not at all strange in the context / of the self-reliant economic and cultural project which became DIP, and was eariler known as savoir-vivres.

1.4:3 PHASE 1: SAVOIR - VIVRE- A village project

PHASE 2: PROGRESS POPULAIRE D IDIOFA (DIP).

Savoir-vivre is the name adopted by a group of villagers. This development was rooted in an endogenous thinking process. Its existence is better understood from its historical setting and also in the cultural tradition and African Cosmogony of the Ambuns.

1.4:4 HISTORICAL SETTING

During the struggle for independence / ,(1959-60) the dominant political party in the province of Bandundu the parti solidare Agricain(PSA), led a strong campaign against foreign based-valves. Foreigners were portrayed as exploiters of African prosperity. Independence was seen as a period of prosperity and affluence for all. On achieving independence, the promised

affluence failed to materialize contrary to this, the small rural enterprises and plantations owned by foreigners closed down. Unemployment and severe poverty became the norm for a majority of the rural population. What was to be done, and by what means, in order to achieve self-reliance within the villages [6] ? This was the question then.

Fabien Mbelabuim, an Ambun carpenter with little on no education understood that the solution was neither to leave the village for the town nor wait in the village in vain. The solution has to be found in the village, rooted in African tradition, and necessiated the participation of all, for the survival of all. First, every body had to feel the need for self-reliance. A new order based on the African traditional vision of the world involving consiltation of all the actors of development processes was all that is called for.

4:5 AFRICAN TRADITION AND WORLD VISION

The Ambun's were of the belief that the world of the living is a circular universe divided into those living under the sun(the visible world) and those living in the under world closer to the vital force energy(the ansestors and those yet to be born). An equilibrum exists which must be kept in order to achieve prosperity in a village, and all must partake or be consulted.

This view of the world of the Ambun implicitly suggests

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that no development project can be undertaken successfully without the infusion of the vital force. This vital force is determined by the ancestors, who communicate it to the elders; who bless the"adult doems".

4:6 PRINCIPLES.

The approach adopted here was first to call village meetings involuvings all the villagers, both young and old, male and female and boys and girls. Every-one was then asked to list the problems facing the village and suggest possible solutions. A priority list was drawn up matched with probable solutions devised for the common good through group actions. Together the group discovered that development is in fact, a process of seeking solutions to existing problems. Their also defined principles were:

- since the future of the country depends on agriculture, this must serve as the basis for the welfare of the villagers;
- happiness and prosperity can be found in the villages, there is no need to go to the towns. Prosperity has to be built in up by working int the villages;
- the pursuit of learning is all - important. Those most able should seek higher education, and others must be oriented to vocational studies;

.../

- to achieve happiness, the villagems must be united and cooperate with each other;
- jealousy, fighting and egoism prevent happiness;
- they must be unity and harmoney between the young and the old, between men and women.

. . 4:7 RESULTS AND ACHIEVEMENTS.

Priorities were established at the meetings on the problems and solutions. Using the clan system, rather than an individual system, of self-taxation each family was asked to donate a certain amount of money. Through colledtive action, more than enough money was raised. As the organisation became more structured, there was need for a President, Secretary, and treasurer. The following enterprises were acquired.

- a cooperative manioc will(a priority on the woman's list).
- a cooperative village dispensary
- a cooperative lumber mill
- a savoirivre school for young people.

who were taught the savoirvivre commual and self-reliance philsophy; and

- a wood and carpentry workshop.

Many other projects such as running water and training centres were under way, but were stopped by the mulelist uprising (1964). All the projects were rooted in the

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communalistic background of the Ambuns.

5. THE CRESSET: A COMMUNITY CORE FOR PETERBOROUGH.

The concepts of providing for the social, recreational and cultural needs of a community within one building complex is not new. Gropius impington village college and sir owen Williams' Peckham health centre are both buildings in which the character and quality developed from the idea of providing a focus where all members of community might meet.

The cresset, at Bretton, Peterborough, is based on similar ideas. It is an attempt to combine the skills energies and resources of several bodies, to provide under one roof, a service for the whole community more effective and ambitious than could have been achieved by individual provision. It serves 16,000 population and contains 8000m^2 of shops, local officers, a school, health centre, divisional police station. The cresset total area 10800m^2, is linked by a common concourse to shops, and includes a IMCA hostel, church centre, Youth facilitie librarys, old person's club, centre for the handicapped, crafts area and workshops for the development core.

5:1 THE ORIGINS OF THE IDEA.

The idea for a combined centre was proposed in early 1970, when the Bretton area was begining to be developed.

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They felt that, by joint provision, an improved range and quality of facilities could be provided earlier in the building programme with possible financial savings.

5:2 DESIGN IMPLICATIONS.

The basic principles underlying the design concept for the crescent has been the application of all the different activities within one building. The objectives in the planning of the interior spaces has, as far as possible, been to allow the different functions to overlap rather than simply provide for a series of separate facilities within a single building.

To achieve this aim, the various function are organised off a central concourse. Functions on the first floor, such as a lounge and bar, are arranged so as to overlook the main meeting hall. The aim was to provide a public focus for the centre, bringing together groups which do not normally come into contact.

5: 3 INNOVATIONS IN FINANCE AND MANAGEMENTS.

The crescent is a break through in the provision of community facilities for a new town. It has achieved a greater range of amenties earilier in the building programme than is usually possible and has involued source of finance not normally considered. The initial parties who were persuaded to combine their resources have acted as a magnet for other uses and provide

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a commercial committment to the shopping concourse.

5:4 LESSONS FOR FUTURE DEVELOPMENT

The critical problems faced have been those of finance and management. The cresset has created precedent for others to follow. The advantages of coodinating and overlapping the various agencies are very plain / in the cresset. The design implication for this approach need further investigation. Scuh questions as how many activities is it feasible to accommodete under one roof and still allow for flexibility ? How does one plan for changing requirements and unpredicable uses in the future ? What are the contractual and maintenance implication of designing one building for a number of clients each with different or separate source of finance ?. These are the issues that have to be tackled in this approach for its successful implementation.

1:: 6·· ABRAHAM MOSS CENTRE: MANCHESTER.

It provides in one itegral complex of facilities, accommodation to meet the needs of:

: an eight form entry comprehensive college;

: a college of further education;

: a district recreational centre;

: a club for the elderly and the handicapped;

: a youth centre;

: a residential wing and

: three shop units.

6 DISSOLUTION OF TRADITIONAL BARRIERS:

The principal point of interest is the dissoulution of the tradition barriers between its component institutions.

The resources in terms of building, land, furniture, equipment and staff are pooled to meet the varying needs of different user groups. Within the whole there are identifiable sub-bases, such as the lower school, the library or the leisure centre, derived from the assembly of common needs. The site has become an extension of public open space. The foot path that transvere the site between and through the buildings are parts of the padestian communication net of the neighbourhood and the playing fields contribute to the total stock of parks and sports facilities in the city.

7 THE PEOPLE'S COMMUNE: CHINA'S TOOL FOR AGRICULTURAL AND RURAL DEVELOPMENT.

Throughout China's countryside there is a network of people's Communes. The commune is the principal economic, administative, social and political unit in rural areas. Chinese rural development experience is therefore reflected in the commune.

An assessment of what the commune is and how it works, is therefore necessary for an understanding of China's rural development efforts. The text provides a general view of communes.

7:1 HISTORY

The people's communues, are not an overnight creation of the Chinese revolution. They are the end result of an evolutionary process stretching from the Yan'an(Yenan) years of the party to now. Todays communes have roots in a long period of experimentation under various influences; ideology, technical planning, and considerations of efficient administration plus the Sweat-stained and error-marked experience of day -- to -- day management of land, labour and other resources within the Chinese setting.

The evolution stages of the commmunes are:

(1) Land-Reform. This occured for about a period of three years starting from 1949. About 300 million peasant were given their own land. This period marked the end of the landlord class.

(2) Mutual Aid Teams. These were created simultenously with land reform and were built on the ancient mutual aid tradition in villages. This marked a Pre-co-operative stage: farmers exchanged work for work to facilitate

seasonal operations and construction work for joint benefit. Private ownership of all productive resources was maintained.

(3) Primary or Elementary Agricultural Cooperatives. This was the first step towards real collectivism. It covered the period 1955-56. Members maintained private ownership of land, implements, etc. but pooled them for joint management. Distribution of income was based on each participant's imput of land, animals, tools and work.

(4) Advanced Agricultural Cooperatives. This state occured between 1956-58. Ownership of land, animals and implements during this phase passed to the cooperatives. Members income were no longer determined by their capital imput to the cooperatives but only by their work. It was during this period that many of the characteristics of todays communes began to emerge; Example, its three-tier structure and the work point system.

7:2 STRUCTURE

Today's commune is characterized by a three-tier organization: the production teams at the lowest level, production brigades and then the people's commune itself.

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However, after a brief experimentation, during the early years, the house-hold has been restored as the basic social unit of the commune. Thus the family remains the nucleus of Chinese society.

(1) The producation team. This is the lowest-level formally organized unit- and in many ways the most important.

Typically, the team consists of some twenty to thrity households. It corresponds to a small village or a hamlet. The team is the basic agricultural production unit as well as the basic unit in the majority of communes.

Ownership of land and of production implements, other than those owned by individuals, is vested in the production team. All production decisions are made at this level. This team is the starting point of the "from the bottom up" part of the planning process. It is believed to be the heart of the commune. They make the commune tick.

(2) The production brigade. This intermediate structure serves largely as a planning and administrative unit. Production teams pass their reports and plans through the brigade to the commune. The brigade is also the lowest rural unit at which the party is formally represented through a party committee.

The brigade under takes a number of economic activities:

Construction and management of Irrigation Schemes, land improvement, etc. They also run agricultural processing plants; farm machinery repair shops and livestock enterprises. They may own tractors and other machinery for contracting to the teams. They operate schools and health stations.

(3) The People's Commune. The highest-level local organizational unit. It does not own land, except land attached to commune owned enterprises and uncultivated tracks. The commune assumes responsibility for activities that neither brigades nor teams can handle: bigger irrigation and drainage works, hydro-electric power plants, large scale livestock enterprises, farm machine manufacture, tractor stations, nuuseries and experimental farms. The communue also runs middle schools and hospitals.

The People's Commune also exercises administrative and political functions.

7:3 FUNCTIONS

Through this organizational structure, the commune and its sub-units carry out a number of basic functions in China's countryside among which are:[7]

(1) Mainly through production teams, they mobilize manpower, work the land, apply resources required, and make the

production decisions within planned guidelines.

(2) At the brigade and commune level, they handle a number of non-agricultural activities, notably operate light industries of various kinds, e.g. farm tools. In many cases, the industries - once they have developed to a size and degree where they acquire importance beyond the limits of the commune-are usually taken over by the state.

The capability of the communes to establish and operate industrial plants has not only contributed to the industrialization of China, but also to the diversification of the rural economy, where it has opened new jobs, increased the level of personal income and the living conditions of the rural populations.

(3) Communes run a number of rural education and welfare activities. This include the establishment and operation of primary and middle schools, the establishment and maintenance of the public health system, including the commune level hospitals, brigade health stations and support for barefoot doctors or paramedics.

Communes also see to the welfare of elderly people not looked after by families, and other people not in position to provide for them selves.

(4) Communes are responsible for the mobilization of rural manpower for large-scale construction as well as land and water

management and improvement works.

(5) Communes muster rural savings for investment.

(6) Communes engage in trade in rural areas.

(7) Commune contribute to national food security by striving local self-sufficiency in basic foods, and by organizing the storing of surplus food grains at both the commune and brigade level and in individual households.

(8) Communes help train and equip local militra and manufacure simple weapony.

(9) A number of communes produce hydro-electric power, both for the commune's own use and in some cases for sale into the national grid.

(10) Communes pass the party line to members of the commune in the organizational and economic life of the commue.

By shouldering these varicus administrative and economic tasks, communes make it possible for central state organs to divest themselves of an enormous amount of defailed bureaucratic work. At the same time, this structure enables the system to remain responsive to lcoal needs and to foster local participation and self-reliance.

1. :7:4 SHARING.

Distributi n of income is based on a number of principles. The basic accounting unit is required to balance appropriately the requirements of the state, the collective and the individual. Distribution to individuals follow the principles "from each according to his ability to each according to his work".[8]

Distribution of the gross revenue falls into the following main categories.

(1) Agricultural Tax. This may be paid either in kind or in cash. It is three to four percent of the gross total revenue.

(2) Production expenses: These covers purchased production inputs, such as fertilizers, pesticides, tractor, contracts, etc. They may account for 25% to 30% of total gross revenue.

(3) Public Accumulation Fund. This is the investment fund of the basic accounting unit. Purchase of all major equipment used by commune, are drawn from this fund. About five to ten percent of gross revenue is need.

(4) Welfare Fund. Two to three percent of the total is, as a rule kept for this purpose. It supports schools and health services, and the care of the aged and infirm.

(5) Cost of Management and Administration.

Members try to keep those within the unit of five to ten percent.

(6) Members' Income. After deductions, remaining total gross revenue accus to members of production team as their income. This accounts to 50% to 55% of total gross revenue.

Distribution of shares to individuals follows a work point system. The income of individual depends, aside from the earnings of production team as a whole, on kind of work and hours worked. The range is usually in the order 1:3 or 1:4 .

It is against this background that some of China's achievement in agricultural and rural development is better assessed.

FOOTNOTES.

1. The team Education will generally be used to include training except where the letter is to be emphasised.

2. FAO. TRAINING FOR AGRICULTURE AND RURAL DEVELOPMENT. 1984

3. ibid

4. ibid

5. ibid 1985.

6 FAO Report on China: The Agriculture training system p. 1980

7 ibid p.

PART TWO

CHAPTER ONE

1: THE COMMUNITY NEEDS:

The previous surveys and studies dealt with in the various chapters in part one is to ensure a proper understanding of the siutation of life and the needs of the rural community. The importance of this surveys and studies is that it will aid in coming up with a village centre design, that will be instrumental to urliftin~ the socio-economic welfare of the village community.

2 ECONOMIC .

As earlier mentioned in chapter two of part one, the economic activities in the rural communities reflects a predominantly low income group. It was also seen that most of the economic activities are practiced with the remotest and most primitive ideas and techiniques. This results to low and poor quality of most of the products; this in turn resulting to low price for the items, and hence the general low income of the village communities. The means to sustain, improve the means of production and widen the scope of opportuniteis available for the rural communities to earn a better living are of paramount importance in this scheme. This can be approached by the [illegible] provision of vocational courses to teach new and improve existing skills, services to give advice or modern management and all types of business. A do - it - yourself approach will allow the centre and the consequent economic benefits from the provisions at the centre.

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Agricultural activities should be well incomperated and catered for in the centre.

3. EDUCATIONAL

The role of education in any development scheme especially in the rural areas cannnot be our emphasised. Education for the understanding of oneself and the community in general through the art of communication. Education to make the village communities susceptive to change and allow for easier implementation of development schemes and a proper use of facilities. Education to enhence the improvement on personal skills and efficiency.

Though, the village has enough educational institutions (both primary and secondary), the irrelevant nature of the subjects offered makes it necessary to emphasis more on the need for functional education, which will take into consideration the needs of the local communities in their daily life. Provision for the education of the adult sector of the community will ensure better understanding between the young and the old. School children need the support and encouragement of their parents, which is easier with knowledgeable parents. The above supports the inclusion of general studies, handicrafts, domestic science sections and other educational facilities in the proposed village centre.

The workshops where technical skill are acquired should be made to be productive oriented in addition to the educational skills received.

4. SOCIO-CULTURAL

The community life style, as found from studies, is characterised by group activity and group feelings - a high degree of mutualism. The design and organisation of the centre should ensure and further foster the maintenance and encouragement of this aspect of the communities life style.

The family -living and the time-use of the community will greatly be affected by the centre / , but it is intended to envolue happier family, varied activities and better use of time. The interest of the various social groups in the community is considered in the design.

5 RECREATIONAL

Facilities for recreational satisfaction of the villagers is virtually non-existance. The only facility is the school field which is treated as private. The establishment of open spaces is vital in the village centre design.

Discussion under the tree is the only means of relaxation and this should be maintained by the provision of a landscape garden and common room and where more useful discussions can be achieved by the participation of social wokers in the discussions. Indoor games can also be introduced and also film shows to screen useful events. This justifies the need for a large hall.

For large meetings and annual agricutural shows which boost the farmers effort requires an arena / to be incorporated in the centre's design.

1.6 HEALTH FACILITY

As mentioned earlier in the text health services in the

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village and its envious is grossly inadequate. Health services for the village community should be catered for in a variety of ways. A primary health centre to sensure and promote the health condition of individuals in the community should be provided at the village centre. This health centre should adequately catere.for the following health needs of the community at large. An out-patient, department, or child care centre, a maternity a preventive medicine and family-planning units. The incorporation of these services in the centre will help to attract people to the centre and give all the recognition the centre deserves from the village communities for its proper operation and ultilization. By this provision at the centre, the health for all by the year 2000 policy / of the present government will be a reality.

..'.7 SHOPPING FACILITY.

Most of the commerical activities are carried out in the market site at the moment, but the lack of alternative places results in inflation and high prices on commodities. The incorporation of a cooperative show to sell goods at the controlled prices will go along way to beat down prices even at the village market. There should be a good link between the existing market and the proposed centre both being places or focus where people meet.

..8 POSTAL FACILITY.

The need for a postal facility has been well established from the communitation gap between the village and the outside world. The provision of postal services will improve the

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communication between the village community and their neighours.

2.:9 SMALL SCALE INDUSTRIES.

Of paramount important in this village scheme design is the diversification of employment opportunities for the young school leavers and graduates to earn a living without much dependence on their parents, and also to contribute their quota to improve on their family living conditions and the overall community development as well. For the small scale industies to be of use to the community a survey of the community needs have to be undertaken, from the studies relevant industries could be established to effectively carter for the community needs and wants.

In the study areas, a survey of the community needs call for the establishment of the following small scale industries. These includes: a carpentory and joinery workshop, engineering and metal workshop, motor and cycle mechanics workshop, tailoring and needle workshop, shoe and leather workshop, arts and grafts, and etc. all run inconjunction with education, hence they are educative as well as economical. The products from the workshops should be sold to the community and the fund generated from such sales put into the purse of the centre, from which further development could be financed. The centre in this way could be made to be self financing; they centre should be able to pay part of the workers salary and other expenses.

CHAPTER TWO .

2.A SITING AND MANAGEMENT.

The efficient operation of such a scheme in a rural area, calls for due consideration of certain vital elements. This is for the convenience of the villagers and the smooth running of the centre. The following elements are worthy of consideration:

2.A.1 PLANNING PRINCIPLE.

Of important in this regard is the settlement pattern obtained in the village. Villager should not be too dispersely scatlered in location. This makes it possible to find a conveniently large enough group of villages within easy working radius.

However, where such settlement pattern does not exist , a regrouping of the various villages is called for to ease development. It is then that it is possible to provide essential services such as water supply, health, electricity, drainage and many others.

In Benue State, the community development section of the ministry for Local Government and Chieftancy Affairs have been duely charged to carry out a survey of the various villages in the Local Government areas of the State. This is in a bid to providing the villages with such services so essential to their daily life and existence.

2.A.2 EXAMPLE (POLISH)

Poland gives a good example where the above approach had been quite successfully adopted for the agricultural rural settlements. The diagram[1] supplied gives the idea of the

planning principle applied and the following factors give the factors being considered for the small producation farms.[2]

(a) Partial disappearance of dispersed farms and some small farms.

(b) Maintenance of production and housing functions in the structure of thevvillages with their own individual farms.

(c) Concentration of a full set of basic services and engineering amenities in selected villages where the situation, size and type of farming predetermine their role as service centres.

(d) Maintenance of elementary services planned according to the needs and economic possibilities of smaller settlement units.

Under the condition where the population of villages are very small(fem hundreds) and are scattered there are difficulties facing the establishment of public ultility services, especially social and communal services, the economic effectiveness of which as well as their convenient accessibility, require a certain degree of settlement concentration.

.3 THE CATCHMENT POPULATION.

The constraints in providing such a development centre for a village settlements, is that of optimum number of people using these centre. This optimum population is closely related to the radius of servicability.

A catchment population of 15,000-20,000 or more inhabitants is being suggested for this centre. The settlement distribution in the area allow this population to be obtained within the radius of 8km maximum. This is obtained from the modes of communication commonly used in the area.

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CHILDREN ON FOOT TO SCHOOL a



RIDING ON BICYCLE b

MEANS OF TRANSPORTATION

PLATE VI



THE SITE

PLATE VIII

The following table relates cruising speed to maximum permissible distance between commuter and his place of work[3]

Means of transport	Cruising Speed in km/h	Max-permissible distance in km
On foot	5	2.5
On horse back	6	3.3
On bicycle	10	5
On motor cycle	25	12.5
On motor car	56	-

These are the main modes of transportation locally used in the area, and so the maximum distance from any neighbouring village to the centre can be accepted as 8km.

In this case, the village that combine to give the desired population (15,000 - 20,000) or more) are within approximately 5 kilometres radius.

.4 LOCATION CRITERIA.

The proposed location of the centre has the advantages of historical centrality, a primary school, a strong market and large settlements around it. The village is also along a major road network which makes it easily accessible from all direction.

.5 SITING.

The siting of the centre took due consideration of its relationship to existing and future residential areas, and other existing and proposed institutions.

.../

The siting of the centre must be effective to the degree that its linkage with other institutions promotes easy flow of goods persons, and information.

The siting also provides a very good link between the centre and the existing facilities like the market, and the primary school all separated from the centre by the roads. The space is large enough to accommodate future expansion.

.6 MANAGEMENT AND FINANCES.

One of the vital functions of the programme is to encourage and enable the villagers to move towards the vision of caring, sharing society, to bring about the maximum involvement of the community in solving the problems that concern them, in participating in the decision that affect them, and in running their own affairs. It is important that people should have a share in transforming their society and not be merely helpless objects of change.

To achieve the above mentioned objectives, it is very important that the community as a whole are encouraged to partake in all aspects of the centres activities. This way the people can disover their potentialities in realising and solving their problems through the own efforts and within their resources of manpower and materials. Normally, government assistance will be sort for where and when the need arises. The leadership of the centre should be localized to a reasonable level so that the willagers should have a say in the decision making and the running of the centre.

The financing of the centres will be on a collective efforts of the various organs of governmental ministries,various social

and religious organizations as well as individuals and the village community. Where necessary, support could also be sought among the various banking organizations in the country. The rural banking policy of the present government will go a long way to make such programmes a success.

Some world organizations and agencies have in the past and are even presently contributing immensely to the development of our rural areas in the fields of agriculture, health, schools and social facilities. Aids should further be sought among the various world bodies where their assistance are needed.

The world bodies and organizations listed below have shown great interests on rehabilitation in the rural areas the world and are therefore willing to assist in the programme.

They include:

(a) (W.H.O.(World Health Organization) - Interest on
- Health aspects, water supply and waste disposal.

(b) I.B.R.D(International Bank for Reconstruction and Development)
Interests on:- Rural Housing and
- Rural water supply.

(c) F. A.O. (Food and Agricultural Organization)
Interests on: Food production
Home Economics.

(d) W.F.P (World Food Programme)
Interests on : - Resettlements
- Colonisation

- Housing
- Rural Improvement

(e) U.N.E.S.C.O. (United Nations, Educational, Scientific and Cultural Organization)

Interests on: - Fundamental education
- Rural School building program
- Housing for rural workers
- Production of local building materials
- Training of skilled masons and other technical skills.

Of recently, both the Federal and State governments have emphasised their determination to improve the life of our rural communities. To this end, the Federal Government have established a body known as the "Directorate of Agriculture and Rural Development". The responsibility of this body is to finance and monitor rural development programs so initiated by that body.

On its own part, the Benue State government recently announced the establishment of abody known as the "Directorate of Rural Development". This is a three-tier organization; consisting of the Directorate of Rural Development, whose sole responsibility is the making of policy guidlines and decision taking on matters. relating to rural development in the state, the State Directorate and the local government Directorates respectively.

The various communal development efforts of the communities in this study area is highly commondable; Most communities have successfully built schools(both secondary and primary) within the reach of their children. Others are either engaged in the

.../

building of health clinics, community halls, cooperative shops or providing rural borne holes for water supply or rural roads to link the communities to facilitate communication between them and the outer world communities.

7.3.1 THE VILLAGE CENTRE.

From the survey on community needs, a proposals on rural development schemes can be formulated. Consideration also has to be given to the international requirements necessary for such development schemes. The following elements are worthy of consideration for the village centre design.

7.3.1.1 THE ELEMENTS OF THE VILLAGE CENTRE.

(1) District
(2) Location
(3) Population
(4) Socio-Economic
(5) vocational facilities
(6) Shopping facilities
(7) Light scale industries
(8) Educational Institution
(9) Health Services.
(10) Parking
(11) Games facilities.
(12) Gardens
(13) Women's section
(14) Community Hall
(15) Entrance
(16) Reception
(17) Arena
(18) Self-service information
(19) Food canteen
(20) Library

(21) Childcare

(22) Officer

(23) Staff lounge

(24) Seminar room

(25) Meeting Rooms

(26) Class rooms

(27) Workshops

(28) Storages

(29) Toklet facilities

(30) Kitchen

(31) Time zone

(32) Expansion

(33) Security

(34) Parks

(35) Pedestrian flour

(36) Vehicular flour

It has been found possible to combine effectively some of the above elements in a single space and the functional digrem shows how this has been achieved including the relationship between the various established functional groups.[1]

2 SPACE REQUIREMENTS AND SCHEDULE OF ACCOMMODATION.[*2]

(A)	ADMINISTRATION	SPACE REQUIREMENTS.
(1)	Director	33.50
(2)	Asst. Director	30.00
(3)	Secretary	33.50
(4)	Administrative Officer(2)	3 x 20.00
(5)	Community development officers( )	2 x 20.00

.../

(6)	General Officer (6 - [illegible])	28.00
(7)	Storage (office malaials)	10.00
(8)	Finance Officers(1 & 2)	2x20.00
(9)	Finance Clerks (4staff)	28.00
(10)	Filing room	99.00
(11)	Duplicating room	19.00
(12)	Maintenance	19.00
(13)	General store room	20
	Total	280m^2

(B) ENTRANCE 100

(C) EDUCATIONAL AND INFORMATION SERVICES.

		Space Requirements
(1)	Building Science(Bickmak/masonry)	80.00
(2)	Carpentry/joinery	80.00
(3)	Engineering/metal work	80.00
(4)	Motor and cycle mechandú workshop	150.00
(5)	Tailoring	80.00
(6)	Heedle-work	60.00
(7)	Home economics/nutition	80.00
(8)	Business Studies *	80.00
(9)	Book-Keeping *	80.00
(10)	Arts and Crafts	72.00
(11)	Agricultural Sciences *	80.00
(12)	General Studies *	80.00
(13)	Typing	80.00
(14)	Library	200.00
(15)	Technical draining	800.00

..../

(16)	Classrooms(Literacy class)(4)	2 x 36.00
(17)	Shoe workshop/Leatherwork	60.00
(18)	Electrical & Plumbing	2x76.00
(19)	Staff Room	80.

* Courses compulosary to all participants.

(D) RECREATIONAL FACILITIES.

(1) Open handscaped area.

(2) Samll games room

(3) Multi-purpose hall *

(E) SOCIO-CAUTURAL FACILITIES. 460 x 600 *

Space Requirements.

(1) MULTI-PURPOSE HALL-ACTIVITIES INCLUDES(200 and above)

- Indoor games)
- Film shows/T.V.viewing)
- Village meeting)
- Club meetings)
- Dramas) 180.00
- Parties) - 250
- Exhibitions/displays)
- Offices)

using

(2)	Club rooms.	
(3)	Co-operative shops	110
(4)	Postal Services	24
(5)	Food Conteen	80
(6)	Bar	40
(7)	Arena.	600.00m^2
	Total	454 + 600m^2

(F)	PRIMARY HEALTH CLINIC	430 *
(1)	Waiting area	52
(2)	Examination room	2x20
(3)	Dressing Room.	20
(4)	Dispensary/drug store	2 x 20
(5)	Child care unit	100
(6)	INPATIENT UNIT	40
(8)	Maternity	290
(a)	Labour room	40
(b)	Delivery room	20
(c)	Recovery room	40
(d)	Husband room	30
(e)	Nurse Station	12
(f)	Sleep/lounge area	18
(g)	Scrip-up room/sub-steile	12
(h)	Medical piep	12
(j)	Equipment store	12
(k)	Anesthic store	16
(l)	Bath, Lavatory, Toilet for patients	12
(m)	Bath, Lavatory toilet for staff	18
(h)	Post-natal room	36
(o)	Soiled Holding room	18
(p)	Clean and sterile store	10
(q)	Nurses lockers	10
(r)	Doctor's room	12
	Total	430[x]

Part Two Chapter 2.

Footnotes.

1. UNO. Rural Housing, World Report.
N.Y. 1969. P.25.

2. ibid.

3. H.T. Sa'ad. M.Sc. Architecture thesis,
A.B.U., Zaria. 1975.
and see plate VI.

4. See Figure 6 and 7

* ERNST Neufert, Architect's Handbook.

Cutbush, P; Pierce, B. R; and Williams, A;
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Chapter Three

CONSTRUCTION MATERIALS:

This thesis will be incomplete without discussing the construction materials to be applied in the village centre. In a village project of this nature, the cost of execution is distated by the cost of material and the construction techniques. The construction techniques depends more or less on the material in use. Thus one vital factor in this village centre is the choice of construction material.

Wall Construction.

Since construction material dictates construction techniques, it will be very erroneous to go for more sophisticated material considering the level of technological know how in the village. But all the same, it will be more erroneous to go for the least durable material just by more question of initial construction cost. At this point, it will be of great help if the problems of wall construction is brought to light:- how well is the wall foundation protected from water, what of the exposed wall, and finally, how about the load bearing capacity of the walling material ?. These are more important factors to be considered alongside with cost. The centre is envisaged to last as long as the village continues to exist. A durability test for mud walls reveals that they need constant maintenance to carry them to a life span of five to ten years. Thus it is not surpirising that the villagers

spend most of their time rebuilding their houses. This also suggest how often, time, energy and money will be wasted in maintaining the centre should it be constructed of mud.

On the other hand, cement-sand blocks will be too expensive for the villagers to use in the village centre, considering their financial position.

To solve the problems of water, and load bearing capacity as well as cost, a balance in the authors opinion is to go for soil-cement block- for load bearing walls and timber wall framing for internal partitions where necessary. This materials are abundant and cheap in the area.

Soil requires the simplest equipment to transform it from its state of structural instability(thus constant need for maintenaced) into a stronger, more durable, and weather resistant external wall. The processes are described as'stabilisation.' and can be achieved juggling the balance of elements in the sub soil and / or puddling, and/ or compacting and/ or by structural reinforcem nt and/or by the admixture of c chemical known by civil engineering as mechanical stabilization.[1]

The stabilising agents include cement, lime, and/ or bitumen with the cement being more popular among the rest.

i. Physical Properties of Soil[2]

Soil is primarily made up of the following constituents:

(a) Mineral substances resulting from the breakdown of the

sedimentary and igneous rocks that form the earth crust as a result of physical, chemical and biological actions,

(b) Organic substances - usually on the top layer of the earth (called top soil) as a result of the decomposition of animals and plants materials.

(c) Sometimes mineral salts can be detected depending on the locality.

The presence or absence of the above in a soil sample can be predicted fairly accurate from the colour of the soil sample:

(a) black and dark-brown, indicate the presence of organic materials.

(b) Red and redish-brown, indicate the presence of iron possibly in the form of iron oxide (hermitite)

(c) Yellow and yellowish-brown-also indicate the presence of iron but in the form of hydrated iron.

(d) Grey, greyish-blue and yellow mottled-these usually indicate high clay contents as a result of poor drainage.

(e) White - usually indicates the presence of iron or silica.

The above characteristics have to be understood because during stabilisation it is not every type of soil that will suit the purpose. For example[3] soil containing too much clay say, over 25% can be difficult to stabilise; and so also soil containing high percentage of organic substances and/or mineral

salts. Soil rich in iron and aluminium compounds but poor in silica compounds have very high stabilising properties of their own.[4] These properties are connected with iron compounds contained, which when dried do not readily reabsorb water, they consequently remain sticking tightly together for many years.

Soils that weather are usually high in silica compound and low in iron and aluminium. Such soils shrink and swell appreciably, and have low inherent stability. They are sticky and glwe-like when wet, and rapidly break up into dust when dry.

A soil used for building in mud must dry hard and remain stable even if rewetted by rain year in and year out. It must not swell or shrink appreciably.[5] Clays and colloids of lateric soils swell and shrink very little when wetted and dried, they remain fairly stable for very long periods, hence they are the most suitable soils for building.

11. Soil Stabilisation.

The main weakness of soil walls is their low resistance to water. Such walls are often said to need a good hat and boots' to survive.[6] Overhanging eaves and verandas help considerably but tropical rain of any intensity can damage unprotected walls.

The main objectives of soil stabilisation is to increase the resistance of soil to the actions of destructive agencies

such as water. This is achieved in 3 main ways.

(a) By increasing the strength and cohesion of soil.

(b) By reducing the movement of the soil caused by changed in the moisture content.

(c) By making the soils less readily wet.

The most modern methods of stabilising soils involve the increase of strength and cohesion of soil by addition of strength and cohesion of soil by additon of cementous material which help to cement the soil particles together in a manner analogous to the way it binds aggregates in a normal concrete mix ?

As soil has some stabilising properties of its own, it is not necessary to add so much cement. The ratio of cement to be added varies with the nature of the soil in question. The nature of soil is very complex-great difference can be obtained between soil samples obtained between two plots quiest hear to one another, as such empirical tests are the only practical solution to determine weather a soil is suitable for stabilisation and if so how much cemtn is necessary. The test include:

(a) Field Tests.[8] A good field test is to make several blocks say 45cm x 23cm x 15cm using one part of cement of varying parts of soil. Make 3 blocks each of the ratios 1:18,1:17, 1:16, 1:15 and 1:14 cenent: soil making 15 blocks in all keep the blocks in the shade and if in a dry climate, keep them damp

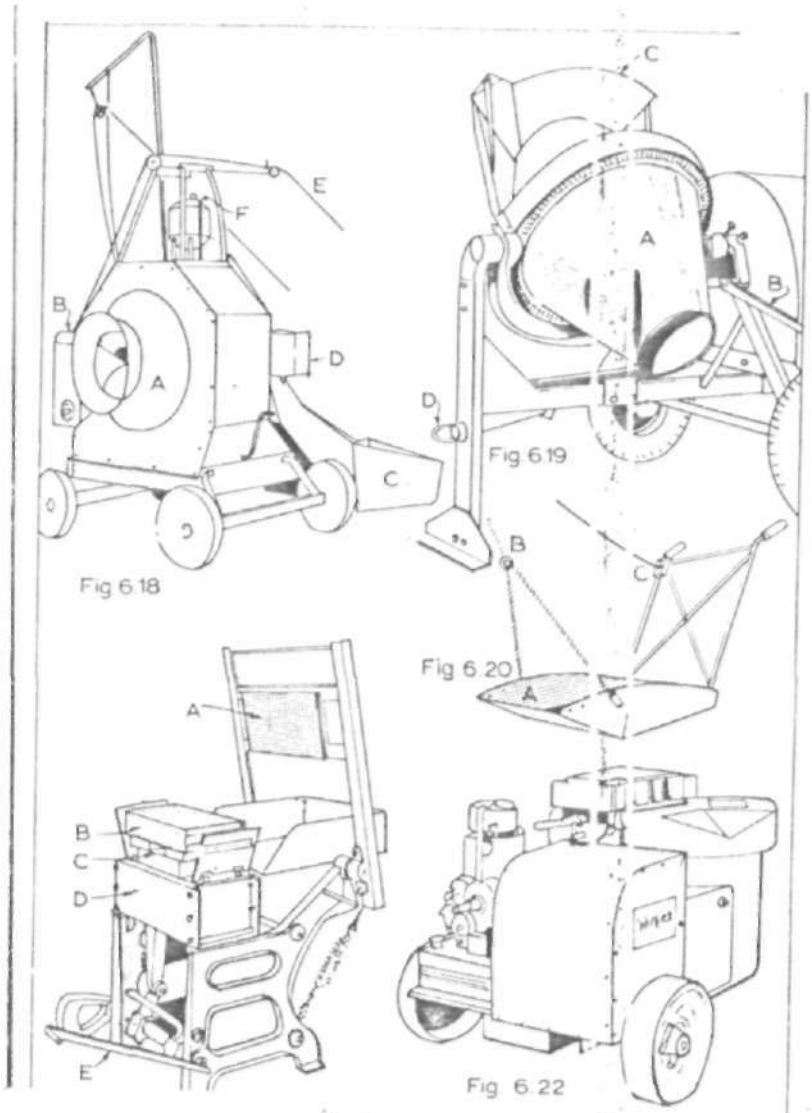


Fig 6.18

Fig 6.19

Fig 6.20

Fig 6.22

Concrete block machine
A Tamper plate
B Finished block
C Pallet
D Box
E Pushing out lever

CONCRETE and BLOCK PLANT

FIG 9

BLOCK MAKING MACHINES

by covering with sacking or matting, weathered frequently. After one weak, immerse two blocks of each strength in weater in a tank, pond or stream all night and place them in the sand all day for a period of one week.

If any of the blocks fall to pieces, crack, swell, bursts, plake or show other defects then the proportion of cement they contain is insufficient. If the whole range is defective then the soil itself is unsuitable.

The third set of blocks of different cement mixes should be kept exposed to the local climate for observation, and as controlled during the erection of the building.

Other reliable tests are available for determining the suitability of soil samples for stabilisation.

b. Preparation of Soil-Cement blocks.

Having tested the soil sample for suitability, correct soil:cement ratio and amount of water to be added, an important factor is to make sure that their is enough of the soil sample to execute the project.

The addition of cement to the type of soil found suitable, will in normal circumstances, produce a block which is fairly stable and will not shrink or expand owing to the presence of moisture; for will it deteriorate when subjected to driving rain or continued dampness. If well made in either of the block making machines[9] it will produce a block with a compressive

strength sufficient for all normal purposes.

Soil for use is dug from below the top soil(top soil containing humus is first removed completely). The soil is dried to remove the moisture content and seived to eliminate roots, coarse materials and large gravels.

The soil is then mixed thoroughly with the right amount of cement. This is either manually or mechanically done using special machines(concrete mixers not suitable). Addition of water is done with care; it is dangerous to have the mixture too dry (better too wet than too dry).[10]

Blocks may be made by hand in wooden moulds in similar manner used for sand-cement blocks. The soil-cement mixture should be well rodded into all corners with a rounded rammer, and the top smoothed off with a trowel or a wooden earth. Moulds may be removed at once, if the mixture is the right consistency.

Machine made soil-cement blocks compare favourably in all respect with sand-cement blocks. This is a considerble saving compared with sandcrete blocks making".

C. Practical Details for use of soil-cemtn blocks.[12]

It is required that the design should be in accordance with British specifications and code of practice for unreinfaced

masonry and hickwork.

(a) Slenderness ratio of up to 18 has been suggested by various authorities.

(b) The use of lintols above openings to distribute the concentrated loads.

(c) Layouts of walls should be made as simple as possible to avoid breakage and slender sections of wall such as would occur between closely sit windows and doors should be avoided;

(d) Most buildings of soil-cement should be of single or two-storey but never more.

(e) Mortar used should be in harmony with the blocks. Mortar may be made from the same seived soil with the addition of some sand to the same strength as the blocks.[13]

(f) The lowest coarse should begin at 25cm above the ground level(just above the D.P.C.) the base being made of more durable material such as sandcrete blocks, concrete or stonework or bricks. Otherwise if soil-cement is used it should be rendered to the D.P.C. level.

(g) Window cills should be made of very durable material such as precast concrete slabs weathered and throated.

c. Finishes:

Internally, the blocks will take plasters, i.e. cement and cement lime renderings which adhere well, but

it is essential that the plaster should not be too strong. Certainly not stronger than 1:12 cement: sound.[14] The addition of lime or 5% to 10% of clay to the mixture will help.

Externally, tyrolene plaster with a base of sand: cement ratio of 7-14 parts if sand to 1 part of cement is sufficient. Soil cement will also take the usual variety of stucco treatment applied to brickwalls, if desired. They should houlever not contain a high proportion of cement. The above treatments will increase the materials resistivity to weather and also improve the appearance of the building.

(2) ROOF CONSTRUCTION .

Here again, the architect is faced with the problem of choice of material and cost. The most available roofing material around is grass for thatch. Experience have shown that no thatched house have lasted more than 2-3 years without replacement. In this area, climatic conditions dictates much to the choice of construction material. As in most rainforest zone, thatched roof is more common than mud roof.

If time, energy and maintenance cost are factors to be taken into consideration for any project execution, the architect is therefore obilged to go for more durable corrugated iron and for aluminium and/or asbestor roofing

materials as a choice for the roof construction.

The roof structure will normally be of timber trusses (timber is readily available in large quantity) and any of the corrugated roofing sheets.

(3) FLOOR CONSTRUCTION:

Here again climatic condition will dictate the choice of material rather than cost. The architect is therefore suggesting a strip foundation with cement/sand floor finish.

Foot Notes

1. Article by Colin MoorCraft in Lec-Tech,
2. H.T. Sa'ad -M.Sc. Arch Thesis, A.B.U. Zaria. 1975.
3. R.L. Fullerton, Building Construction in warm climate Vol. 2. p. 177
4. Colonial Building Notes Department of Scientific and Industrial Research No 16 p.5
5 ibid p.3
6 R.L. Fullerton, Building Construction in warm climate, Vol 2. p. 176
7 H.T. Sa'ad, M.Sc. Arch. Thesis, A.B.U. Zaria, 1975.
8. Coloninal Building notes No 16 p.6
9 See Figure 9
10 Colonial Building notes No 16. p.6
11 ibid p. 7
12 H.T. Sa'ad, M.Sc. Arch Thesis, A.B.U. Zaria. 1975
13. Colonial Building notes No. 16 p. 9
14. ibid.

Design Summary:

One of the task before any architect the world over is to design with the environment at heart. This task is not an easy one considering many of the constraining factors he comes in contact at the various stages of design. Architecture(the politics of lines) is a very intricate subject to embark upon, as it envolves patience, endurance, and the right mind to take discussion that could be costly to whoever may be concerned or envolved.

With this in mind, the realisation of rural conditions - as they exist, and the understanding of these conditions - through studies, the architect have tried to envolve an Architecture unique in its own context and orientation to suit the rural conditions.

'Simplicity is the design approach taken, and economically, it has been achieved both through the choice of materials / technology and through the choice of shape. All these been conclusion drawn from studies of the rural conditions. The shape i.e. rectengular, for instance was chosen as this is the most commonly used shape in the area. This shape is greatly dictated by climatic factors.

The design is further simplified by avoiding varied building type. To this end, two types of buildings were designed and include, building type one (T_1) of 6 metres

span; (for administrative and health blocks); and building type two (T_2) of 10 metres span(for educational, workshops, recreation/social and industrial blocks).

The design is further simplified by adopting a modular unit of 3¼m for the length of all the building types.

'Courtgard' is the unit taken for the design. This not only conforms with the rectangular shapes adopted but also reflect the traditional layout of spaces and activities within the area. The verious units in the centre are reached through a central concourse (courtyard) just by the entrance.

From financial point of view, the design have made it possible for the project to be executed in phases at the will and pace of the community. The different phases can be constructed at the will of the community as their financial position improves.

The different units in the centre are complementary to one another, and therefore will perform better if in co-existence as planned. The centre have great potentiality for expansion and this have be taken care of in the planning principles adopted.

Thus altogether it has been an attempt to create or give the villagers an architecture that looks quite homely in the rural enviroment. In this way, the villagers will accept

and participate fully in the village centre activities,
a chance to improve ones living conditions and to
contribute more to the society he lives in and to the
development of the entire nation .

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