ENVIRONMENTAL CONSEQUENCES OF RURAL-URBAN MIGRATION AT THE DESTINATION

(A case Study of Bida Local Government Area)

BY

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DEDICATION

TO THE ENTIRE FAMILY OF MALLAM MUHAMMAD JIBRIL

DECLARATION

| I hereby declare that this project is my original work and to best of my knowledge as |
|---|
| never been presented by any student in any form for the award of postgraduate |
| Diploma in Environmental Management at any other institution. All information |
| derived from published and unpublished work of others has been duly acknowledged |
| in this project. |
| |
| Adamu Muh'd Jibril Date |

CERTIFICATION

This is to certify that Adamu Muhammad Jibril (Reg. No PGD 2001/2002/245) carried out this work entitled "ENVIRONMENTAL CONSEQUENCES OF RURAL –URBAN MIGRATION AT THE DESTINATION (A case Study of Bida LGA)

As one of the pre-requisite of award of post-graduate Diploma in Environmental Management in Geography Department of School of Science and Science Education of Federal University of Technology Minna.

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ACKNOLEDGMENT

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ABSTRACT

Fuelled by rapid population growth as a result of rural-urban drift, urbanization in Nigeria is characterized by city slums with serious environmental consequences. The problem has been described as acute and exemplifies the inability of development measures to keep pace with the rate of population growth. The problem of the disposal of sewage and refuse in particular, has been shown by this research to be quite serious because of the rapid rate of generation of non-biodegradable materials, such as plastics.

Nigeria and the study area in particular are currently experiencing a significant amount of urban growth.

In addition Environmental conditions in the urban areas have greatly deteriorated due to the rural-urban drift and the attendant of social services and infrastructures to keep pace with the rate of growth.

Environmental problems associated with the increasing growth of urban slums have also been studied and they include overcrowding in squalid housing conditions, poor quality or unavailability of basic infrastructures and social services, such as water and sewage facilities. The dominance of primitive and out dated sewage disposal facilities in the study area help to illustrate this point.

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CHAPTER ONE

1.0 INTRODUCTION

Nigeria, being a developing nation has most of its population dwelling in rural areas. This population engages mainly in primary production activities, among these, agriculture is the most vital and predominant activity.

Nigeria with approximately 98.0 million hectares of land is liberally endowed. However, the equally large numbers of people especially in the rural areas has to be contending with the limited resource available.

The continues rise in human population and limited natural available calls for concern among well meaning people, such that the deterioration of the environment can be reduced. This is only possible if populace is made aware of the consequences of actions, when the environment is progressively degraded, the inhabitants are forced to migrate. Those that remain become disenchanted as they experience decline income and standards of living, unemployment and general threat to the to the environment.

The segment of the inhabitants that migrate may sooner or later

Experience another process of environmental degradation in their host communities.

Hence, unless, with proper management of the environment, effective and sustainable population policies, the natural environment will continue to be at the receiving ends.

1.1 Definition of Terms

- Urban: The word is derived from the latin urbs which means a town or city. So urban settlements are cities or towns like Lagos, Ibadan and kano.
- Rural:- Means 'of the country' and so rural settlements are places in the country side where people live, for examples villages, hamlets and isolated houses or huts.
- Waste:- can be defined as "any unavoidable material resulting from domestic activity or industrial operation for which there is no economic demand and which must be disposed of ' (Tchobanoglons 1977).

1.1.2 STATEMENT OF THE PROBLEM

Every man is basically an economic man deriving his needs from his

Environment, man's needs include shelter, food and clothing. In order to satisfy these
needs, man often moves or migrates from one location to another, most especially
from rural to urban, this is due to the fact that resources are scarce and unevenly
distributed world wide. And where the resources are available, the exploitation will
depend on the level of technological know-how and social organization.

Mobility and migration by man calls for concern because of the way and manner the environment is being exploited, which is not in tune with international acceptable standards.

Migration has resulted in accelerated urbanization with the attendant problems of Housing shortage, urban congestion, high cost of living, unemployment. All these together had culminated in wide spread Environmental problems which includes soil erosion, desertification, waste generation among others.

consideration the existing features, and level of man activities on the biophysical environment with respect to immigration.

Sets of questionnaire were designed to source information from the rural populace, migrants and the local Government authorities.

ii. <u>Secondary Source:</u> The data collected through the secondary source were gotten from materials such as textbooks, research papers, past project works, lecture notes, maps e.t.c that have direct or indirect bearing to the project.

1.5.1.2 <u>SAMPLING METHODS</u>

The whole population data cannot be easily taking therefore the characteristic of the whole population can be inferred from the properties of the parts of the population (sampling).

Sampling provides least cost and rapid methods of data collection.

1. Population:- the sampling elements were used to determine the population and information about the immigrants into Bida local Government Area Council.

1.1.6 SAMPLE SELECTION

The researcher took a sample of 120 respondents to represent the population.

120 respondents were drawn from the study area. The study area (Bida Local Government Area) was divided into two (2) i.e. Bida North and Bida South. He randomly selected three (3) wards each out of the seven (7) wards in each division. The researcher went further to randomly choose 20 respondents from each ward, as shown in the table below.

Table 1.1.6 SAMPLE SIZE

| DIVISION | WARDS | NO.OF | NO. OF |
|------------|-----------------|---------------|---------------|
| | | QUESTIONNAIRE | QUESTIONNAIRE |
| | | DISTRIBUTED | RETURNED. |
| BIDA-SOUTH | UMARU MAJIGI B' | 20 | 20 |
| | NASSARAFU | 20 | 19 |
| | BARIKI | 20 | 19 |
| BIDA-NORTH | MASAGA 'A' | 20 | 18 |
| | KYARI | 20 | 19 |
| | CHENIYA | 20 | 20 |
| Total | | 120 | 115 |

SOURCE: - RESEARCH QUESTIONNAIRE, 2003.

1.1.7MASTER QUESTIONNAIRE

In order to elicit appropriate information during the course of the study, a master questionnaire was designed. In each selected division of the study area specific information in the questionnaire was obtained on the rural –urban migration, reasons, and it consequences at the destination through a multi-sampling procedure namely:-

Stage 1:- Two (2) divisions were made namely Bida South and Bida North.

Stage2:- Three (3) sampling units (wards) were selected.

Stage3:- Out of the three (3) units twenty (20) were selected for the purpose of the research.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 MIGRATION

Migration takes place when people voluntarily move from one place to another. The movement of people from one place to another has been taking place since the origin of man.

During recorded history, migration has not only increased in volume but has also involved steadily lengthening distance. With this amount and of migration has come a corresponding necessity to identify and explain such movement. (lewis 1974, kostinki prothero 1975).s

As long ago as the 1880's Ravenstin (1885), 1889), using birth place statistics contained in the 1881 census of England and wale, suggested that migration could be generalized into seven 'laws'

- 1. The majority of migrants move only a short distance, and consequently there is a generally displacement of persons producing currents of migration in the direction of the great centers of commerce and industry.
- 2. The process of absorption is created by movement from immediately around a great city, creating gaps, which are filled from more remote areas. This also means that few migrants will be found in cities from areas progressively further away.
- 3. Dispersion has similar features and is the inverse of absorption
- 4. Each main current of migration produces a compensating counter current.
- 5. Long distance migratory generally go to large cities.
- 6. Urban dwellers are less migratory than rural dwellers.
 - 7. Females are more migratory than males. Although this highly generalized

perceptions of, and are able to benefit to different extends from opportunities at places other than those in which they currently reside (Jones 1980).

In response to these criticisms the last decade or so has witnessed the emergence of a more behavioural approach to the study of migration and, in particular, urban residential site selection (Adams and Glider 1976; Michelson 1977; clark 1981). Such an approach argues that migration occurs because individual believes that, he will be able to better satisfy his aspirations in a location other than the one at which they are resident.

In their own words (White and Morgan 1981), the decision to migrate is made on the basis of perceived opportunities (with different locations providing different individuals and groups).

2.2 PATTERNS OF MIGRATION

2.2.1 Temporary Movements

Seasonal migrations such as pastoral normadism and transhumance are usually affected by seasonal plant growth but there may be other commercial incentives. In this seasonal category come the movements of temporary agricultural labour, such as fruit pickers to East Anglia and Kent, where they occupy temporary accommodation during harvest.

Large-scale periodic movements include pilgrimages organized festivals, and the annual holiday surges to the sea, lakes or mountains.

The economic life of resorts like Brighton, on the English channel depends on the arrival of several million visitors each year, as temporary residents. There are mass migrations for shorter periods from cities like Montreal, where weekends movements to residences on lake-sides and hills to the north affect

the whole pattern of housing, hotels, shops and roads on this southern part of the shield, empty the city, and jam the roads on Friday evenings.

Businesses may cause employees to live on sites away from home, or tour abroad for varying periods. These too, can affect settlement patterns; and also where urban for businessmen.

2.2.2 <u>Permanent Migrations</u>

Internal: Within a country, people tend to change their permanent residence under the stimulus of specific causes, through waywardness must be involved in many individual movements. Among such causes are: first employment; marriage; subsequent employment opportunities; acquired skills, leading to opportunities elsewhere; shift of employers; promotion to other branches; dismissal, or change in business for times; social or racial unrest; inheritance; medical factors; and Retirement. This is certainly not a comprehensive list, but focuses the attention on the many compelling reasons for internal movement (DC Money, 1972).

Decisions must be made before moving and selecting a new area to live in based on such considerations as employment offers, physical environmental attractions, presence of relations or friends, local economic advantage or otherwise (cost of living).

Age, and social and marital status are also factors, which make some groups more mobile than others. The young seek jobs and may adjust more easily; the old may be stimulated to move to 'retirement' areas, or to relatives elsewhere.

2.2.3 Internal Migration

Measurement:-

Direct measurement of internal on a national scale is only possible in

Countries where a migration question is posed at the census or where there is a system of residence registrations. This is the only satisfactory basis for calculating the volume and direction of migration streams. Alternatively indirect measures are possible:

- (a) By comparison of two good constructive censuses, either by the "Vital statistics methods". Which estimate the total net gain or loss in population of a community as a result of migration by subtracting total inter-censal changes, or by the "survival ratio method" which estimates the proportion of the population which should be expected to survive at the second census and determines the difference between his surviving expected population and the actual population, and
- (b) By comparison of place of Birth statistics with present residence. The disadvantages of these methods are that we do not know when the migrations occurred. We are sometimes compelled to supplement data by simple survey.

2.2.4 Rural – Urban Migration

The onset of industrialization and rapid technological developments have usually caused marked movement from rural to urban areas (DC Money 1972).

This type of migration has generated more discussion than any other type of tion, this because the number of people involved is very large.

Apart from employment opportunities in towns, there are the attractions of s, schools, and entertainments, which may outweigh such considerations as increased of living, noise, and population

Thus the shear scale of this type of migration has constituted a great burden to rban center while at the same time depriving the rural areas of their able-bodied and ated young men and women.

2.2.5 Regional Migrations

parts of a country may be seen as advantageous from the points of view of rtunities, standards of living, or climatic conditions, so that marked regional migration rs.

This may be seen in the drift to the midlands and south East which has occurred in n. Here the Birmingham – West Midlands conurbation, and London and its industrial fringes, offer employment in growth industries, and favourable conditions for the ishment of new industrial ventures.

There are often social implications in regional migrations as seen again in the North – movements in Britain; also, despite the fact that much attractive countryside lies close e northern industrial areas, there has been a feeling that the south has climatic stages, which has tended to make the overcrowding in the south a secondary deration.

2.2.6 INTERNATIONAL MIGRATIONS

This consists of movement of people from one country to another, and of people from ontinents e.g Europe and America into Africa these movements have been on since the nial era. Many embassies have been established and elite from various continents has uted into Africa engaged in diplomatic service, or commerce and industry. For example, ding to Ghana census of 1960, over 850,000 persons or 12% of the 6.7 million. lation were of foreign origin, the vast majority of them came from the neighboring tries of Togo (200,670) Burkina Faso (194,570) and Nigeria (190,780) (udo). Before the expulsion of aliens from Nigeria in 1983, there was an estimated one on Ghanians in the country.

2.3.0 REASONS FOR MIGRATION

Rural-urban migration is also important factor in the urbanization of Nigeria.

In recent years thousands of people have left the rural areas and gone to live in the urban centers, especially in Bida.

In Nigeria, the people have moved from the country to the towns for the following reasons:-

- a. Economic reasons.
- b. Social / Cultural reasons.

2.3.1 Economic Considerations or reasons

That is poverty and lack of work constitute the most important motive for migration. As far back as the 19th century. Ravestein reported as the pioneer of demographic studies, emphasized the importance of economic considerations when he observed that "Bad or oppressive laws, heavy taxation and unattractive climate, uncongenial social surroundings and even compulsory slave trader, deportation, all have produced and still producing currents of migration, but non of these currents can compare in volume with that which arises from the desire inherent in most man to better themselves in material aspect".

(Udo 1982) lamented that the expectation of a job in industry or public service has been a paramount consideration for lage scale migration to the cities where most of the opportunities exists. Some migrate as "target workers" with the purpose of earning money to solve a particular problem e.g the payment of bride price.

2.3.2 Social / Cultural reasons

Other reasons apart from economic consideration helps to motivate migration.

- 1. The desire to escape from social stigma, for example when some are convicted of adultery, stealing or witchcraft. In many villages in parts of Ibo land for example some people are still culturally isolated as "OSU" because they are descendants of slaves who were dedicated to the earth god (Udo 1982). These categories of people migrate away from home and thereby create a new image for themselves.
- The desire to escape from excessive parental control and custom/ traditions, which is too cumbersome to observe.
- The desire to move to an area with more recreational and cultural facilities for purpose of tourism or better living.
- 4. The movement of women to join their husbands.
- 5. The desire to attend or further education at higher institutions e.g. universities or polytechnic which are located away from homeland.

2.4.0 <u>IMPACT OF MIGRATION (DESTINATION)</u>

According to (Udo 1982), the most obvious change in the rural

Destinations appear to be increasing economic activity shown by rising production figures in mineral and agricultural exposits from such areas. And for the urban centers, which receive the bulk of the migration, the changes have been really enormous, resulting in the rapid Urbanization.

 Migration increases the population of the receiving areas. And since migrants are usually in their prime of life (falling within 15 and 45 years) migrants provides a much-needed manpower for the economic development of receiving areas.

- Because most migrants are in the reproductive age, birthrates tends to be influenced, prostitution is also encouraged.
- By bringing together people of different races, languages and religions,
 certain conflicts tend to arise, as times result in violence.
- 4. Migration has resulted in accelerated Urbanization with the attendant problems of hosing storage, urban congestion, high cost of living, Unemployment and under employment.

2.5.0 URBANIZATION

Urbanization means not only the growth in the population of urban centers, but also the growth in the proportion of the total population concentrated in urban settlements.

It is a process where people move from country areas to live in town and cities. This process of urbanization has speeded up greatly in the last 150 years. It has increased more rapidly than the world total population. But this the urbanization has not increased at the same rate in all countries, thus, the United State and the countries of West Africa. Never the less, in Nigeria the number of people living in urban areas is now increasingly rapidly; thus it increased from 10% in 1952 to 19% in 1963 and over 30% in 1980.

2.5.1 THE CAUSES OF URBANIZATION

According to (GED Lewis 1982) the most important factors that can cause urbanization are: -

- Migration: Migration takes place when people voluntarily move from one place to another, there are two main kinds of migration:
 International and National
- a. International migration:- This is the movement of people from one country to another. Such migrations can cause an increase in the population of towns. Thus between 1820 and the United States allowed 47 millions immigrants to settle in the U.S.A, most of them from Europe and West Africa.

b. National or domestic migration

This is the movement of people within a country, for example from the country —side to the towns (rural-urban migration), or from one part of the country to another. This has been an important factor, for example, in Japan, where millions of people have left the rural areas and gone to the cities to work in factories.

2. The natural increase in the population: - the natural increase is usually greater in the towns than in the rural areas. This is because people in urban areas usually have better houses, better sanitation, a better water supply, better education and better health than those living in rural areas. Moreover those who migrate from the rural areas to the urban centers are usually the young people, who tend to get married and have children; consequently the population of the urban centers increases faster than the population of the rural areas.

3. Industrialization: - when a country becomes industrialized, it requires thousands of people to work in its factories. Factories are usually built in or near the towns; consequently people are attracted by the wages and work in the factories and so they move to the towns.

2.5.2 THE PROBLEMS OF URBANIZATION

The experience of countries such as Japan, India and Nigeria shows that urbanization brings with it many problems. Thus Tokyo, Calcutta and Lagos all have serious problems as a result of their rapid growth in population. The following are some of the most important:

- Traffic Congestion: This is a serious problem in must large cities of the world, for example in Tokyo, Calcutta Lagos.
- 2. Shortage of housing: Cities like Tokyo and Lagos which have grown rapidly in size usually suffer from over crowding, squatter settlements and a serious shortage of proper house. In Lagos many of the house are also of poor quality.
- 3. Pollution:- Where urbanization is mainly due to industrialization, as in Japan, pollution can be a serious problem.

In Nigeria, the pollution is mainly land pollution due to difficulty of getting refuse removed. Many towns have no adequate refuse disposal service.

4. Other problems: - Urbanization can also cause many other problems, for example, in Lagos and many other Nigerians towns the water supply is inadequate, while many people have no piped water.

Many Nigerian towns also have no proper drainage to take away the rainwater. As a result, when the rainy season comes, the water collects in pools,

which acts as a breading ground for mosquitoes. Consequently Malaria is still a common disease in Nigeria.

2.6.0 HUMAN IMPACT ON VEGETATION

Vegetation is important to human as a primary source of food, as a building material in manufacturing industries, as a fuel and as medicine.

The first human impact on vegetation, which is still prevalent, is the use and misuse of fire. Even through over half of the fires that occur are natural, resulting from lighting strikes or spontaneous combustion of decaying organic material, the rest can be attributed to accidental or deliberate burning is used to clear land, through it can be used to help improve the quality of soil arid regions through adding fresh organic material, or as an and to reduce wide pared fires, fire cause a reduction in national vegetation, they threat ion wildly, humans and property. Fire produces secondary problems with the clearance of vegetations, such as soil erosion. Heavy grazing of cattle leads to trampling and compacting of the soil, reducing its capacity to hold water and attiring its structure. Selection graying of particular plants may leads to change in the nature of the vegetation cover.

2.6.1 HUMAN IMPACT ON THE LAND SCAPE

The land's surface is an important resource allowing us to build settlements, produce communication links, and have farmlands and recreational areas. It is also beneath this land that mineral resources and fossil fuels are to be found. But in order to exploit these we have had to cut away at the land surface and dump the rock waste, which in turns creates new land forms.

Human activities are continually modifying the landscape, creating pits, ponds; spoil heaps terraces, cutting embankments, dykes, cannel's reservoirs and

areas of subsidence. War also causes dramatic and significant landscape modifications.

Geomorphologists consider human as an important land-forming agent and refer as geo-morphologic anthropogenic agents. Many consider that for large regions of the world, humans are an important factor in contributing to the landscapes we see today. The rapid increase in population has placed great demands on the available living space. The trend towards urbanizations has led to an increase in the size of settlements at an incredible rate and the exploitation of marginal lands. In the latter, natural processes constitute a hazard to people settling in these regions. Rapid deforestation and devegetation, resulting in soil erosion; flooding and other associated problems often accompany advances in these areas.

The pressure for land has become so great in some regions that new land has been created by coastal reclamation. This is particularly well illustrated in settlements such as Hong Kong, which has one of the highest population densities in the world.

2.6.2 Urban waste Generation and Management

Due to rapid urbanization in Nigeria in the past three decades, waste management has become a major problem. Man's unguided developments and ineffective solid waste management especially in urban centers of Nigeria result in degraded urban environment and outbreak of diseases such as cholera, diarrhea etc as it stands, effective waste management in our urban centers need to be addressed to achieve sustainable development.

Basically, wastes are broadly classified into solid semi-solid and liquid wastes.

These pollutants are unwanted by-products of our activities or used substances, which have several consequences. They also constitute a nuisance into our environment causing discomfort and health hazards. They can be carried along for distances by airs

1

or by water, threatening the health and live-spans recreations, personal hygiene and the happiness of man who have no direct involvement in their production but cannot escape these effects.

Rivers, streams, ponds and lakes are polluted when waste products are discharged in them in sufficient quantities.

The phenomenon of waste generation is common to all human communities and often leads to urbanization process, especially when both the natural and migration not gains are relatively large. In other words, urbanization as a spatial process has its common constraints; for example, when population explodes, consumption tends to be elastic, and people create refuse from all soils of materials used as packaging material. According to Adedibu & Okekunle (1989) rapid population growth is a significant that is causing poor environmental sanitation.

Toxic waste is another category of waste which is very harmful to health for example carbon mom code emitted from exhaustible fumes of cars, machinery chemise, generating plants and other combustible items. Lester (1987) says, without population, there would be no pollution and that pollution is the price of progress.

CHAPTER THREE

3.0 BACKGROUND TO THE STUDY AREA

3.1.1 LOCATION

Bida, the study area, lies between latitudes 6^0 20° and 7^0 15° North of the Equator and longitudes 5^0 40° and 6^0 33° East of the Greenwich meridian.

Geographically the study area shares boundaries with Lavun local Government to the west Gbako local Government to the North Badeggi to the North East and with Minna the state capital and katcha/lavun at the southwest.

Bida covers a landmass of about 1,000sq. Km, and it is watered by rivers landzu, musa and umoru, river landzu takes its flow across the heart of Bida Township. The importance of these rivers is that they provide good irrigation opportunities for the inhabitants. Thus they are of both economic and social importance.

As shown in figure 1A

3.1.2 CLIMATE

The study area experiences a climate in transition between the arid desert climate in the North and tropical rain forest climate in the south with basically two district seasons namely dry and rainy seasons. The climate is influenced and controlled by Northeasterly and southwesterly winds. The latter with high relative humidity and low temperature yields rain, while the former which controls the greater part of the country between November and May does not produce rains. Generally the length of rainfall decrease from South to North.

The mean annual rainfall is about 1227mm with a wet season of about 180-250 days. The north experiences a uniform temperature throughout the year, which does not fall below 20° C.

Both daily maximal and minima temperatures rise to their annual peaks of 38° c between February and March and 35° c between November and December.

The average annual evaporation is observed to be between 1200-1600mm, but rainfall pattern provided adequate water for annual crops.

3.1.3 VEGETATION

The area lies mainly within the southern Guinea Savanna Zone with much of the primary woodland over the plains modified by slash –and-bush agricultural practices. A large part of the zone consists presently of open savanna woodland with tall coarse tussocks grass (5-10m high).

Many trees of different species were said to have existed or growth in the past within this savanna, trees such as the locust beans, shear butter, Baobab, mango, silk-cotton. Some of these trees are also planted for economic reasons.

3.1.4 GEOLOGY AND SOIL

Over 90% of the region is underline by Nupe sandstones, which comprise weakly cemented fine to coarse gained clays, siltstones, and sandstones with locally embedded with these beds of carboneous shale.

The soils of the region can be broadly classified into two: The upland and lowland soils. While the upland soils are generally sandy, the lowland areas are characterized by loamy soils.

The upland soils are reddish yellow in colour and generally very sandy with a clayey subsoil. Apart from being highly leached soils, they are slightly acidic with PH of 6.5 and with low to very low exchangeable cat ions.

3.1.5 TOPOGRAPHY

The landscape features of the region are largely determined by the underlying geology especially its lithology and structure.

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It is the local texture that largely shapes the landscape. Areas underlain by coarse sandstone are relatively flat to gently undulating, while areas of fine sandstones are hilly and dissected.

The topography is simple and according to Buchaman and pugh, this area lies within "Niger Trough".

3.1.6 THE PEOPLE

Bida Local Government is one of the forty-two local Government areas of Niger state, with a population of about 172,898 (1991 census) but have a projected population of 237,902 as at the year 2002. The indigenes of Bida local Government are predominantly Nupe. There are however other tribes who came to settle in the area as civil servants, students, traders and finally immigrants. The tribes include Gwari, Dibo, Kakanda e.t.c from other parts of the local Government and Hausa Yoruba, Ibo e.t.c from other parts of the country.

The study area witnesses an influx of immigrants from other local Governments such as Gbako, Badeggi, Katcha, Lavun, Doko etc being the headquarter of the Nupeland.

The religions practiced in the study area are Islam and Christianity. Bida is about 89 kilometers south of Minna, the state capital.

3.1.7 OCUPATIONAL-STRUCTURE

The study area has no mineral of much economic value, therefore the inhabitants engage in agricultural practices, though Trading and other Terri any services are preferred by most people. Therefore the people living in the study area depend directly or indirectly on the rural farmers.

Apart from farming, the dwellers also have other occupations, according to the field survey, other occupations carried out include glasswork at Masaga Silver, brass

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and copper work at Tswata mukum; Blacksmithing at Dokodza, others include cloth weaving and wood carving (Gbagba).

However the tearing sector like the federal polytechnic Bida; federal medical center Bida, NTA and FM station tend to employ more people, this could be due to the fact that the younger generation are increasingly better attracted to the sector partly through the benefit of their educational opportunities, and partly because of the huge number of job opportunities made available in tertiary sector by public investment in education and social services by the federal state and Local Government.

CHAPTER FOUR

4.0 DATA ANALYSIS AND DISCUSSION

4.1 INTRODUCTION

MIGRATION:- The push-pull theory has often been employed to explain the movement of migrants. It is generally observed that migrants originate mainly from areas which experience certain environmental degradation, therefore these migrants are "pushed" from their home area, such problems at source include poor soil fertility; population pressure; family problem; social, faming purposes and trading etc

While at the destination, migration has resulted in accelerated urbanization with the attendant problems of housing shortages, urban congestion, waste generation, high cost of living and spread of diseases etc

4.1.1 BIOGRAPHIC PROFILE OF THE IMMIGRANTS

AGE-GROUPING, SEX AND MARITAL STATUS

The age distribution of the immigrants in the study area shows that the population structure fell between 26-35 and 36-45 age group, which means that over 50% of the immigrants can be described as youthful. The results of the study also show that majority of the migrants are male who came to the study area in search of jobs.

Similarly there is drop in the 46-60 age group, this therefore revealed that immigrants within this age group are insignificant. Although there is dominance of males in the respondents, in most ways, the marital status of the immigrants was what would be expected in the various age groups of the sexes.

Almost all women are married by the age of 24. But a surprisingly number of men in the 26+ age groups stated that they had not married.

Table 4.1.1 AGE-GROUPING OF THE RESPONDENTS

| Age Group | Frequency | Percentage (%) |
|-----------|-----------|----------------|
| 16-25 | 17 | 14.8 |
| 26-35 | 40 | 34.8 |
| 36-45 | 22 | 19.1 |
| 46-60 | 19 | 16.5 |
| Above 60 | 17 | 14.8 |
| Total | 115 | 100 |

Source: Field survey data, 2003

4.1.2 EDUCTIONAL BACKGROUND

Inspite of the huge effort made by the Government to meet the demand of the primary and secondary Education programme, the level of formal education among the respondents (immigrants) is not high.

More than 50% of the adults stated that they had no formal education at all. A decline in koranic education in the younger age group is apparent when compared to adult group; about 21.7% have Quranic education only. Less than 20% received or are receiving primary or secondary education. 44% has received 'A' level or higher education.

Table 4.1.2 EDUCATIONAL BACKGROUND

| Educational status | Frequency | Percentage (%) |
|----------------------------------|-----------|----------------|
| 1. Completed primary education | 15 | 13 |
| 2. Completed Secondary education | 10 | 8.69 |
| 3. Tertiary Institutions | 5 | 4.4 |
| 4. No formal education | 60 | 52.2 |
| 5. Koranic education only | 25 | 21.7 |
| Total | | |

Source: field survey data, 2003 4.1.3 MAJOR OCUPATION

60.9 % of the immigrants to the study area are farmers, they engage in farming activities, while 16.5% engage in trading among which significant proportions of the youth engage in motor vehicle transportation business otherwise known as kabu-kabu. Only, 11.3% of the respondents are civil servants. The renaming are either learning one handwork or the other such as carpentry, mechanic etc.

Table 4.1.3 Occupational status

| Occupation | Frequency | Percentage (%) |
|----------------|-----------|----------------|
| Farming | 70 | 60.8 |
| Trading | 19 | 16.5 |
| Artisans | 7 | 6.1 |
| Civil servants | 13 | 11.3 |
| Others | 6 | 5.2 |
| Total | 115 | 100 |

Source: field survey data, 2003.

4.1.4 FACTORS RESPONSIBLE FOR THE MOVEMENT

Table 4.1.4 factors

| Factors | Frequency | Percentage (%) |
|------------------------------------|-----------|----------------|
| Search for improve living standard | 45 | 39.1 |
| 2. Search for job / trading | 40 | 34.7 |
| 3. Pressure from home / trading | 15 | 13.0 |
| 4. Poor soil fertility | 10 | 8.6 |
| 5. Other reasons | 5 | 4.4 |
| Total | 115 | 100 |

Source: field survey data, 2003

4.1.4.1 IMPROVE LIVING STANDARD

Every individual wants economic power to improve his present status and living standard. In a situation where the need is not achieved at home, then nothing will stop him from going out to seek for better shelter, good clothing and other better things of life. Table 4.1.4.1 shows that majority of the respondents (immigrant) left their home town for the study area because of the availability of the facilities to improve their living standard.

4.1.4.2 SEARCH FOR EMPLOYMENT / TRADING

The field study result has shown that work has been the main attraction with over seven in ten immigrants household heads saying their main reason for coming to Bida was for employment. Migration to the study area (Bida) has not been local. Apat from a proportion of immigrants from Gbako and lavun local Government Areas the remaining local Government Areas contributed insignificant numbers of immigrants to Bida or none at all. The remaining came from outside Niger state as from within it.

4.1.4.3 PRESSURE FROM HOME/TRADITION

The desire to escape from excessive parental control, customs and traditions make a lot of people move out of their hometown, similarly the desire to escape from certain social stigma for example from the discussion held, some of the immigrants complain about being accused of witchcraft, adultery and the like.

Another set of immigrants from patigi and lafiagi local Government Areas of Kwara state complained about being marginalized by the predominant yoruba ethnic group in their home state. Therefore they easily move out, so as to create new image for themselves.

4.1.4.4 POOR SOIL FERTILITY

As a result of continuous cropping for a period of time, the soil fertility will deteriorated which will adversely affect production too. Table 4.1.4.2 indicates that large number of people migrates because of the poor state of the soil in their homes, and as such their means of survival is threatened.

4.2.0 WASTE GENERATION AND SOURCE

The phenomenon of waste generation is common to all human communities and often leads to urbanization process, especially when both the natural and the migratory net gains are relatively large.

The result of this research reveals that as a result of increase in population, consumption tends to be elastic and thus creating refuse from all sorts of materials.

Used as packaging material.

Some of the respondents indicated that the domestic and commercial processes produce most of the waste they generated which include waste from preparation of cooking, leftovers leaf litters, corn cobs and fruits peels etc.

Table 4.2.0 shows the type of waste generated and table 4.2.1 indicates the source of the waste generated.

Table 4.2.0 TYPE OF WASTE GENERATED

| Type of waste | General composition of the | Generation | Frequency | Percent |
|---------------|---------------------------------------|--------------------|-----------|---------|
| | waste | Source | | age (%) |
| Garbage | Waste from preparation of | Household | 38 | 33 |
| | Cooking leftovers and | (Kitchen) | | |
| | market waste etc | restaurants & | | |
| | | markets | | |
| Rubbish | Rubbish Rags, combustible papers Mark | | 30 | 26.1 |
| | and unused pagers | households | | |
| Ashes | Residues from fire used in | Kitchen and | 27 | 23.5 |
| | cooking | market | | |
| Street trash | Leaf litters, cobs, fruit | Restaurants stores | 20 | 17.4 |
| | peels & cans etc | passer-by etc | | |
| Total | | | 115 | 100 |

Source: field survey data, 2003

Problems of waste generations are as highlighted below:

- Uncollected waste encourages the breeding of flies, cockroaches, and rats etc,
 which easily transmit diseases that can greatly affect human health and pollute
 the underground water resource especially during percolation process. And
 thus rendering it unfit for human consumption.
- 2. It could cause smog and / or air pollution in places where wastes are being openly burnt indiscriminately. The resulting carbon dioxide is usually destructive to but human health and stratospheric zone too. Offensive odours as a result of decomposition of the organic waste leads to a discomfort and

psychological imbalance to the people residing nearby to the area the wastes have been dumped.

4.2.1 WASTE DISPOSAL

Generally, bad refuse/waste disposal schemes as a whole characterize most of the urban centers in Nigeria. For example, the increased population density implies greater generation of waste. Refuse mounds and dumps are common features on the contemporary urban centers, in most cases; many people dispose their wastes in guthers, drains, streams and rivers. The waste materials so deposited become clogged up and flooding results at the onset of raing season as the available waster ways have been blocked due to the deposits.

MEANS OF WASTE DISPOSAL

Table 4.2.1

| Means of waste disposal | Frequency | Percentage 9%) |
|-------------------------|-----------|----------------|
| Rivers/streams | 11 | 9.56 |
| Burning | 19 | 16.5 |
| Refuse mounds and dumps | 59 | 51.3 |
| Pit hole | 15 | 13 |
| Gutter/drains | 11 | 9.56 |
| Total | 115 | 100 |

Source: field survey data, 2003

There are no formal wastewater treatment systems within the study area. The existing facilities for the disposal of faucal matter is septic tanks with soakaways in the institutions, hotels and houses in the G.R.A, and some newer houses. The majority of the population use pit latrine.

Each family from both the immigrants and the native has a pit latrine within a compound and there are usually two or three families per compound comprising as many as 30-50 people. This means that the pit latrine is required to serve 15 people. On this basis, a latrine last few years before it becomes full, this obviously presents a problem to the continuance of pit latrines and the disposal of the contents.

As there is no formal system for the disposal of wastewater, the sullage water in the high-density areas finds its way into the natural water courses by way of flow out of the compounds and into street and roads side channels.

This method of disposal obviously presents a health hazard and is environmentally unsatisfactory.

4.2.2 SANITATRY FACILITIES ARRANGEMENTS

The results of the research reveal a terrible state of poor sanitary facilities throughout the study area. Much sharing is tolerated in large compounds with related households living the traditional extended family way of life.

By far the greatest number of households (51.3%) were dependent on the pit latrine. The next largest category of households were those with no toilet facilities at all in the compound, they therefore rely on defecation in the surrounding bush and open spaces.

Table 4.2.2 sanitary facilities

| Conditions of sanitary facilities | Frequency | Percentage% | |
|---|-----------|-------------|--|
| 1 Adequately provided (toilet provided) | 11 | 9.6 | |
| 2. Inadequately provided (very few toilets) | 24 | 20.9 | |
| 3. Not provided(no toilet facilities) | 21 | 18.3 | |
| 4. Provided but poor (pit latrines) | 59 | 51.3 | |
| Total | 115 | 100 | |

Source: field survey data, 2003

Only about (9.6%) of households had the use of a fully connected flush water closet, the study area (Bida) has, without doubt, serves in sanitary conditions. Combined with the traditional pattern of congested building and extremely crowded living.

4.2.3 TYPE OF TENURE

The study area, i.e. Bida, is a town of owner occupancy and extended family living. Although Two-thirds of all households in the town are living in non-rented accommodations, only one –third of the immigrants (respondents) compounds are lived in by one household owner-occupier.

However, more than 50% of the respondents are living in rented accommodation. The remaining percentage lives with either friends or relatives.

Table 4.2.3 Accommodation system

| Type of tenure | Frequency | Percentage (%) |
|---------------------------------|-----------|----------------|
| Rented accommodation | 60 | 52.2% |
| Non-rented accommodation | 35 | 30.4% |
| Friends/relatives accommodation | 16 | 13.9% |
| Government quarters | 4 | 3.5% |
| Total | 115 | 100 |

Source: field survey data, 2003

4.2.4 SOURCE OF WATER

It is universally accepted that an adequate supply of water for drinking, personal hygiene and other domestic purposes is essential to public health and well-being. Water for public and commercial uses are no less important. Bida is fortunate in having a perennial supply of water that should be no constraint to normal future growth.

Table 4.2.4 Source of water

| Source of water | Frequency | Percentage 9%) |
|-----------------|-----------|----------------|
| Тар | 69 | 60 |
| Wells | 36 | 31.3 |
| Rivers/streams | 10 | 8.7 |
| Others | | |
| Total | 115 | 100 |

Source: field survey data, 2003

Therefore a lot of the respondents have access to tap water, 60% account for this, while those that live around Bangaie area largely depend on well water.

Some percentage (8.7%) of the respondents that live around the reverie area (Landzu) utilized the river water for drinking and irrigation purposes (sugarcane and vegetables), therefore prefer to remain there. Bathing is also done in the river and streams. In most cases washing of clothes and cooking are carried out in these steams and takes thereby contaminating and polluting the waters.

4.2.5 RESIDENTIAL PATTERN OF THE SETTLEMENT

Bida, the study area is characterized largely by unplanned nucleated settlement, which for the sake of convenience had been classified into different wards. The wards are composed of cluster of compounds. The compounds are usually based on extended family and are often sub-divided into sectors, each containing a family unit.

The increase rate of migration have given added impetus to the founding of new settlements especially at Gbazhi, Esozhi, Makwalla and Bangaye areas, they are also scattered throughout the town with particular dominance at kyari and Nasarafu wards.

The results of field survey data on table 4.2.3 reveals that 60% of the immigrants lived in a ranted accommodation usually in a family compound increase the population of the household thereby overstressing the limited facilities in the compounds. And thus increasing the waste generated in the compounds. The consequence is a rapid rate of garbage accumulation compled with a low rate of removal leading to foul air and bad smell within the town.

Similarly, of the 30.4% of the immigrants that do not live in rented accommodation have their settlement around the river side called (landzu) where they build huts and houses, the water from the river is used for irrigation purposes (sugarcane and vegetables) cultivation. These practices lead to the contamination and pollution of the river.

Living pattern of the people at the study area generally was not reflected in the design of the settlements originally.

4.3.0 MIGRANT RESIDENCE AND THE STATE OF URBAN ENVIRONMENT

As a result of the field study carried out by the researcher coupled with interview and discussions with cross-section of both the migrants and the indigenes of the study area, the researcher was able to deduce a relationship between migrant's residence and the state of urban environment.

The result from table 4.2.1 and 4.2.2 indicates that more than 50% of the respondent's residents lack sanitary health and social amenities. Particularly waste disposal facilities and inadequate water supply especially in Nasarafu ward, this have a negative effect on sanitation of the environmental quality this has made the study area, an urban town only in a demographic sense.

Naturally, the immigrants attitude towards sanitation as a crucial factor in environmental maintenance seems to be limited to personal hygiene in terms of

bathing and clothing himself and hardly extends to the environment. This is understandable seeing that their earlier environment was surrounded by farmlands and domestic animals. The rural value of the immigrants thus becomes an embodiment of attitudes and behavioural detrainments towards the new environment.

For instance: excretion of biological waste from the human body, defectaion in their rural home setting does not have to have enclosures designed for it, an in urban areas, but rather it is done in the open bush in the surrounding backyards, by the roadside, infact anywhere as soon as the back is turned to the public view.

Results from table 4.2.1 show that the respondents doesn't have provisions for trash bins, and waste is seen littered within the immediate confines of the homesteads, this phenomenon is more common at Efuturi in kyari ward.

Washing is also done in the open and while the washed clothes or cooking utensils are spread out to dry, the wastewater is thrown out in the open on the undrained surface of the surrounding grounds.

Unpleasant sights and smells which inevitably emanate from these varying sources of environmental pollution are thus quite common and have come to symbolize rural life in the urban towns especially Bida town, the study area. And because the migrants to the study area with this background find it difficult to break out from it completely, they simply seek to adopt it to the living conditions of the town.

Similarly the result of the field survey on table 4.2.4 reveals that some immigrants largely depend on rivers and streams as their source of water and usage, therefore bathing (if not done in streams and rivers around the neighbourhoods) it is done by fetching water in a large container and using a hand bowl to scoop up the water and throw it over the body. Thus the migrant to the urban area is faced with the

use of the both tub in the bathroom splashing water all over the floor and walls of the bathroom. This process of misuse, coupled with inadequate maintenance and overloaded use of these facilities (some times up to fifteen people or more) in an extended family systems such as obtains in Bida, live in one, two or three bedroom house and have to share just one toilet, causes a breakdown, in a shortwhile, of the facilities (broken or blocked soil pipes or exhumed septic tanks or soakway pits) transforming them into serious sanitary risks to the inhabitants of the dwelling.

The risk that these pose to the health of the inhabitants has manifested itself in the urban areas Bida inclusive through persistent epidemics like yellow fevers, meningitis, cholera etc.

SUMMARY OF FINDINGS, RECOMMENDATIONS AND CONCLUSIONS

5.1 Summary of findings

As the relevant parts of this research show, urbanization is characterized by slums with serious environmental consequences, as a result of rural urban drift.

The problem has been described as acute and exemplifies the inability of environmental development to keep pace with the rate of population growth. The problem of the disposal of sewage and refuse in particular, has been shown by these studies to be quite serious because of the rapid rate of generation of non-biodegradable materials such as plastics.

Similarly environmental problems associated with the increasing rural –urban migration that have been studied include overcrowding in squalid housing conditions, poor quality or unavailability of basic infrastructures and social services such as water and sewage facilities.

The results of the research, in addition show that the growth as a result of urbanization has important implications for the provision and maintenance of basic urban services and the effective management of environmental problems.

Lastly the rural-urban migrant was used to a highly personal set of relationships, norms, values and cultural conditions in his rural home setting and therefore his attitude and response towards his new environment is highly affected by much of what he left being the way he relates to others and maintains his new environment.

5.2.0 RECOMMENDATIONS

In the light of the afore-mentioned findings, I will like to make the following recommendations, which if implemented will enhance the conservation status, urban waste management and sustainable development in the study area (Bida local Government).

- Dumpsters should be provided at strategic locations to minimize the incidence
 of waster which when left to litter the town could constitute a health hazard.
 However, structures should be made fundamental through adequate removal of
 waste to the appropriate dumping sites.
- 2. A number of agencies have been established alongside federal ministry of Environment to address soil erosion problems along with other environmental related problems, these agencies and ministry should be extended to local Government Areas to assist in conducting a public enlightment programme on modes of environmental management, researches training programmes among others.
- Establishment of home and community-based programmes including separate collection of recycling household waste.
- Extending waste services which will require national planning, international co-operation and funding.
- Rural-urban migration is one of the factors that account for population growth, therefore the Government should ensure that comprehensive data on immigration is available.
- The fact of an accelerated population growth is undisputable; the attendant problems associated with these are hard facts, which the nation has been faced

- with. Greater effort will, therefore, be necessary to maintain the same basic services and standards for increased numbers.
- 7. A committee should be put in place and charged with the responsibility of collecting sanitation fees, create refuse dump sites, monitor the behaviours of refuse disposal and impose sanctions on defaulters of these regulations. This type of development is capable of sustaining an environmental standard
- Finally, there is need for environmental awareness through enlightment campaigns. This can assume the form of mass media such as radio, television, newspapers etc

In the preceding chapters of this research work several vital issues have been covered with respect to rural-urban migration especially to the study area (Bida). It is therefore appropriate in this conclusion to stress the consequences and show some indication of future perspectives for the country's developmental thrusts.

One of the most important point that has emerged from the study on the environment is that the adoption of proper management techniques would be crucial to the maintenance of the quality of the environment.

The ever-increasing rural –urban drift of agricultural population seeking to eke out better living conditions in the urban centers, in which they are ill prepared. This, influx coupled with lack of environmental awareness by both the migrants and the indigenes continues to compound the social, economic and environmental deterioration of the urban towns.

The problems of waste generation and management have underscored the need for re-evaluating the basis for delivering modern services efficiently in Bida. It is the believe of all that every body has an important part to undertake in this re-evaluation. To avert disaster is to avoid disaster, therefore careful planning and management of the expanding life supporting systems in most of the urban centers are very crucial if the environmental crisis is to be ameliorated. Otherwise environmental degradation will increase in intensities at great economic and social (including health risks) cost to the society whose survival and well being should be a major priority.

REFERENCES

Abiodun, J.O (1996) "Environmental policy, poverty and sustainable development in Nigeria cities" The Nigerian Social Scientists.

Adeleke, B.O and Leong, G.L (1980) certificate physical and Human Geography OUP ltd.

Bida Master plan (1980-2000) Town Planning Division, Ministry of Housing and Environment Niger State. Max Group Nig. Ltd.

D, J Wolmesley and G. J Lewis (1984) Human Geography Behavioural approaches, Longman Scientific & Tech. Publishers.

Emielu, S.A (1987), Tropical Africa, A social and Economic Geography.

G.E.D Lewis (1982): Human Geography for West Africa.

H.I Jimoh and IP Ifabiyi (2000): contemporary issues in environmental studies, Haytee press and publishing CO.Ltd.

Housing Today (1989): the Journal of the association of Housing corporation of Nigeria, vol.6 no2.

J.S Oguntoyinbo, O.O Areola & M. Filani (1978) A Geography of Nigerian Development, Heinemann Educational Books (Nig) Ltd.

Niger State Government (1999) statistical year book, Niger state Government printing press, minna.

Tade, A.A and Ademola, T.S (1992) "The challenge of sustainable development" NEST.

APPENDIX

OUESTIONNAIRE ON ENVIRONMENTAL CONSEQUENCES OF RURAL – URBAN MIGRATION AT THE DESTINATION

Instruction: - Be Honest Accurate & Precise, Tick or Write where appropriate.

SECTION 'A'

| 1. | Name of Village /Town L.G.A |
|-----|--|
| 2. | Age Sex |
| 3. | Religion Marital Status |
| 4. | Educational level attained |
| 5. | Major occupation. |
| | SECTION 'B' |
| 6. | Where is your place of origin? |
| 7. | For how long have you been here? a.o-5 () b. 5-10 () c. 10-15 () d. 15-20 |
| | () e. over20years () |
| 8. | Are you settled here permanently? Yes or No |
| 9. | Have you acquire any land here? Yes or No |
| 10. | If yes, what is the purpose for which land is acquire? a. Farming b. Residential |
| | c. Trading d. None |
| 11. | If the answer in No. 10 is 'a' what is the system you adopt in clearing of the |
| | land? a. Bush-burning b. Tractor c. Trading d. None |
| 12. | Why did you decide to move out from your place of birth? a. Poor soil |
| | condition b. family problem/pressure c. search for education e. search for work |
| | e. Trading |
| 13. | What was your occupation before you decide to leave your home town? . a. |
| | Farming b. Trading c. Fishing /hunting d. Artisan e. others |

| 14. What category of people migrate to this place most? a. Youths b |
|---|
| c.Children d.Teenagers e All of the following |
| 15. What type of accommodation are you living in? a. Rented accommodation b. |
| Personal accommodation c. Friends/relatives d. Government quarters. |
| 16. How many people live in a room (room occupancy rate)? a.1 person |
| b.2 people c.3 people d. 4 people e. 5 and above |
| 17. What is the condition of sanitary facilities in the house? a. Adequately |
| provided b. Inadequately provided c. provided but poor d. Not provided. |
| 18. Any sewage disposal facilities? Yes () No () |
| 19. If No, in what way do you dispose off your waste? a. Dumping ground |
| b. Through river/streams c. pit hole d. Burning e.others |
| 20. What is the source of waste generated in your house a. Domestic process |
| b.packaging material c. commercial activities d. Industrial activities |
| 21. The type of waste generated include a. Garbage b. Ashes c. Rubbish d.street |
| trash e. Others |
| 22. What is the source of water you use for drinking and other domestic purposes? |
| a. Tap b. Well c. Streams/rivers d.other source (specify) |
| 23. Is the provision of social amenities around you adequate? Yes or No. |
| 24. What is the state of social a merities? a. Very Good b. Good c. Bad d. Fair. |
| 25. What is the state of condition of the health facilities provided? a. Very Good b. |
| Good c. Bad d.fair |
| 26. Does the increase in population (immigrant) have effect on the demand for |
| social / heath facilities? Yes or No |
| 27. Are you enlighten about environmental conservation? Yes () or No () |
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| | through what means? nmental education d. G | a. Public entigna | mantal con | servation? |
| 28. If yes, | antal education d. G | cort towards e | nvironmenta | |
| Enviro | nmental education nat is your personal nat are the steps or acryation? | effort | wards er | ivironmental |
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