

POPULATION GROWTH AND ITS RELATION WITH DEVELOPMENT IN NIGERIA (1960-2000)

*Dissertation submitted to the Jawaharlal Nehru University
in partial fulfillment of the requirements
for the award of the Degree of*

MASTER OF PHILOSOPHY

PRANAV KUMAR



**CENTRE FOR WEST ASIAN AND AFRICAN STUDIES
SCHOOL OF INTERNATIONAL STUDIES
JAWAHARLAL NEHRU UNIVERSITY
NEW DELHI-110067
2002**



जवाहरलाल नेहरू विश्वविद्यालय
JAWAHARLAL NEHRU UNIVERSITY
NEW DELHI-110067

Centre for West Asian and African Studies
School of International Studies

Date : 22 July 2002

CERTIFICATE

This is to certify that the dissertation entitled, "POPULATION GROWTH AND ITS RELATION WITH DEVELOPMENT IN NIGERIA (1960-2000)" submitted by PRANAV KUMAR, in partial fulfillment of the requirements for the award of the degree of MASTER OF PHILOSOPHY, is his own work and has not been submitted for the award of any degree of this or any other university.

We recommend that this dissertation be placed before the examiners for evaluation.

Dr. Ajay K. Dubey
(Chairperson)

Centre for West Asian and African Studies
School of International Studies
Jawaharlal Nehru University
New Delhi-110067.

Dr. S.N. Malakar
(Supervisor)

Centre for West Asian and African Studies
School of International Studies
Jawaharlal Nehru University
New Delhi-110067.

To
my ma, papa & mai

ACKNOWLEDGEMENTS

I gratefully acknowledge my debt to my supervisor Dr. Subodh Narayan Malakar, who has rendered constant help and invaluable guidance throughout. It has been a source of great inspiration for the researcher to work under the extensive scholarship of Dr. S.N. Malakar. His beneficent supervision has been an asset to the cause of this work.

I also record my gratefulness to Dr. Ajay Dubey, Chairperson of the Center for West Asian and African Studies, for his valuable comments, suggestions and guidance.

Words fail to express my gratitude to the academic environment of JNU where this work took its final shape.

I would like to thank the staff members of my centre and of the JNU library, Sapru House, Shastri Bhawan Library, the UN Library and the Delhi University Library for their kind co-operation.

Much gratitude goes to my friends-Binod, Harish, Mahendra, Pankaj, Parimal, Anita, Sonu, Alok, Ranjeet, Madan, Hiralal, Rajesh, Vinay, Sapna, Sujay, Sudarshan and Omprakash. My seniors -- Shahid, Vishal, Sanjeev, Premchand, Vidhan and Nandkishore, who provided me with their invaluable suggestions and support throughout.

I am thankful to Mr. Mohinder Pal Singh for his efforts in typing my dissertation meticulously and that too in a short span of time.

Last but not the least, I would like to thank my sisters Uma, Nirupama, Raginidi and brother Prashant, who have been a constant source of inspiration.

*Date: July 22, 2002
New Delhi*

*Pranav Kumar
(Pranav Kumar)*

PREFACE

The second half of the twentieth century witnessed one of the most explosive expansion of human population. The third world in general and Africa in particular, contributed substantially to this expansion of population. At the same time the development performance of most of the African countries has been dismal. The interrelation between population and socio-economic variables often forms a 'U' curve, showing the ambiguity of the link between rising population figures and developmental performances. However, constant efforts have been made to correlate these factors in the African context by drawing parallel between sharp population growth and underdevelopment.

On the contrary, majority of the African nations have paradoxical combination of high population growth and low population density. However, they need rising population even for moderate density. Among the ten most populous countries of the world, only one, i.e. Nigeria, is situated in Africa. Despite the above given facts efforts have been made to establish negative correlation between population growth and development. For analyzing the above given assumption, Nigeria could be an important case study, as it is not only the most populous country of Africa but it's density is relatively higher than the African Average.

To analyse the correlation between population growth and development in Nigeria, graphical techniques have been taken into consideration. Along with the graphic representation, socio-economic milieu has also been considered. The multiple regression techniques, which is generally used for establishing

correlation between population growth and development, have not been adopted in this study. As this technique ignores socio-economic, cultural and structural peculiarities of a country. At the same time, the multiple regression techniques also encourage generalization, based on the most frequently observed outcomes in the selected case, that are implicitly treated as similar in all-important aspect, except for those involving the projected and mathematically manualed variables.

This study aims to analyse the relationship between population growth and socio-economic development parameters in Nigeria. The study intends to explore the possible effects of development policies on the demography of a country. Efforts would also be made to analyse the effect of population growth on development planning. Finally, suggestions would be made to co-ordinate ways in which population growth can be utilized as an asset for sustainable development in Nigeria.

The study evolves around a hypothetical framework that rapid population growth is not the only cause, which hinders development in Nigeria. Improper planning and socio-economic structures are also responsible for the slow development of the country. Furthermore, various population policies failed because of slow pace of socio-economic development which were incongruous with social realities. The natural resources of Nigeria are sufficient to assure development along with the present rate of population growth if appropriate policy measures are introduced and implemented.

The study is divided into five chapters. **Chapter-1**, deals with the historicity of the population – development debate. This provides a background on the basis of which the present study can be judged properly. Simultaneously, it analyses the conflicting nature of the debate between pre-Second World War and post-Second World War on one hand and between Malthusian, Neo Malthusian and their opponents on the other.

Chapter-2 titled, “Socio economic structure, demography and the nature of population growth in Nigeria”, deals with socio-economic structure of Nigeria along with her resource capabilities. This chapter also highlights the nature of population growth during the last forty years, along with peculiarities and uniqueness of Nigerian demographic structure. **Chapter-3**, titled “Nigeria: Population related development issues” deals with issues, which are severely affected by sharp population growth. Successes and failures of various developmental and population policies has also been discussed under this chapter.

Next chapter titled, “Population growth and development in Nigeria: An analysis” deals with the core issue of population growth and its effects on the development process and vice-versa. The researcher investigates whether there is any relationship between population growth and development? If that is not the case then, what are the factors responsible for the static development of the country?

Last chapter, points out conclusive findings about the whole issue and suggestion are being made, to make population growth compatible with sustainable development.

Throughout the study a holistic approach has been adopted to subject the findings more near to an objective reflections. But how far I have been successful in this endeavour is left to the fair assessment of the readers.

CONTENTS

	Page No.	
<i>Acknowledgements</i>	<i>i</i>	
<i>Preface</i>	<i>ii-v</i>	
<i>Abbreviations</i>	<i>vii-viii</i>	
<i>List of Figures and Maps</i>	<i>ix</i>	
Chapter I	Introduction: Population Growth- Development Debate	1-33
Chapter II	Socio-Economic Structure, Demography and the Nature of Growth in Nigeria	34-69
Chapter III	Nigeria: Population Related Developmental Issues	70-100
Chapter IV	Population Growth and Development in Nigeria: An Analysis	101-129
	CONCLUSION	130-138
	BIBLIOGRAPHY	139-152
	APPENDIX	

ABBREVIATIONS

ADP	-	Agriculture Development Programms
APC	-	African Population Conference
CBR	-	Crude Birth Rate
CDR	-	Crude Death Rate
DFRRI	-	Directorate of Food Roads and Rural Infrastructure
DND	-	Dakar Ngor Declaration
FACU	-	Federal Agriculture Coordination Unit
FHSP	-	Family Health Services Projects
FMOH	-	Federal Minister of Health
FSP	-	Family Support Programme
ICPD	-	International Conference on Population and Development
IMR	-	Infant Mortality Rate
KPA	-	Kilimanjaro Programme of Action
MAN	-	Manufactures Association of Nigeria
MLP	-	Mass Literacy Programme.
NALDA	-	National Agricultural and Development Authority
NARP	-	National Agricultural Research Project
NGOs	-	Non Governmental Organisations
NIRADO	-	Nigerian Integrated Rural Accelerated Development Organisations

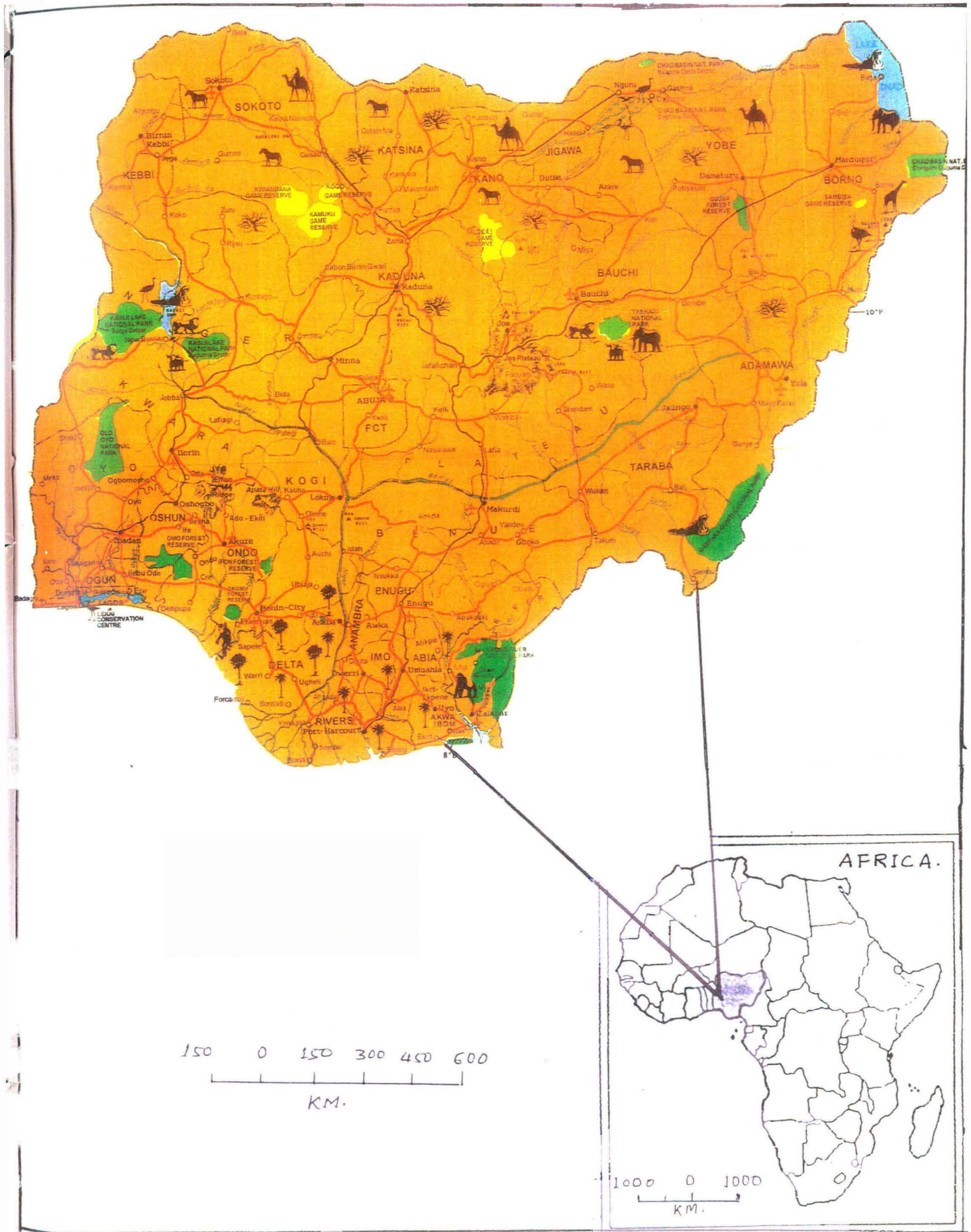
NPC	-	National Population Commission
NPE	-	National Primary Education
NSS	-	National Seed Service
OFN	-	Operation Feed the Nation
OPCPP	-	Office of Planning and Co-ordination for Population
SAP	-	Structural Adjustment Programme
SCP	-	Sustainable Cities Programme
UBE	-	Universal Basic Education
UNDP	-	United Nation's Development Programme
UPE	-	Universal Primary Education
WAPPA	-	World Population Plan of Action.

LIST OF MAPS AND DIAGRAMS

	Page No.
Fig 1 - Nigeria: The Study Area	x
Fig 2 - Resources And Industries	37
Fig 3 - Nigeria: Total Population	56
Fig 4 - Population By Broad Age Group	58
Fig 5 - Nigeria: Dependency Ratio	60
Fig 6 - Nigeria: Labour Forces	66
Fig 7 - Nigeria: Natural Population Growth Rate	68
Fig 8 - Nigeria: Food Supply	85
Fig 9 - Population Growth Rate Vs Economic Performance (1970-2000)	104
Fig 10 - Nigeria: Population Growth Rate Vs Urbanisation Growth Rate	108
Fig 11 - CO ₂ Emission in Nigeria	128

NIGERIA - THE STUDY AREA

FIG. 1



SOURCE - NIGERIAN HIGH COMMISSION (GOVT. PRESS, ABUJA).

Chapter I
Introduction: Population Growth-
Development Debate

CHAPTER - I

INTRODUCTION: POPULATION GROWTH DEVELOPMENT DEBATE

“The Prediction is dire. The world is in the midst of a ‘demographic explosion’ and unless the trend is arrested in the ‘critical decade the 1990s; is heading towards Catastrophe... ..”

-Paul Ehrlich

Unabated population growth has always been envisaged as a baffling problem for the third world. During last few decades, the issue of population growth has got so much attention that arresting third world population growth has become a matter of great concern, almost equivalent to the issue of avoidance of the Third World War. A large section of political and social thinkers, particularly demographers, started to believe that the plethora of problems persisting in the third world is the by-product of high population growth.

The extent and pace of global population growth, during second half of the twentieth century is unparalleled in the history of mankind. Whereas, it took millions of years for the global population to reach the first billion, it has taken less than fifteen years to rise from 4 billion to 5.4 billion and it is still growing at a rate of 3 births per second. However, during the second half of the twentieth century, population of the less developed region, underwent demographic change at an unprecedented pace. It was only 2.5 billion in 1950 and increased to 6 billion in 2000.

The unprecedented global population growth in the last few decades owes mainly to the decline in world's average mortality rate, while the world's average fertility remained stable. This phenomenon is prominent in most of the third world countries. The phenomenon of population expansion is most striking in the African continent. Nevertheless, during the same period, level of development in the third world countries, has been either dismal or negative. Except a few countries, most of them are struggling from low level of human development. Widespread poverty, low level of economic performance unemployment, a large-scale urban problems and the problem of environmental degradation and hazards provided a platform where renewed effort to establish causal relationship between population growth and development became inevitable. Before going into the historicity of the issue it is required to define, both the concept of population growth and the developments.

Population Growth

The concept of population change or growth is often used to connote the change in the number of inhabitants of a territory during a specific period of time, irrespective of the fact whether the change is negative or positive¹. Such a change can be measured both in terms of absolute numbers and in terms of percentage.

Fertility, mortality and migration constitute the three basic components of population growth. Fertility, which refers to the occurrence of birth, however, needs to be differentiated from fecundity, which refers to the

¹ R.C. Chandana, *A Geography of Population* (Ludhiana: Kalyani Publisher, 1994), p. 81.

reproductive capacity of woman during her entire reproductive period. The fertility can be measured by various ways. These include – Crude Birth Rate (CBR), general fertility rate, child woman ratio, age specific birth rate, standardized birth rate total fertility rate, reproduction replacement rate etc. CBR is not only the simplest but also the most common measure of human fertility. Similarly Crude Death Rate (CDR) is the most common measure of human mortality. Although in real sense migration constitute the important component of population growth. The natural population growth is measured only by CBR and CDR.

CDR As the fertility and mortality constitute the basic component of natural population growth, the factors determining the fertility and mortality also determine the population growth. Biologically race, fecundity and physical and mental health have been considered as important determining factors affecting fertility are age-composition, sex composition, degree of urbanization, duration of marriage and status of women. The socio-cultural determinants of fertility would cover such factors as religious background, educational level, age at marriage, tradition and customs relating to marital and sexual life, privacy of individuals, attitude of people towards family restrictions, desire for having a son and public policies. Among the economic facts, the most prominent is the level of income and closely related with this is the standard of living and resultant diet.

The cause of mortality vary both space and time. Spatial difference in the Socio-economic development and technological advancement guides the

rate of mortality in different regions. Mortality rate is determined by a large number of endogenic and exogenic factors. Age sex structure, degree of urban development, adequacy of medical facilities and level of education are the important exogenic factors.

Development

Over the years, there has been much discussion on the idea of “progress” which is very akin to the idea of “development”. The concept of “development”, however, in the sense of the process of national growth is of fairly recent origin. While the idea of “progress” has been rather controversial. The idea of ‘development’ has been widely accepted and even considered as being worthwhile to act upon². Traditionally, development was seen essentially as an economic phenomenon. It was generally defined in terms of capacity of the economy to generate and sustain an annual increase in per capita structural change in a way that brings a decline in the share of agriculture and an increase in industrial national income. They often equated development with industrialization, economic independence, modernization and economic welfare. It was also assumed that economic growth would automatically solve problem of relative poverty and welfarism could be used to contrast any in egalitarian tendencies in economy.

In the late 1960s, and the early 1970s, economists started supplementing the objective of economic growth with a number of other sub-objectives like reduction of poverty, inequality and unemployment. In the 1970s, an attempt

² Asha A. Bhende and Tara Kanitkar, *Principle of Population Studies* (Bombay: Himalaya Publishing House, 1985), p.401.

was also made to create composite indicators that could serve as complementary or alternatives to traditional GNP growth measure. Hence, Development is defined by two ways: One that measures development in terms of quality of life (like life expectancy, infant mortality rate and literacy) and two: those measuring development in terms of 'normal' or pattern of interaction among, social economic and political factors. Now it has also been generally accepted that 'development' is both an 'economic' and a 'social' process³.

However, Development is about expanding the choices people have to lead lives which they value and it is more than the rise and fall of national income. It is about creating an environment in which people can develop their full potential and lead productive, creative lives in accord with their need and interest⁴.

Renewed debate over negative relationship between population growth and development, emanates from the parallel drawn between high population growth and low development status of the third world countries. Even though causal relationship between these two is not so simple, historically several efforts, in one way or the other, had been made to derive it.

Population-Development Debate: A Historical Perspective

The Debate on population and development is not new. Nearly 2500 years ago, Plato in his republic was concerned with achieving the best

³ Kingsley Davis, "Population Policy: Will Current Programmes Succeed?". In Ashis Bose et.al. (eds.), *Studies in Demography* (London: George Allen and Unwin Ltd., 1970), p. 370.

⁴ *Human Development Report 2001*, (New York, N.Y.: Oxford University Press, 2001), p.9.

equilibrium ideal between population size and the perfect city-state. So, history of vague thinking on population-resources nexus dates back to the days of plato⁵. He gave the figure of 5040 as the ideal population of one city- State. However, successive among the pre Malthusian theories (16th-17th century A.D.), early modern population theories have their own importance some of the important aspects related to population and development, which were missing in Mathusian theories and were reintroduced after Second World War, make important ingredients of these theories. These include the policies of non-nuclear families, the steady encroachment of secular and worldly criteria of choice into domain, a view of differential development of groups as having more to do with successful control over the policies of distribution than with fertility regulation, etc. Early modern population theories also emphasise on other aspects of population such as differences of population size and composition Unlike Malthusian and pre-Second World War theories, their main emphasis was on absolute number of population. Pre-Mathusian theories also indicate about quantitative methods, which were the main instrument of post second war period theories.

Among Pre-Malthus thinkers Hobbes (1588-1679 A.D.) opines that a numerous population is neccesery for the development of a strong state in the same way as many off spring assist the power and capacity of a family⁶; but he

⁵ n. 1, p.293.

⁶ Philip Krager, "Early Modern Population theory: A reassessment", *Population and Development Review* (New York: NY), vol. 17(2), June 1991, p.111.

also points out about the importance of collectivity, which can prevent a large population from debacle.

Locke (1631-1704 A.D.) prefers to say that mechanisms such as money and credit increase difference among men. He opines the increase of population led to the scarcity of land⁷. This position is very near to that of Malthus and avoids technology factor. On the other hand, in Montesquieu (1689-1755 A.D.) law-promoting liberty, likewise, promoted population and commerce and their development was in contrast to apothems and the continuing powers of church⁸. So he envisages population growth as a positive factor for the development of a strong state. However, state could only develop their demographic and other resources if their population would be utilized properly.

Earlier Machiavellian (1469-1527 A.D.) and his immediate followers, Bolero recognized that limited natural resources must ultimately restrict population growth. Then, as now no precise answer to the question of an optimum population was possible and as a strategic value, the best population size and structure inevitably varied from state to state as determined by differing arrangement of authority, choice and their implications for membership and development. According to Filmer's Patriarcha (1680), the strategic issue of population membership is determined by the need to generate manpower for defense, trade etc.⁹ As Machiavellian, Hobbes, Bodin and Starkey had pointed out that large population was needed for defence and

⁷ ibid.

⁸ ibid., p. 113.

⁹ D. Hodgson, "Benjamin Franklin on Population: From Policy to theory", *Population and Development Review*, vol.17(4), December 1991, p.112.

development of a state. Machiavellian opines that there is no best population size. While a small state is preferable, since it is more likely to permit equality of right and a republican constitution. Actually it is not the size and composition of a population that matter but the number available that will act cohesively or can be contrived to do so¹⁰. Rousseau (1712-1778 A.D.) affirms that there is no population size for all states, although a large and increasing population is a secret sign of prosperity. He defines the different kind of states by the ratio of size of the governing body to the population.

Seventeenth century merchant-writings, redeveloped the classical and medieval distinction between intrinsic values (i.e. natural and God given endowment in the fecundity of human and in land, sea, mineral resources etc.) and the extrinsic values (i.e., value that represents local differences in the affairs of men especially profit from trade). Merchant writers including, Grant and Pretty, noted that price of land, labour and money actually varied according to extrinsic factor. Thus, Pretty's political arithmetic (1690 A.D.) favours larger population of London. Grant regarded population size and growth as root value and evidence of natural and divine order, while at the same time, showing how the strength of development of states was also the consequence of strategic balance with population¹¹.

Despite the above given variation thoughts about population, most widely accepted, population theory is contained in mercantilism, a school of thought dominant from 16th to the 18th centuries A.D. According to this most

¹⁰ ibid.

¹¹ ibid.

consistent doctrine, each nation should wish to have a large population and a large population would provide a supply of labour, a market, and a source of soldiers for effecting expansionist policies¹².

When mercantilism began to decline rapidly in 18th century, several confusing views about population started to prevail. Not characterized by a uniformity of ideas, 18th century was a period of uncertain grouping for policies, as the earliest element of the industrial revolution began to emerge¹³. Benjamin Franklin was a prominent thinker of that period, who wrote a lot on population. His observation concerning the increase of mankind was published in 1751. His work was one of the rare instances in which ideas travelled eastward across the Atlantic. Adam Smith, David Hume, Lord Hume, Lord Kames, Richard Price, Turgot and of course Malthus were influenced by it¹⁴. It was remembered as an influential precursor of Malthus' essay on population. In his observation he elaborated an essentially pessimistic theory about the role of population dynamics in human affairs. Observing, that reproduction capacity was much greater than needed for replacement, he asserted that the availability of subsistence ultimately determined population size and growth he also identified high population density as being responsible for many of the ills¹⁵. Yet he supported colonial population expansion, advocating rapid population growth. The unreconciled strands of "optimism" and "pessimism" runs through his

¹² *The Encyclopedia Britannica* (Chicago: William Bahton Publisher, 1977), p. 818.

¹³ *ibid.*

¹⁴ *ibid.*

¹⁵ *ibid.*

treatment of population¹⁶. However, Hutchinson, like most demographers treats Franklin essentially a pessimist, since in latter's theory the availability of subsistence determines population dynamics¹⁷. According to him, population growth in sparsely settled land was an immediate need and a source of strength, while in old world it was associated with misery. So it looks like, when his population theory is highlighted, he appears as a Malthusian pessimist and when his population values are highlighted, he appears as an ardent expansionist.

Laissez Faire Theory

Perhaps the major 18th century school of thought touching on population question was physiocracy. Often regarded as the first “scientific school of economics”, this school of thought emphasizes that state should lift it's vast complex of rules and regulation on mercantilism and let nature take its own course. Further, this theory recognizes the fact of growing population and urged private investments in order to provide expanding employment. Adam smith, who said to be influenced by above theory, claimed that an increase in nation's aggregate wealth fostered increase in population and that population growth generally contributed to overall human happiness.

Malthusianism

Although several thoughts about population were given before Malthus; it was the publication of “Essay on principles of population” in 1798 written by

¹⁶ H. Norman, “Benjamin Franklin on Population: A Reexamination of Franklin on Francis Place”, *Economic History* (Utrecht), vol. 3, no.12, February 1937, p. 389.

¹⁷ n. 12, p.818.

Malthus, which provided definite and thorough association between Socio economics problem and population growth. Thomas Robert Malthus (1766-1834), a British professor of History and Economics was probably the first to appreciate the close relationship between population growth and other demographic changes on the one hand, and socio-economics changes on the other which started a new debate.

The first essay on population by Malthus, has been commonly viewed as an arithmetical one. In the first chapter of his essay, he assumed to postulate: food is necessary to the existence of man; the passion between two sexes is necessary and will remain nearly in present stage.

Assuming these three, he adds that the power of population is indefinitely greater than the power of the earth to produce subsistence for man. Population, when unchecked increases in a geometrical ratio, whereas subsistence increases only in arithmetical ratio. A slight acquaintance with number in comparison of the second¹⁸. Malthus considered the unit of time in which a population could double, if it were not impeded by lack of subsistence, to be about 25 years. According to his calculation in 200 years of time span population would increase by 256 times of its original life, while subsistence would increase only 9 times of its original amount. By giving this estimate Malthus intended to highlight the differences in potential of population to increase and the power in the earth to produce subsistence for man. The widening gap between population and subsistence will increase a man's

¹⁸ Thomas Malthus, "The first Essay", In *Ann Arbor*, (Chicago: University of Michigan Press, 1959), p.4.

tendency to press upon the means of subsistence¹⁹. He opines, it will result in the division of the society into two sets of people, the rich (haves) and the poor (have nots) and capitalistic set up will emerge. However, he defends the capitalistic set up of society by saying that it is inevitable because if the capital was to be distributed among the poor, it will not be available for investment in the modes of production. But according to Malthus, the increasing gap between population and resources will ultimately lead to a point where misery and poverty becomes inevitable²⁰. Thus in a nutshell Malthusian thesis attributes virtually all the problems of human civilization to a rapid growth in population.

Though, at the time of Malthus there was no concept of third world, however in the first essay Malthus' treatment of the "less civilized" world variously and unsatisfactory now known as the third world or the less developed countries was limited²¹. According to Malthus, in the uncivilized lands there is more warfare, epidemic disease, and vice and recurrent famines, so population problem would be much more chronic.

Malthus' arguments about the matter have always been in controversy, even since its first publication. Firstly he has been criticized, for his basic hypothesis on passion and desire for sex, by saying that the desire to have children cannot be mixed up with passion and desire for sex. The desire for sex is a biological instinct, where as, the desire to have children is a social

¹⁹ n.1, p. 294.

²⁰ *ibid.*, p. 294.

²¹ J.C. Caldwell, "Malthus and Less Developed World: The Pivotal Role of India," *Population and Development Review*, vol. 24, no.4, December 1998, p. 680.

instinct²². Secondly, his quantitative approach and validity of his two sets of ratios can also be questioned. Thirdly, 25 years of time of population cannot be relied because it varies from country to country depending upon its technological advancement and socio-economic reality. Fourthly, he over-emphasized on positive checks on population rates than preventive and developmental checks. Finally, it looks like he has totally ignored technological factor.

However, contemporary of Malthus, Michael Thomas Sadler (1780-1835), found an inverse correlation between man's tendency to increase the number and density of population. He opines that man's tendency to increase in numbers would diminish as the density of population increased²³. He adds that after getting the utmost degree of happiness for the largest possible number of human being, the population would cease to grow. Another Malthus' contemporary Thomas Doubleday (1790-1870) postulated that increase in number of men was inversely related to the food supply²⁴. According to him, areas with better food supply shall record slow increase in their population. Thus Doubleday opines that population is not responsible for under development rather underdevelopment is responsible for population growth.

British philosopher Herbert Spencer (1820-1903), proposed a natural law of population growth in his biological writings. Like Sadler and Doubleday, he also believed that there was natural law that would absolve man

²² n.1, p. 295.

²³ *ibid.*, p. 296.

²⁴ *ibid.*, p. 296.

from any responsibility for the control of his increase in numbers²⁵. He opines that quest for greater advancement on the part of individuals shall weaken their interest in reproduction.

Thus during 19th century there were two set of people who had a quest for searching a natural law of population growth. However, they adopted different, ways, while one group adopted scientific methodology, other group simply accepted Malthusian theory.

Indeed Malthus himself jostled with one of the earliest believes of a follow clerical philosopher William Godwin, who maintained in a running debate that when man learned to live together in a kind of primal communism without limitation of private property and marriage institutions, an eden like balance between man and nature would assert²⁶. Though, much of Malthus' argument is in its classical form, was rejected earlier, the most important contribution of Malthusian principle was that it initiated theory building.

Among the social theories of 19th century, who contributed on the prevailing debate on population theory, Henry George (1839-1897) was an important component. The American economist and social reformer questioned on the Malthus basic hypothesis. He strongly advocated that unlike other living things, the increase in man's number involved the increase in his food as well²⁷. The French social scientist Arsene Dumont (1889-1902), believed that individual tried to attain higher level, which could be termed as social

²⁵ ibid., p. 296.

²⁶ N.E. Chamberlain, "Framing the Issue," *Beyond Malthus: Population and Power* (London: Inc Publisher, 1970), p.6.

²⁷ n.1, p. 298.

capillarity. He considered upward movement from class to class as a direct cause of decline in the birth rate, according to him, the development of numbers in a nation is an inverse ratio to the development of individual²⁸. He linked decline in population growth in France with well-established democracy and obstacles to upward movement were few and weak. Thus, he emphasized the actual condition under which people live and the nature of development for check on population. David Ricardo (1772-1823) accepted Malthusian principle, but built up his own normative model of market system by following an analytical approach. He strongly believed that population regulated itself according to the availability of funds to employ it. Hence, the population increases or decreases in accordance with increase or decrease of the rate of capital accumulation²⁹. He opines, like Malthus, misery and poverty as natural inevitabilities because law of diminishing returns is inevitable after accruing equilibrium state between demand and supply. However, like Godwin, but with far more sophistication and logic, it was Karl Marx who analysed relationship between population growth and development.

Marxism and the Population – Development Debate

Karl Marx (1818-1883), while enunciating his general theory of communism did give some idea on population growth as well. He follows a dialectical approach and considered the society consisting of two major classes; rich and poor. He says that the profit earned by the rich led to the process of

²⁸ W.S. Thomson and B.T. Lewis, *Population Problem* (New Delhi: Tata McGraw-Hills, 1976), p. 76.

²⁹ David Ricardo, *Principles of Political Economy*, (London: Cambridge University Press, 1951), p. 78.

capital accumulation with the rich. In response to this capital accumulation, the poor labour class tries to accumulate labour, the only commodity it possesses through rapid population growth³⁰. According to Marx, poverty and misery were not natural inevitabilities but were evils of capitalism, which will disappear if system of communism was adopted. He held that poverty and misery were entirely a consequence of condition of unemployment and under-employment, arising out of inability of the capitalistic system to provide jobs for all, regardless of the pace with which the population increases. Marx considered that Malthusian natural law of population was based on law of capitalism³¹. He strongly advocated social reforms to free the society from evils of capitalism. He held the view that, productivity of labour could be increased and marvelous economic benefits can be achieved by means of technological changes. He recommended a systematic approach to the entire problem; the whole system was capable of handling dynamics and was internally dynamic, so as to produce new concepts and categories to deal with the system under investigation³².

Thus Marx had a distinctive approach to the problem of population and was the first thinker, to visualize such social transformation that could eliminate poverty and misery rather than accept it as a natural inevitability³³. Marx rejected the prevailing thought that, there could be external or natural law of population. However, he held the view that a law could be developed in the

³⁰ K.H. Marx, *Capital* (New York: International Publishers, 1976), vol.3, p.218.
³¹ n.1, p.300.

³² D. Harvey, "Population, Resources and the ideology of Science", In Richard Peet, ed., *Radical Geography*, (London: Methun & Co. Ltd., 1977), p. 233.

³³ n.1, p.300.

context of contemporary mode of production. According to Marx, each mode of production had its own economic and demographic laws because mode of production is a specific set of forces of production (Labour, Materials, machinery e.g.) Patterned in a specific set of relation of production (Relationship of property, Work relationship employer-employee etc.)

The creation of surplus population was explained by Marx on the basis, that the supply of labour increases more quickly than the demand of workers. This creates a large pool of unemployed and semi-employed hand and at the same time the magnitude of working population among this large pool determines the movement of wage level. In turn, level of wages is inversely corrected with the birth and death rate. Thus such a class of workers that is more prone to reserve army or surplus population, shall have lower wage level but higher birth and death level³⁴. Hence, Marx provided a systematic and scientific explanation of population growth and level of development.

The above discussion reveals that, 19th century produced the long-drawn-out debate between the exponents of two conflicting dogmas, expounded by Thomas Malthus and by Karl Marx, about relationship between population (growth) and socio-economic (development) conditions. First stream was based upon the view that there was some natural law, which determined population growth. Except Malthus many of the natural theories held the view that naturally determined rate of growth would lead to the most satisfactory balance between population and subsistence. Second stream

³⁴ *ibid.*

refuted first stream by saying that there couldn't be any immutable natural law. This group pleaded that population growth was determined by man's inherited characteristic as developed in the total milieu in which he lives³⁵.

Contemporary Debates

The Demographic Transition

In the twentieth century an important riposte to Malthusian position is offered by what is known as theory of demographic transition³⁵. The term "demographic transition" refers to the historical transformation of a society, from an era in which it is characterized by what can be called a primitive demographic balance (with birth and death rates fairly stable in a relative balance with each other at a high level) to a modern demographic balance (with birth and death rates fairly stable in relative balance with each other at a low level)³⁶. Both of these two demographic types (primitive and modern) are characterized by relatively slow rates of population growth, but the dynamic growth component is different. In the primitive type the high birth rate remains relatively constant, and it is primarily functions in the death rate that effect changes in the rate of growth. However, it is the low death rate that is constant, and the changes are determined by the level and trend of the birth rate.

The demographic transition theory in its original form was given by W.S.Thompson (1929), and Frank.W.Notestein (1945) who based their statements on the trends in fertility and mortality, being experienced by

³⁵ n.26, p.8.

³⁶ E.G. Stockwell and K.A. Laidlaw, *Third World Development: Problems and Prospects* (Chicago: Nelson-Hall Inc. Publishers, 1981), p. 72.

Europe, America and Australia³⁷. Broadly speaking, the theory postulates a particular pattern of demography, which is in transition as discussed above, i.e., from a high fertility and high mortality to a low fertility and low mortality. The demographic transition takes place when a society progresses from a largely rural, agrarian and illiterate society to a dominantly urban, industrial and literate society. Three hypotheses are involved in the transition.

- That the decline in mortality comes before the decline in fertility
- That fertility eventually declines to match the mortality
- That socio-economic transformation of the society takes place simultaneously with its demographic transformation.

However, during the course of progression all societies experience an intermediate stage i.e. stage II, when there occurs a wide gap between mortality and fertility³⁸. This phase, not only gives huge rise in population but also changes demographic structure. Nevertheless, different countries require different time span to complete the process because of different pace of socio-economics transformation. Notestein suggested the existence of three stages in the transition:

- (1) High growth potential exists before fertility begins to decline.
- (2) Population growth slacken once fertility decline.
- (3) Incipient decline occurs when fertility falls below the replacement level and when mortality has already stabilized at a low level³⁹.

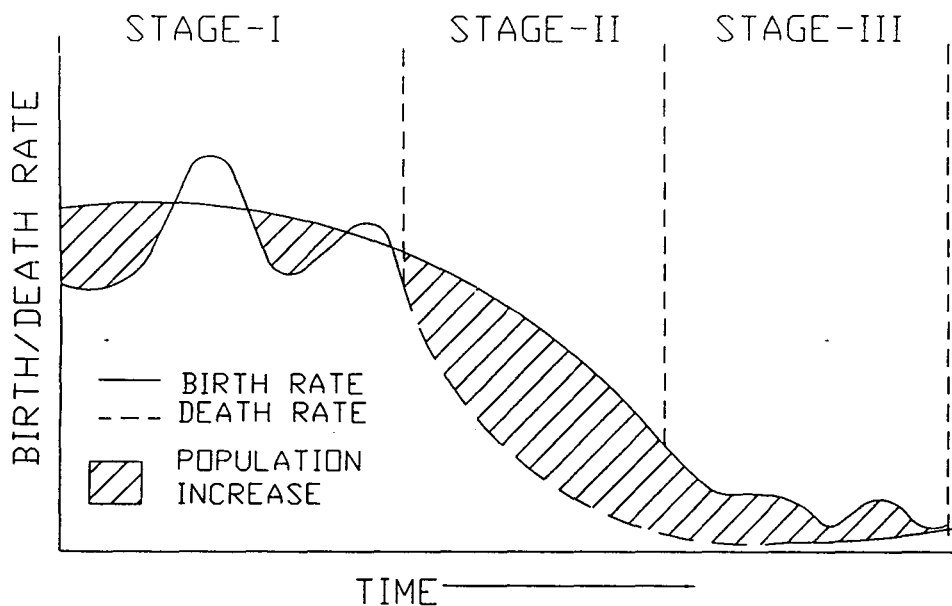
³⁷ n.34, p.125.

³⁸ *ibid.*, p. 126.

³⁹ Robert Woods, *Population Analysis in Geography* (New York: Longman Group Ltd., 1978), p. 87.

Even though various models based on the original statements of Thompson and Notestein have been suggested, generally a three-staged model has been identified with pre-industrial, early western and western stage. The model can be shown as follows.

SEQUENCE OF POPULATION TRANSITION



- 1 - High Fertility and High Mortality
- 2 - Declining Fertility and Low Mortality
- 3 - Low Fertility and Low Mortality

Source: Glen T. Trewartha, *The Less Developed Realm: A Geography of its Population* (New York, N.Y: John Wiley & Sons, Inc., 1972), p. 14.

In the demographic transition approach it is not only technology that works, but also changing pattern of social behavior, which act to limit the growth of population. Hence main thrust of the theory is, that the level of development guides population growth. According to the theory, fertility and mortality rates are the consequences of traditional modes of behavior rather

than conscious decision⁴⁰. Stage-II (transition stage) characterized, swelling population and evoking Malthusian concern due to substantial decline in the death rate because of technological advancement and improved health facilities. However, during this stage the rising urban industrial and commercial middle class purposively limit the number of children as means of improving their own status and securing the future of those fewer children. So the then society enters into a phase where social planning limits both the numbers of deaths and births to stabilize population growth, with only minor fluctuation⁴¹. Hence, the theory covertly indicates that it is not only population growth that stagnates the process of development rather, stage of society and level of development, both in terms of technology and procreation that provides automatic breaks on population growth.

As far as applicability of this theory to world population growth is concerned by and large, the first world consisting of, North western Europe, North America, Australia, New Zealand, South Africa experienced the typical sequential pattern of fertility and mortality as visualized in the demographic responses of individual countries⁴². However, transition phase in this part of world was completed during the late 19th or early 20th century when in the second world, consisting largely of Eastern Europe, the transition period began in the early decades of 20th century. Interestingly, the second world countries never experienced the explosive stage of population growth as was envisaged

⁴⁰ n.26, p.8.

⁴¹ ibid.

⁴² n.1, p.129.

DISS

304.6209669

K9604 Po

N60



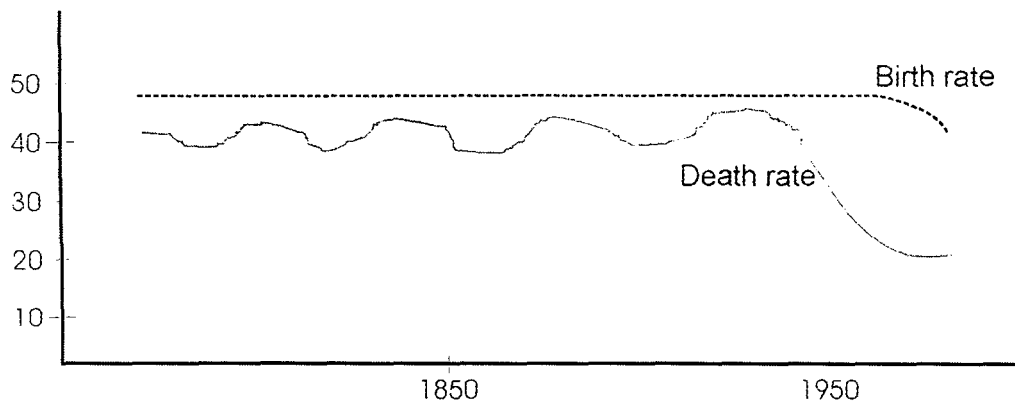
TH9956

Handwritten scribbles and marks, including a large '1' and some illegible characters.

by the original transformation⁴³. Also the transition was completed, in relatively short span of time of 30 to 40 years.

Demographic Transition and Third World

The experience of third world countries to demographic transition has been very different from the first and the second world. Most of third world countries entered in the transition phase between 1930 to 1950. However, there is no indication of entering into third phase, even after more than 50 years of transition phase and most of the less developed countries of the world are passing through the explosive stage of demographic transition because of decline in mortality rate, owing to widespread penetration of medical facility. Modified form of demographic transition for third world countries can be shown as follows.



Source: Based on J.I. Clarke, *Population Geography* (Oxford: Pergmon Press, 1972), p. 157.

It is often argued about third world countries that the imported medical and public health technology has drastically cut the mortality rates but at the same time there has been no accompanying socio-economic change required to

⁴³ *ibid.*

promoting fertility reduction.⁴⁴ Moreover, it can be said that, there is certainly some degree of inconsistency in such a sweeping macro historical transition theory. The theory is neither predictive nor stages are sequential and inevitable;⁴⁵ and the role of man's technical innovation cannot be underrated.

Population: Resources Debate

Another important significant debate, which assumes great importance in 20th century, was corollary to the population-development debate and was related to relationship between population and resource. It was propagated that due to explosive population growth, particularly in the post-1930 period, the world is in a state of perpetual crisis because resources are limited. Hence growth of population becomes a vital element in any assessment of population resources nexus. However, Zimmerman refutes the above hypothesis by arguing that a resource does not refer to a thing nor to subsistence but to a function, which a thing may perform in order to attend a given end⁴⁶. Similarly, Zelinsky considers resource as a progeny of human aspiration, memory, talent and labour, applied to relatively inert physical entities⁴⁷. As the technological advancement enable man to expand and create new resources, it was Ackerman, who interned the factor of technology in the study of population resources nexus⁴⁸.

⁴⁴ ibid., p. 130.

⁴⁵ D.S. Loschky and W.C. Wilcox, "Demographic Transition: A forcing model," *Demography* (Silver Spring), vol. 11, 1974, p.215.

⁴⁶ A.L. Hunker, *Zinimerman's Introduction to world Resources* (New York: N.Y: Harper and Row Publisher, 1970), p. 28.

⁴⁷ W. Zelinsky, *A Prologue to Population Geography* (N.J: Prentice-Hall Inc., 1966), p. 103.

⁴⁸ n.1, p. 283.

Traditionally it has also been argued that population growth also depresses human welfare, because it affects savings and dilutes the quantity of capital per person on which productivity growth and living standard depends. Also, population increase absorbs resources, affects soils, degrades environment, produces overcrowding and puts pressure on food supplies⁴⁹. In its substance above thought is a reputation of Malthusian dogma. Ewke (1966) concluded that even resources used to retard population growth can contribute perhaps one hundred times more to higher incomes per head than resources used to accelerate output growth⁵⁰. However, as far as traditional argument that population growth reduce community's saving ratio by leading to a high dependency ratio of children who consume but not produce, is concerned, it can be argued that even low population growth by controlling fertility rate may cause a high dependency ratio due to increase in the number of older people. On the other hand P. J. Verdoorn, a Dutch economist, established a positive relation between growth of population, employment and out-put on the one hand and the growth of production per head on the other⁵¹. It is also possible that high population growth may favourably motivate and lead to change in production techniques, that can overcome the so called negative consequences of population growth. Julian Simon challenging negative relationship established by Enke argues that the ultimate resource is-skilled, spirited and hopeful people – who will exert their wills and imagination for their own

⁴⁹ A.P. Thilwall, *Growth and Development* (London: McMillan Press, 1999), p. 200.

⁵⁰ *ibid.*, p. 205.

⁵¹ *ibid.*, p. 202.

benefit and so inevitably, for the benefit of us all'⁵². He further suggested different simulation model for developed and for developing countries to establish positive relationship between population growth and per capital income. For developing countries, Simon considers the following important feed back mechanisms:

- The Stimulus to new methods in agriculture
- The supply response to families
- The provision of social infrastructure
- Scale economies
- Demand – induced investments⁵³.

The 'Optimum' Population

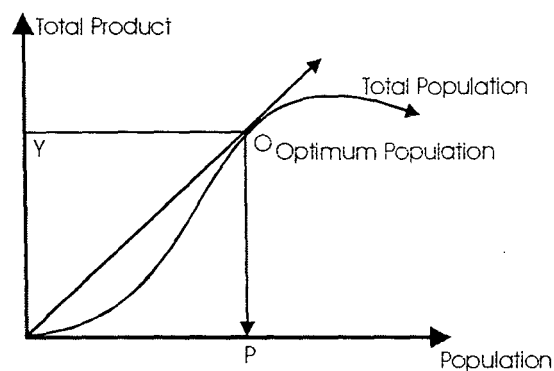
The term optimum population, was introduced as a scientific concept early in the 20th century, by a Swedish economist in order to establish an equilibrium between population and resources which satisfies the well-defined need of all the members of a community, and which varies both in time and space. It can be understood as an intermediate position between over population and under population. However, in order to arrive at the optimum level of population of any area, the term optimum itself must be measured in terms of quality of life. The optimum level is that size of population which yield the highest quality of life⁵⁴.

⁵² ibid., p. 207.

⁵³ ibid., p. 207.

⁵⁴ n.1, p. 282.

On the other hand English economist cum philosopher Henry Sidgwick adopted the criteria of total welfare maximization for deciding the ‘Optimum’ population. However, the basic criteria for assessing optimum population that emerge according to different definitions include – per capita production, average standard of living, degree of employment, longevity of life, dependency ratio, social harmony, family stability, attainment of knowledge, growth of purely intellectual function of expenditure on food, rationality of land use, balanced demographic structure and rational development of resources.



Source : A.P. Thirlwall, *Growth and Development* (London: McMillan, 1999), p. 209.

It is sometimes used to refer to the size of population that maximizes the average product or income per head.

However, the real problem is to establish criteria of social objectives of the optimum population, because a population size that insures the highest average standard of living or per capita production is lower than a population size that insures highest collective power. Furthermore, the theory of optimum has been criticized, on the following grounds: Firstly, the theory can only be applied on traditional agriculture population. Secondly, it is difficult to

determine an optimum population scientifically, and finally its political applicability is not clear.

In the response a number of demographers believe that, a steady increase in the population can be more advantageous than a constantly or declining population, one must further note that such demographers do put a limit on the rate of increase⁵⁵. As a result an alternative concept, 'optimum rate of growth' in the population. That is a rate, insuring the highest annual increase in the standard of living. However, it is also difficult to determine "optimum rate of growth", like "optimum population" similarly there is no limit of growth as a consequence of improving technology and also need of labour force can be underestimated.

Post Second World War Debate

Post second World War phase has witnessed fast population increase due to decline in mortality rate in third world countries. This phenomenon renewed the debate on population growth and its relation with development. A number of seminars, conference and workshops were organized on the issue, especially under the auspices of the United Nations and its subsidiary organization.

One of them was Bucharest conference (1974), where three prominent approaches related to the debate were adopted. For some, population growth was basic facts in the structural rigidity of the underdeveloped economies⁵⁶.

⁵⁵ n.12, p. 820.

⁵⁶ Leon Tabah, *Population growth and Economic Development in Third World* (Dolhain: Ordina Editors, 1979), p. 25.

This school of thought urges that, due to fast growing population limited resources would be exhausted and it would cause decline in the developmental process. Other group of experts believe that “it is not possible to discuss exhaustion of the earth’s resources because an inventory has not been made for them”⁵⁷, this group believe that there are vast unoccupied areas and unutilized resource and the products are constantly being replaced by others. Innumerable resources and products are yet to be discovered and scientists are discovering new sources of energy.

A third group opines that population growth is not an obstacle to development rather it is a manifestation of under development. This group also recommends that population growth can be controlled by improving socio-medical services and by raising the level of socio-economic and cultural status.

The Cairo symposium (1994) was another landmark event dealing with interrelation between population and development. Few participants contended that, there was a great need of economic progress in the developing countries as in industrial countries⁵⁸. However, during the symposium, the government of third world countries has accepted that a policy of slowing down population growth is advisable along with several development programs. The major problems discussed at length during the symposium vis-à-vis population growth in the third world were: sufficient amount of food production, education and unemployment. Demography was considered to be a major factor in the outlook of food demand in developing countries. It was argued that large scale,

⁵⁷ *ibid.*

⁵⁸ *ibid.*, p. 26.

illiteracy among developing countries was mainly due to burdensome number of children per family which discouraged people of third world to invest in education. Employment and its relation with population growth was another issue discussed at length during the Symposium. But the emphasis was on economic development.

The Stockholm Symposium (1972) marked a watershed in the development of a new paradigm, about prevailing debate, as Neo. Malthusian theory started to evolve here. Two major types of problems related to population were the primary concern of the symposium. First was interrelation between population growth and the use of natural resources and second was interrelation between population growth and deterioration of environment. Even though after the Bucharest conference, an awareness of demographic phenomenon, which before the conference was restricted to a few specialists, was soaring to peaks; we owe to the 1972 United Nations conference on the human Environment in the third world, and particularly to the symposium of Founex that preceded it and the third area of awareness of relations between development and environment in the third world emerged⁵⁹.

The Stockholm symposium was marked by the presence of several school of thoughts. According to the first school of thought, population was the most crucial factor causing environmental degradation in the Third World. According to second school of thought these pessimistic views are evidence of a misapprehension of a concept of the natural resources and the environment,

⁵⁹ ibid.

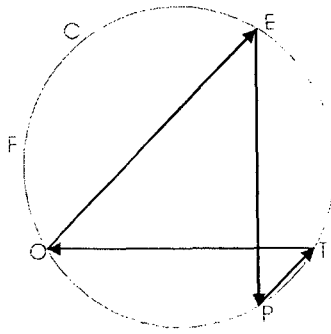
and fail to understand the essential role of technology, which change constantly and unpredictably and therefore modifies the kind and amount of resources, which will be available tomorrow⁶⁰.

Finally, at Cairo (1994), the need for economic development was stressed, at stockholm it was suggested that a change in the consumption pattern of the overdeveloped countries could play in the short and medium term, a role as important as anything, if not greater than, in reducing population growth in the third world. The relative pressure on natural resources, the consumption level in the industrialized countries and of population growth in the third world was discussed at length. It was agreed, that changes in the consumption pattern of rich countries contributed more than the population growth of third world countries.

Neo – Malthusian

Though much of Malthusian argument in its classic form was discarded long back, the essence of his doctrine reflected in most of the contemporary writings, who like Malthus attributes virtually all the problem of human civilization to rapid growth in population. One of under-pinning thrust of Neo-Malthusian argument is that, expanding population eats into the world resource and thus leads to scarcity, on one hand and adding waste products and environmental pollution, on the other. Ester Boserup suggested following model of development on the basis of the Neo-Malthusian hypothesis

⁶⁰ *ibid.*, p. 33.



E – Environment, P – Population, T – Technology level, O – Occupational structure, F – Family structure, C – Culture

Source: Ester Boserup, *Population and Developed Review*, vol.22, no.3, September 1996, p.507.

On the basis of the above model he further elucidates Neo-Malthusian theory, as follows:

$P \rightarrow T$, More population lead to more intensive land use with modern inputs and result in greater number of technological artifacts, such as motor vehicle.

$T \rightarrow E$, Modern technology damage the environment.

$T \rightarrow O$, Modernization of agriculture promotes rural to urban migration.

$O \rightarrow E$, Accelerated urban growth which result in urban slums and increased pollution;

$E \rightarrow P$ —Food shortage and pollution reduce rate of population growth by increasing mortality⁶¹.

Dennis Hodgson and Susan Colts Walkins (1997) have argued that the post- Second World War debate on the consequence of population growth may be divided into four distinct periods⁶². In the first period 1946-65, the Neo-Malthusian view gained dominance and cause of concern shifted from

⁶¹ Easter Boserup, “Development Theory: An Analytical Framwork and Selected Applications”, *Population and Development Review*, vol., 22, no.3, September 1996, p. 509.

⁶² D.A. Ahlburg, “Jullian Simon and Population growth, debate”, *Population and Development Review*, vol. 24, no.2, June 1998, p. 317.

population growth rate; which was supported by Coale and Hoover (1958). However, in the second period, 1965-74, opponents of population growth became more outspoken with many demographers who demanded for solutions other than “Family planning” such as government’s impressed incentive on child bearing. Third period, 1974-85, characterized by a “Significant demotion for fertility control on the international agenda of policy intervention,”⁶³ in which Simon was the main spokesperson of this period. Again in the fourth period, 1985 until today, Neo-Malthusian gained momentum internationally but lost ground domestically. This is the period when the concept of sustainable development got prominence.

However, it is clear that Neo-Malthusian is over emphasizing on population growth, in order to hide the failure of developed world to protect environment and the unequal distribution of wealth. Despite the fact that population and natural environment are closely interlinked, the interrelation between the two are not linear and as simple as it is made out to be. Population-environment-development-inter linkages are rather very complex and dynamic.

Most of the recent days debate over population growth and development is mainly related to the third world (as third world rapid population growth). Africa constitute a substantial part of the third world, has witnessed some of the most astronomical population growth rates which in turn have brought to the fore the debate regarding its effect on development process. Within Africa, sub-Saharan Africa forms a vital part of the countries in the third world

⁶³ D. Hodyson and S.C. Walkins, “Feminists on Neo-Malthusian: Past and Present alliance”, *Population and Development Review*, vol. 23, 1997, p. 484.

reflecting the major trends of population growth and its relation with developmental issues. Sub-Saharan Africa thus, represents an important region where the growth of population is to be understood in relation with developmental process. Among all the African countries, Nigeria demands special attention in the wake of the dubious distinction it has attained, of being the most populous country in Africa with still an inordinate fertility rate incongruous with its economic development and allocation of resources. Despite being a resourceful country it has not been able to progress the way it should have been. Taking into consideration the rapid population growth rate, comprehensive and multifarious development is the utter need of the hour.

In spite of high population growth in Nigeria, her labour force has not been exploited to its potential. Nigeria has industry building capacity to accommodate its ever increasing population. Although balance between population and developmental strength can be maintained. The criticism against higher population growth causing under development is not the essential truth to assess the deterioration rather the Socio-economic and demographic structures of distinct nature should also be taken into consideration. While the criticism is made that population growth is a major cause of underdevelopment in Nigeria, the socio-economic structure and demographic factors should also be taken into consideration in order to analyse the development pattern.

Chapter I
Socio-Economic Structure, Demography
and the Nature of Growth in Nigeria

CHAPTER - II

SOCIO-ECONOMIC STRUCTURE, DEMOGRAPHY AND THE NATURE OF POPULATION GROWTH IN NIGERIA

The Federal Republic of Nigeria is one of the most important, and the largest of sub-Saharan African countries having an area of 923,777 sq km. It is a coastal state on the shores of the Gulf of Guinea, a part of South Atlantic Ocean and has common boundary with Benin to the west, Niger to the north, and Chad to the northeast and Cameroon to the east and southeast¹ Despite being 14th in size, it is the most populous among other African countries. The population was enumerated at 88,514,501 according to the census of November 1991, increasing to an estimated 97,223,521 at mid 1995. Population density in 1995 averaged 105.2 persons per sq.km. The population of Nigeria in 2000 is estimated 113,862,000 with density of 121 persons per sq.km.²

Physical Features

Nigeria is divided into three parts by the river Niger and its main tributary, the Benue. These divisions are: the north, the Southwest and the northeast.³ “High plains of Hausaland”, a monotonous plateaus, lies in the north. The high plain of hausaland is not uniform in height but forms a series of broad steps across which a number of rivers flow. The Jos plateau is the highest part of the high plain of housaland. It is a watershed from which stream flow to

¹ Akin L. Mabogunje, “Nigeria Physical and Social Geography”, In *Africa South of the Sahara* 2001 (London: Europa Publication, 2000), p. 818.

² *ibid.*

³ H.R. Jarrett, *Africa* (London: Mcdonald and Evans Ltd., 1974), p.311.

lake Chad and to the rivers Niger and Benue. To the south-west, across the Niger river, Yoruba highland is situated which is very similar to the northern highlands relief but is surrounded by forest and tall grass. The Yoruba highland forms a watershed for a number of tributaries flowing northward to meet in the Niger River. But southeastern Nigeria is quite different in character from the other regions .It is developed on sedimentary rocks of comparable age to those of the coastal plain in the southwest⁴. The gigantic trough formed by the Niger and Benue vallies separate the northern and southern upland areas. Elsewhere in the country, lowland of less than 300 meters stretch from the coast to over 250 Kilometers and continue in the river Basin trough⁵.

The Niger, third largest river of Africa, is the main river of Nigeria. After entering in to Nigeria it flows first south easterly then south again south east till its convergence with its main tributary, the Benue; then it flows southward and forms a large delta before it empties into the Gulf of Guinea. During most of its course the Niger is not navigable due to the presence of a number of falls and rapids. However, the Benue flows in a broad flood plain and is navigable during the period of seasonal flooding beyond the Cameroon border⁶. The Nigerian coastline is relatively straight, with few natural indentations⁷.

⁴ ibid., p. 313.

⁵ n.1, p. 818.

⁶ n.3, p. 313.

⁷ n.1, p. 818.

Resources

Soils and Vegetation Resources

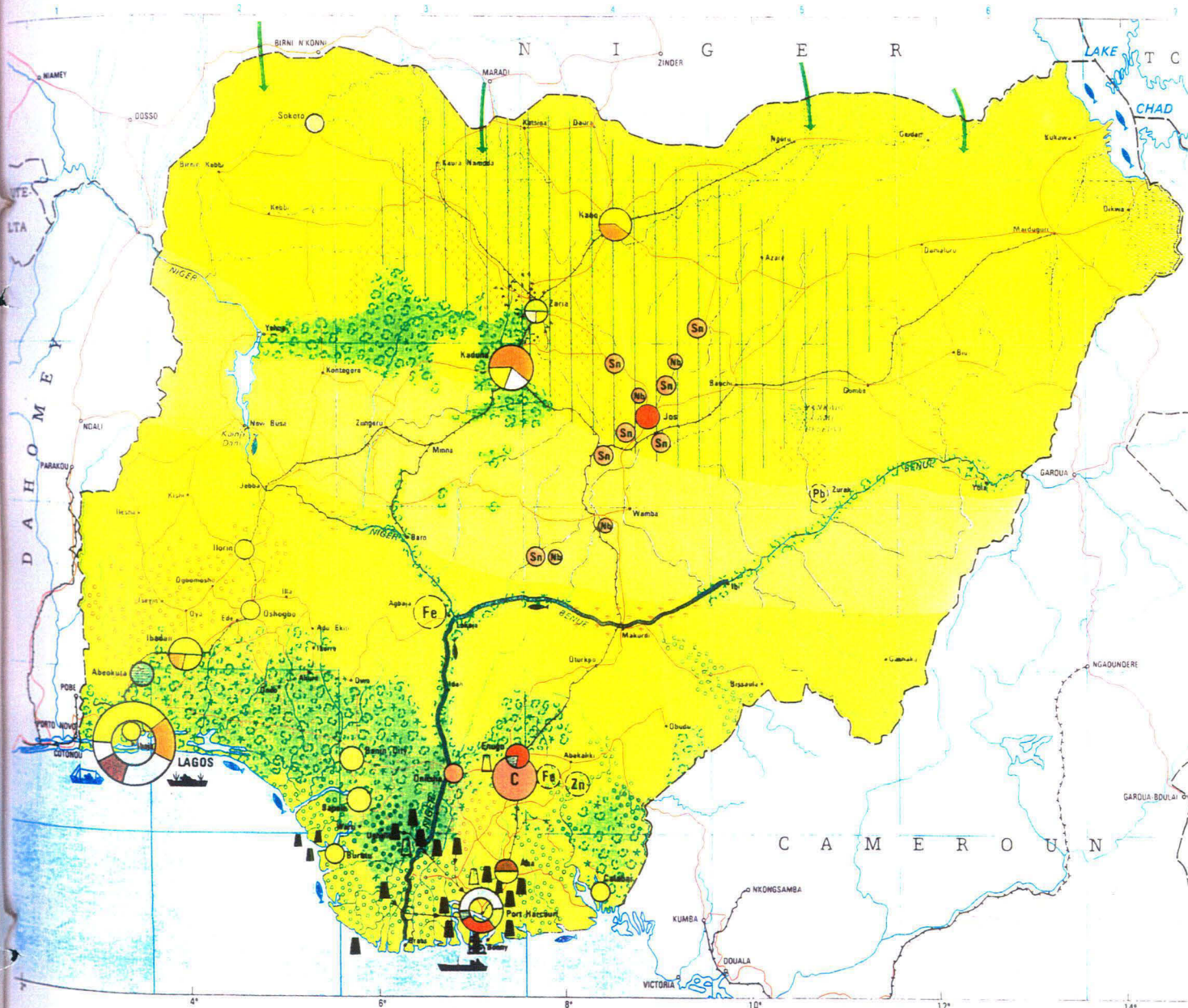
The soil and the vegetation communities of Nigeria occupy an important position in her development⁸. Broadly heavily leached, reddish–brown, sandy soils are found in the south and light or moderately leached, yellowish-brown, sandy soils in the north⁹. However four major groups of soils are found in Nigeria. They are as follows:

- Hydromorphic and organic soils developed on alluvial, marine and fluvio–marine deposits of variable texture; mainly found in river vallies and delta region and has great fertility.
- Regosols and brown soils found in the northeastern parts of the country. These are infertile and lack an adequate vegetation cover.
- Ferralsols, mainly found in southern Nigeria and are sedimentary rocks. They are deeply weathered soil but most of the forest belt of Nigeria is found on these soils.
- The highly ferroginous tropical red and brown soils of basement complex rock areas are most extensively covered soils type, and are mainly found in the middle and northern part of the country. These soils are mainly covered by Savanna type of vegetation.

⁸ O. Areola, “Soil and Vegetal Resources”, In J.S. Oguntoyinbo, O.O. Areola and M. Filani (eds.), *A Geography of Nigerian Development* (Ibandan: Heinmann Educational Books Ltd., 1978), p. 72.

⁹ n.1, p. 818.

Fig. 2
RESOURCES AND INDUSTRIES.



SOURCE - NIGERIAN HIGH COMMISSION (GOVT. PRESS, ABUJA)

There are two broad types of vegetation in Nigeria; the forest and the Savanna communities. The forest communities include the mangrove and fresh water swamps; the lowland tropical rainforest and the secondary forest re-growth. In general, the mangrove and the rain forests are found in the south occupying about 20 percent of the area of the country. While grassland of various types occupy the rest¹⁰. Savanna vegetation covers over three quarter of the land area of Nigeria but it contains very few timber tree species¹¹.

The fresh water swamp forest occurs extensively in the Niger delta, on the flood plains of the larger coastal rivers and in the smaller coastal river vallies. The lowland tropical rain forest, which is the backbone of country's timber industry, is no longer as extensive as it used to be. Now this type of vegetation is confined to narrow broken stretch just south of Ondo and Idanre Hills, extending from the Osan valley to the Benin River in Bendel state. Other areas of mature forest is in the southeast part of the country bordering Cameroon and along cross-river. However, in its northern fringes and elsewhere the high forests have been degraded to secondary re-growth.

Savanna grasslands can basically be divided into three distinct belts i.e. the Sahel, the Sudan and the Guinea Savanna north to south in order. Between forest and Savanna zone there is a transition belt of grassland which is a secondary development of vegetation, as a result of frequent fires in previous forested area. There is also evidence of scattered forest in the Savanna region which is a great source of fuel and pales. However, the Guinea Savanna zone in

¹⁰ FEPA, *Biological Diversity in Nigeria* (Abuja: 1992), p. 12.

¹¹ n.8, p. 83.

particular and gallery forest in riverine areas contain scattered trees of value such as *lophira lanceolata*, *terminalia glauscens*, *afezelia africana*, *terminalia macroptera*, *mitragyna inernush* and *daniellia olveri*¹². The Savanna land also provides the grass, weed, shrub and leguminous plants which are very important for the grazing economy of the country. The Sudan Savanna is more suitable for grazing as the grasses of this zone are shorter and feathery in contrast to the stout, broad-leaved tussocky Guinea Savanna grasses. So, Nigerian soil and vegetation resources have large economic interest.

Water Resources

There is close relationship between water availability and economic development. Furthermore, water is also an important factor controlling the distribution of population in Nigeria. Areas having unreliable and scarce water availability are sparsely populated. Such areas include large proportion of Borno, Sokoto, Kwara and Gangola states among others¹³. Major urban settlement and industries are located in the regions having abundant water availability. Nigeria is well endowed with abundant water resources. Although, there are yet no accurate assessment of the magnitude of the country's water resources, Available data shows that these resources, though ample in sum total, are unevenly distributed over the country and are subject to large seasonal variations¹⁴.

¹² *ibid.*

¹³ J.O. Ayoade and B.L. Oyebande, "Water Resources", In J.S. Oguntoyinbo, et.al. (eds.), *op.cit.*, p.41.

¹⁴ *ibid.*

As far as the sources for water resources are concerned, surface water is the main sources. Even though rivers of northern Nigeria are not perennial and carry less water, the Niger and the Benue are enough to provide sufficient water given there by proper management. However, southern Nigeria's surface water resources provide surplus water. Although knowledge about quantity, quality, and pattern of distribution of Nigeria's ground water resources is not satisfactory, it is clear that Nigeria is particularly poor in groundwater resources because half of the country is undulant by crystalline rocks of basement complex, which are generally poor aquifers. According to Mitchell - Thome, Nigeria occupying 0.7 percent of the world land area has a ground water supply above 750 meters amounting only 0.2 percent of the worlds groundwater total¹⁵.

If we exclude scarcity of water in the northern part of the country during summer surface water availability, along with traditional practices of exploiting water in Nigeria, consisting of direct collection of rain water in containers and extraction of springs, streams, ponds and hand dug well, are enough to fulfill water requirement of the population despite relatively poor ground water situation. As a whole it can be said that Nigeria is well endowed with water resources.

Mineral and Energy Resources

Mineral resource contributes more than 95 percent of Nigeria's export value and aids her industrial development. In 1995 as much as 728,648.3

¹⁵ ibid., p. 45.

million Nairas` (N) export was of minerals out of a total of 748,368.1 million Nairas` export¹⁶. The minerals resources of Nigeria can be grouped into the following categories:

- i) Mineral fuels: Coal, lignite, crude oil and natural gases
- ii) Metallic minerals: Cassiterite, tin, columbite, wolframite, galena, tantalite, gold, and iron ores
- iii) Industrial minerals: Limestone, marble, gypsum sands, gravel, feldspar, graphite, etc.

The first commercial discoveries of petroleum were made in 1956 in the Niger River delta region. By the early 1970s, the petroleum industries had become the dominant sector of the Nigerian economy and the major determinant of the country's economic growth. In 1986 the petroleum sector accounted for around 18 percent of GDP, more than 97 percent of total export earning and over 70 percent of all government revenues. Nigeria's proven reserves were estimated at 2,126 million tons¹⁷.

Besides its petroleum resources, Nigeria possesses the largest of natural gas proven reserve in Africa and are assessed at more than 2,800,000 million cubic meters, most of which is located with petroleum deposit in and around the Niger delta. Probable gas reserves were estimated at 18,00,000 millions cubic meters of which 77 percent was flared¹⁸.

¹⁶ based on *Africa South of the Sahara* 2001 (2000), op.cit. p. 843.

¹⁷ L.V. Buren, "Economy" In *Africa South of the Sarhara 2001*, op.cit., p. 832.

¹⁸ *ibid.*

Nigeria possesses substantial deposits of lignite, but the country has yet to exploit their full potential. Bituminous deposits are found in the lower coal measures, which out-crop at Enugu, Ezima, Orukpa, Okapa and Ogboyoga in Ambara state¹⁹. Deposits of bituminous coal near Akure were developed under the government's bitumenous implementation project and the first deliveries of crude were assessed at more than 359 million metric tons in 1963²⁰. However, coal production declined from a peak of 9,40,000 tons in 1958 to 144,000 tons in 1986, and to 86,700 tons in 1992²¹.

As far as metallic minerals of Nigeria are concerned, the most important of them is Cassiterite, which is mined around Jos plateau along with Columbite, tantalite, wolframite and theorite. There are deposits of low-medium grade iron in Nigeria, mainly in Kwara state. Nigeria's output of tin concentrates has been declining since the late 1960s, and these exports have reflected the depressed conditions in the world tin prices since the late 1980s.

Land Resources

Total geographical area of Nigeria is 92377 thousand hectare out of which total land area is 91,077 thousands hectares²². In 1998 the total arable land was 28200 thousand hectares²³, which was 27,500 thousand hectares in 1975²⁴. Permanent cropland has been 2,535 thousand hectares in 1975²⁵. Non

¹⁹ F.O. Akintola, "Minerals and Energy Resources" In J.S. Oguntoyinbo, et.al. (eds.), op.cit., p. 60.

²⁰ *UN Statistical Year Book 1974*, (New York: NY UN Publications), table 50, p. 170.

²¹ n. 17, p. 832.

²² See *UN Statistical Year Book 1997*, op.cit., p. 641.

²³ See *FAO Year Book 1999* (Rome: FAO Publications), vol. 53, table.1 p. 4.

²⁴ See *FAO Year Book 1991*, ibid., vol. 45, table-1, p. 4.

arable and non-permanent crop land was as much as 60,339 thousand hectare in 1998²⁶. Besides this about 40,000 thousand, hectare permanent pastures land and 11,900 thousand hectares forest and woodland were there.

Hence 30,738 thousand hectares land are either arable or under permanent crops which is one third of total land area. However, only 8.25 percent are under permanent crops. This is only 2.8 percent of total land area²⁷. In Nigeria per capita arable land under permanent crops are only 0.29 hectares (1995), in 1985 it was 0.37 hectares. Similarly forest and woodland precipitate is as low as 0.1hactares. In 1985 it was 0.16 hectares.

But the land distribution is uneven and also due to unutilized lands and low level of technological application, agricultural sectors has performed badly. For example in the middle belts, despite the fact that it could be used for various purpose, largely the lands are unutilized. Similarly stagnation in the permanent cropland depicts the low level of technological application.

Socio-Political Configuration

The population of Nigeria is composed of numerous tribes or tribal groups distinguished by Customs, traditions and languages. The largest among them are the Hausa and The Fulani, who inhabit the Northern Region, the Yoruba in the Western region and the Ibos in the eastern region. There is considerable diversity even within these main language group, with each region having strong minority of groups. The people are divided into various groups,

²⁵ Assessment is based on, n. 23, and n.24.

²⁶ n. 23, p.4.

²⁷ n. 24, p.4.

some with as little as 1000 people and other numbering into millions²⁸. Besides, Hausa, Fulani, Yoruba and Ibo other sizable groups are the Nupe, to the north of Yoruba in and around Benin city; the Ijaw and Ibibo in the Niger Delta and along the Cross River estuary; the Ekoi, Tiv and chamba along the Cameroon border; and the Kanurin in Barno state in the northeast, near lake chad²⁹.

Only three ethnic groups, Hausa, Yoruba and Ibo constitute over 50 percent and termed as major ethnic groups, constitute over 80 percent of the total population. Ethnic Composition of Nigeria is, Hausa 21 percent, Yoruba. 21 percent, Ibo 18 percent, Fulani 11 percent, Ibibo 5 percent, Kanuri 4 percent and Edo 3 percent. Major religions are, Sunni Muslim 45 percent, protestant 26 percent Roman Catholic 12 percent and African indigenous 11 percent.

The majority of Hausa live in the highly organized northern emirates of Nigeria, where Islam is the dominant religion. Although little is known about the early history of these people, the then pagan Hausa were established over large areas of the northern region before the infiltration of the Moslem Fulani, which probably began in thirteen century³⁰. The Fulani and Hausa intermarried to a considerable extent leaving only some nomadic herdsmen, a few isolated communities, as new pure Fulani. They are also in the north, where Hausa language is widely understood and used, a number of isolated pagan

²⁸ K.R. Singh, "Country profile: Nigeria", *Africa Quarterly* (New Delhi), vol.41, no.1-2, January-June 2001, p.221.

²⁹ *ibid.*

³⁰ *Nigeria: The making of a Nation* (New Delhi: British Information Services in India, 1960), p.4.

communities, which have survived the Moslem invasion or have been partially assimilated. The Kanari of Bornu, for example, were never subjected to the Fulani.

At the time of European penetration of Nigeria the Yoruba kingdom in the west was disintegrating, but at one time it might have extended from the Niger to as far as Dahomey. The tribal organization of the Yorubas differed completely from the structure of the Moslem emirates. The Eastern Region is inhabited largely by the Ibo-speaking people, whose traditional social organization no longer recognized the family of Christians and pagans. More than 374 languages have been identified in the country, with English as the official language. It is used by government, large-scale businesses, mass media and in education beyond primary instructions. In Northern part classical Arabic is also used for religious purpose. Pidgin English, which is hybrid of English and local Jargon is also widely used³¹.

The present political structure of Nigeria owes its origin to activities of British interest and authorities, operating in the area during the later half of the nineteenth century³². Towards the end of that century there were three such authorities, the governor of Lagos colony, the Counsel of Calibar and the Royal Niger Company, controlling the southwest, the southeastern and the northern areas of present Nigeria, respectively. Though the name Nigeria was coined by an English journalist, Miss Flora Shaw, in an article in the 'Landon Times' on

³¹ n.28, p.31.

³² O.Adejuyigbe, "Social Factors in the Development of the Political map of Nigeria" In J. S. Oguntoyinbo, et.al. (eds.), op.cit., p. 175.

January 8, 1897. The amalgamation of all the three parts was completed in 1914. Earlier the first governor-general of Nigeria, Lord Lugard introduced indirect rule, a system of government reconciling the total sovereignty of British with the delegation of local governed, to native chieftains under the Supervision of British official. This experiment was later applied to other British possessions in Africa³³. Although the system had much to command, in Nigeria it resulted in the accentuations of tribal and regional differences and aggravation of the hostility between the moslem and feudal north, which were more receptive to modern influences.

Internal political map of Nigeria has changed many times, since the creation of the country .The changes were due to a number of factors, primary among which were those connected with the social systems in the country, spatial problem, economic consideration and official policies most notably by indirect rule system³⁴. Three types of social groups are considered in the creation of internal administrative units in Nigeria. These are ethnic nations, the traditional political units and the communities.

Each ethnic nation is recognized by a common language used by its members. There are various opinions about number of ethnic nations in the country. Some mention, as many as 240 ethnic nations while others say, there are only 60. It is often suggested that country should be politically divided according to ethnic nations. The ethnic nations have featured prominently in discussion on the creation of sub national units in Nigeria. Although division of

³³ K.O. Dike, *100 years of British rule in Nigeria* (Lagos: 1959), p.127.

³⁴ n.32, p. 176.

country into twelve states in 1967 did not follow the ethnic boundaries as contained in various suggestions, ethnic consideration still played important role.

The traditional political units are the administrative units, which existed before the colonial rule. They fall into two main groups, those that were independent of others just before the colonial period and those which owed allegiance to another one at that time³⁵. The most notable of these in the Second category were the units in the Fulani Empire called empirotos and found in house land and in parts of present day Gongola, Niger and Kwara states. These were similar units in the Oyo, Ibadan, Benin and Baron empires. Each traditional political unit traces its origin to people who have descended from the same ancestors, who founded the main settlement from where people later expanded to the surrounding territories to establish secondary settlements.

A primary community constitutes the core of a traditional political unit such as, community may have its own separate dialect but in many cases the same dialect of the main language may be spoken by a number of primary communities³⁶. A primary community has only one focal point which usually has the greatest concentration of people in the area, and the members of a primary community prefer that the entire community should be administered together. Since the beginning of self-government in 1950's there have been more demands by primary communities for separate divisions because they in the are the main units considered in the distribution of basic facilities like

³⁵ *ibid.*, p. 181.

³⁶ *ibid.*

educational and medical institutions or scholarship. At the local level new divisions were created to fulfill their demands. Although the main effect of primary communities on the development of the political map of Nigeria is felt at local level, yet they are important because of the general desire to keep them united. Hence, the factors of socio cultural desire should be kept into mind when any administrative decision should be taken.

As far as national administrative units are concerned, the formation of a federal type of government based on regionalism emanated in the Richards constitution of 1886 and later 1946 and the 1951 and 1954. The 1946, 1951 and 1954 constitution provided parliamentary representative system based on election by direct suffrage and increased African representation. In 1954, Nigeria officially became federation of three states, each with wide autonomy. On October 1, 1960 Nigeria became an independent state and consequently a federal republic was established on October 1, 1963. It lasted only for three years when first coup took place. In 1999, formally democracy has been restored, Nigeria is one of those African country, where nexus between army and politics is a conspicuous feature. Ethnically divided Nigeria has also been victim of civil war for a long period.

However, under the 1999 constitution, legislative powers are vested in the national assembly made up of a 109 member senate and 360 member house of representation, executive powers are vested in the president, while the judiciary is represented by various ways at different level. The federal republic of Nigeria, consists of thirty six states and the administrative headquarter is

located in Abuja. For the effective participation in governance, up to grassroots level, the Federal government, the state government and the various local municipal bodies share powers, revenue and responsibilities between themselves.

Economic Structure

Nigerian economy is a mixed economy and accommodates all, individuals, corporate organization and government agencies. Earlier we have discussed that Nigeria has ample amount of agricultural and mineral resources. Despite these facts Nigeria is ranked by the world bank as a low income country and amongst the 20 poorest countries in the world on the basis of per capital income³⁷. In 1997, according to the world bank estimates Nigeria's gross national product (GNP) measured at constant price was US\$ 33.4 billion equivalent to \$280 per head³⁸. For dealing with economic structure backwardness, Nigerian economy needs to be studied.

Agriculture

Until Nigeria attained independent in 1960, agriculture was the most important sector of the economy, accounting for more than one half of GDP and for more than three quarter of export earnings. However, with the rapid expansion of the petroleum industries, agricultural development was neglected and during the mid 1980's Nigeria moved from a position of self sufficiency in basic food stuffs to one of heavy dependence on imports³⁹.

³⁷ n. 17, p.330.

³⁸ See *World Development Indicators* 1999 (Washington, D.C.: The World Bank Publication), p. 13.

³⁹ n. 17, p.831.

Major agricultural crops are categorized in to two categories. i.e. Food crops and cash crops. Food crops are further divided into two categories, i.e. root –crops and grain crops. Root crops are grown in the rainforest areas where as grain crops are grown in Sudan Savanna, the Guinea Savanna of the middle belt, which is an area of overlapping between the root and grain crops of the south and north respectively. Out of a total cereals crop of 22.7 million tons in 1998, Sorghum represented the principal share of 7.5 million tons followed by maize (5.9 million tons), paddy rice (3.3 million tons) and maxis (5.9 million tons double the 1997 output) Among root crops the Cassava crop amounted to 30.4 million tons, while 19.6 million tons of yams were harvested⁴⁰.

Export crop production began in Nigeria long before the commencement of British Administration, However, major boom in the production took place during colonial period. The British colonial administration deliberately encouraged and supervised the cultivation of export crops by providing local farmers with improved seed varieties and technical advices through extension services⁴¹. As a result, first three decades of this century witnessed a remarkable expansion in export crop production and earning. This was partly due to increased production of existing crops like oil palm, and partly due to the introduction of new crops such as groundnuts, Cocoa, rubber and cotton. Although share of cash crops in export decreased remarkably during the last forty years, its contribution to national economy is still important. Cash crops

⁴⁰ ibid.

⁴¹ Ade Akinbede, “Export Crop Production” In J.S. Ogintoyinbo, et.al. (eds.) op.cit., p. 226.

are mainly grown in the mid-west and north of the country. The important cash crops are cocoa, oil palm, rubber, cotton and groundnut.

Among the agricultural crops, only cocoa makes any significant contribution to export, but Nigeria's share of the world cocoa market has been sub-stantially reduced in recent years⁴². Cocoa is grown throughout Yoruba land i.e. the present Ondo, Oyo. Ogun states on the other side of Nigeria was world's leading export of palm oil until 1971, but the production and export of oil palm products has declined dramatically. Now situation is such that Nigeria is heavily dependent on imports in order to satisfy domestic needs. Oil palm is mainly grown in equatorial coastal regions of Nigeria. Rubber, which is also grown in rain forest area, is a major cash crop of Nigeria. In 1990 Nigerian overtook Liberia, as the largest rubber producer in Africa⁴³. Cotton is an annual crop grown on small peasant holding particularly in the northern part of the country. In 1997, Nigeria produced 341,000 tons of seed cotton, yielding 230,000 tons of cottonseed and 90,000 tons of cotton lint; however, output declined sharply in 1998 by 49 percent Groundnut is also grown in northern part of the country⁴⁴.

According to the FAO, output of the beef and veal reached 294,000 metric tons in 1997, while the output of goat meat was estimated at 130,000 tons .In Nigeria, herd comprised 20 million cattle and 14 million sheeps⁴⁵. This is a large increase from 1995.

⁴² n. 17, p.831.

⁴³ *ibid.*

⁴⁴ *ibid.*

⁴⁵ *ibid.*

Fish Catch in country is estimated at 366.1 thousands tons in 1995⁴⁶. As far as forestry is concerned mainly broad leaved forests are found in Nigeria. Round woods production of Nigeria is estimated as 111.1 million cubic meter.

Industry

Industrial development in Nigeria has mainly taken the form of import substitution of consumer goods, although during the 1970s, greater emphasis was placed on the production of capital goods and on assembly industries. In 1983, textiles, beverages, cigarettes, soaps and detergents together accounted for 60 percent of the total manufacturing output⁴⁷. The Nigerian industries can be categorized into three important categories. First group is the type of industries heavily dependent upon imported raw materials these are mainly metal industries. According to the manufactures Association of Nigeria (MAN), upto 60 percent of all the raw materials that local industries used in 1985 were imported. So these industries are vulnerable to disruption, if imports of raw materials are restricted. However, in the recent past, successive government have been trying to cope with this situation.

On the other hand, there is another group which generally uses local sources for getting raw materials. This group of product has an upper hand as far capacity utilization is concerned. Tyres, leather products, beer stone (59 percent), textile and industrial chemicals are major product of this group. There is also another industrial sector which got momentum recently when various government programmes aiming at national self sufficiency in food

⁴⁶ See *UN Statistical Year Book 1997*, op.cit., table 41, p. 396.

⁴⁷ n. 17, p.854.

allowed for the steady growth of agro-industries during 1970s. Among these, sugar refinery, textiles, brewing, rubber, fertilizers, edible oils, footwears, paper, cigarettes and general food processing industries are the most significant. Motor assembling, and nitrogenous fertilizer manufacturing are other important industries of Nigeria.

Trade

Traditionally, Nigeria is a Petroleum exporter and makes trade surplus due to crude oil export, but export revenue fluctuates according to the international price of petroleum. Moreover, petroleum export got momentum only after 1965. The composition of Nigeria's trade has always shown a contrast between exports and imports. The former consists of raw materials derived initially from agricultural and forestry and lately from mineral sources. Imports are mainly industrial manufactures and capital goods. In the export sector, tin ores used to be most important mineral exports before independence and other were palm kernels and palm oil. By 1959-60 groundnuts emerged as the most important agricultural export by weight.

In 1962, Nigeria's traditional agriculture commodities, cocoa, palm products, groundnut product, cotton and rubber constitutes 70 percent of her export but by 1974 the non oil export sector had dwindled, while oil accounted for 92 percent of Nigeria's total export earning.⁴⁸ This trend continues till now, as in 1995 petroleum constituted 97 percent of total export by value.⁴⁹

⁴⁸ ibid.

⁴⁹ See n.16, p. 843.

As far as Nigeria's import, are concerned, machinery, transport equipment, basic manufactures and chemicals constitutes about three fourth of total import by values.⁵⁰ This trend is, by and large, unchanged since 1960, as in 1965 two third of Nigeria's import was of manufactured goods, machinery and transport equipment.⁵¹

The spatial orientation of Nigeria's trade has undergone striking change in the last four decades. In 1960, Britain dominated Nigeria's foreign trade, as that year 43 percent of Nigeria's import was from Britain, which decreased to 23 percent in 1974⁵² before recovering to 32 percent in 1991. Export has undergone more drastic change, as in 1991, 47 percent of export was going towards USA and UK's share was only 16 percent of total export. Nigeria's other important trading partners are Western European countries and Japan.

The principal supplier of electricity in Nigeria is the state owned NEPA, which was formed in 1973 by the merger of Niger Dams Authority and Electricity Corporation of Nigeria. In 1980, total electricity capacity of Nigeria was 2230 thousand Kilo Watts in which 1470 thousand Kilo Watts was from thermal power and rest was from hydroelectric plants.⁵³ However, demand for power regularly exceeds capacity and power cuts have become a regular feature of the daily life. Only 30 percent of the population have access to electricity.⁵⁴ As far as electricity generation in Nigeria is concerned about 50 percent of the total 10,000 million Kilo Watts per year was generated by hydroelectric plants.

⁵⁰ ibid.

⁵¹ n.47, p. 342.

⁵² See n.16, p. 843.

⁵³ *UN Statistical Year Book 1982*, p. 798.

⁵⁴ See n.17, p. 836.

Transport

Despite the fact that transportation quality in Nigeria is yet to be developed properly, Nigeria has a well developed transport system. The major intra-transport systems are roads, railways and pipeline. However approximately 95 percent of all traffic in goods and passengers is by road, most of it to and from the major parts, which is lined to world trade.⁵⁵ Congestion, lack of maintenance and poor planning have resulted in service that are unreliable and often dangerous.

Demography

According to last census held in November 1991, population of Nigeria, the most populous black country, was 88,992,220 in which males population was 44,529,608 (50.04 percent). This census record shows a balance between male and female population.⁵⁶ The 1991 census shows an increase of about 60 percent in the population over the last officially held census in November 1963.⁵⁷ In the 1963 census the total population of Nigeria was 55,670,055 constituting 28,111,852 (50.5 percent) males and 27,558,230 (49.5 percent) females.⁵⁸ (Please refer to fig. 3) However, reliability of census data has always been questionable. According to an estimate, the population of Nigeria in 1999 was 110.8 millions and it will reach to 165.3 million in 2015, the annual population growth of Nigeria during 1975-1999 is estimated at 2.9 percent. This shows that population growth rate of Nigeria is very high. From 1960-2000 the population of Nigeria is estimated as:

⁵⁵ ibid.

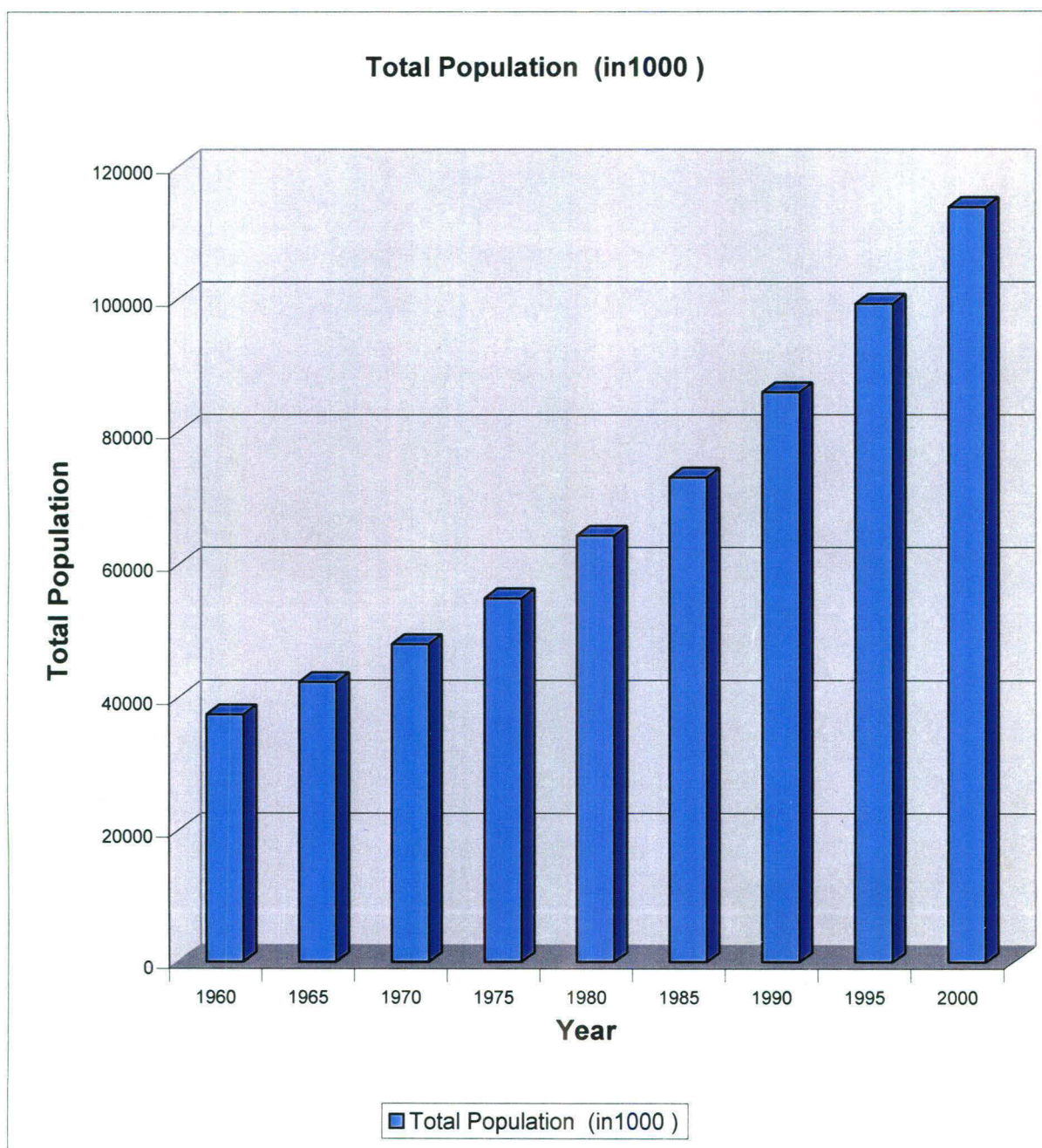
⁵⁶ based on *UN Statistical Year Book 1997*, op.cit., table, p. 34.

⁵⁷ Calculated on the basis of *UN Statistical Year Books 1974 and 1997*.

⁵⁸ Based on *UN Statistical Year Book 1974*, op.cit., table 18, p. 68.

Nigeria: Total Population

Year	1960	1965	1970	1975	1980	1985	1990	1995	2000
Total Population (in1000)	37447	42283	47980	54886	64325	73068	85953	99278	113862



Source: Based on *World Population Prospect: The 2000 Revision*, (New York: UN Publications, 2001), vol-1, table - A.33, p.662.

Fig-3

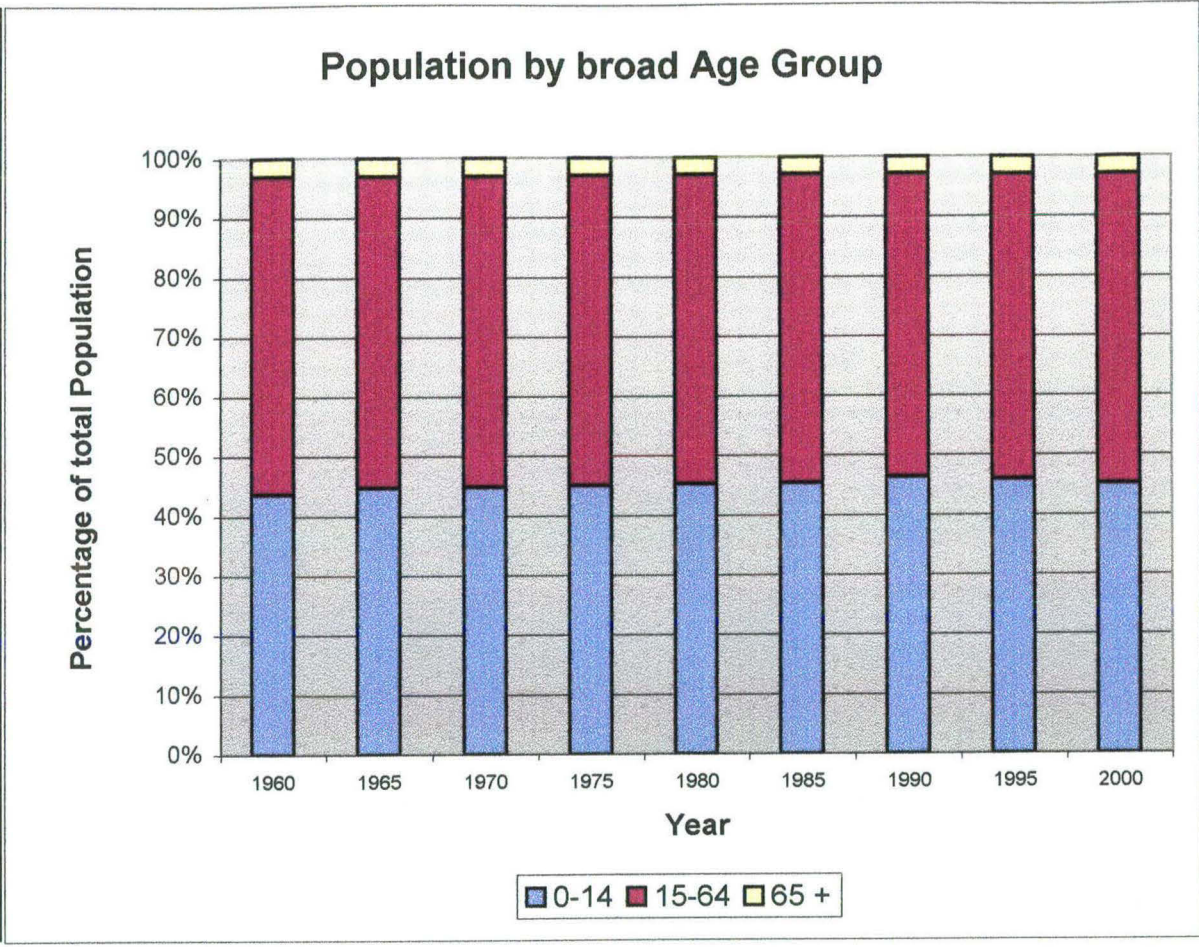
Year	Population in ('000)
1960	37447
1965	42283
1970	47980
1975	54886
1980	64325
1985	73068
1990	85953
1995	99278
2000	113862

Source: Based on *World Population Prospect: The 2000 Revision* (New York, NY, UN Publication, 2001), p. 652.

According to 1963 census, about 43 percent of the population was made up of children, below the age of 15 years. Males under 15 years of age amounted to 22.1 percent and females were about 21 percent of the total. Barely 3.0 percent of population reached the age of 60 years and above by 1963. However, population counting is a highly political affair in Nigeria because of its implications of ethnic balance, electoral competition and federal revenue allocation of the state. A major census was held in 1973 but its results were immediately discredited by suspicions that in many areas; the figures had been inflated in a attempt to ensure that state government get the greatest possible share of federal revenues. In consequence estimates have varied widely. Another census was held in November 1991 and the result announced by President Babangida in March 1992, showed a total of just 88.5 million which provided a sharp contrast to the World Bank's mid 1990 estimate of 117.5 million. This confirmed widely held reports of over counting in previous censuses but will be changed by groups, who feel that they have least influence and access to federal funds as a result. (Please refer to figure 4)

05

Population by broad Age group			
Age group	0-14	15-64	65 +
Year	Percentage of total population		
1960	43.6	53.3	3.1
1965	44.7	52.2	3.1
1970	44.8	52.1	3.1
1975	45	52	3
1980	45.2	51.9	2.9
1985	45.3	51.8	2.9
1990	46.3	50.8	2.9
1995	45.9	51.1	3
2000	45.1	51.9	3



Data Source-Based on , *World Population Prospect: The 2000 Revision* (Newyork:UN Publications,2001),vol.1

Fig-4

According to UN estimates, about 43.6 percent population was made up of children below 15 years of age, which increased to 46.3 percent of total population before decreasing to 45.1 percent in 2000. Age group of above 65 years constitutes about 3 percent of total population since 1960 and continued till 2000.

Total dependency ratio of Nigeria was 88 percent in 1960, which increased to 97 percent in 1990, before going down to 93 percent in 2000. In dependency ratio, major contribution was child dependency ratio, which was 82 percent in 1960, increased to 91 percent in 1990 before going down to 87 percent in 2000.⁵⁹ This shows that fertility is very high but high child dependency rate shows that in future there will be sufficient number of human resources that will be available for stimulating future development. On the other side Elderly dependency rate has been hovering around 6 percent throughout the last 40 years. This shows that health facilities is yet to be developed properly. (Please refer to figure 5)

Density and Spatial Distribution of Population

Nigeria has an area of 912377⁶⁰ sq. kilometers. In 1995, the density of Nigeria was 121,⁶¹ which was only 41 in 1966.⁶² During the last 35 years density of the country increased by three folds. However, Nigeria's density can be termed as moderate one. Infact, population density of Nigeria is not

⁵⁹ Based on *World Population prospect: The 2000 revision* (New York, NY: UN Publications, 2001), table A.35, p. 724.

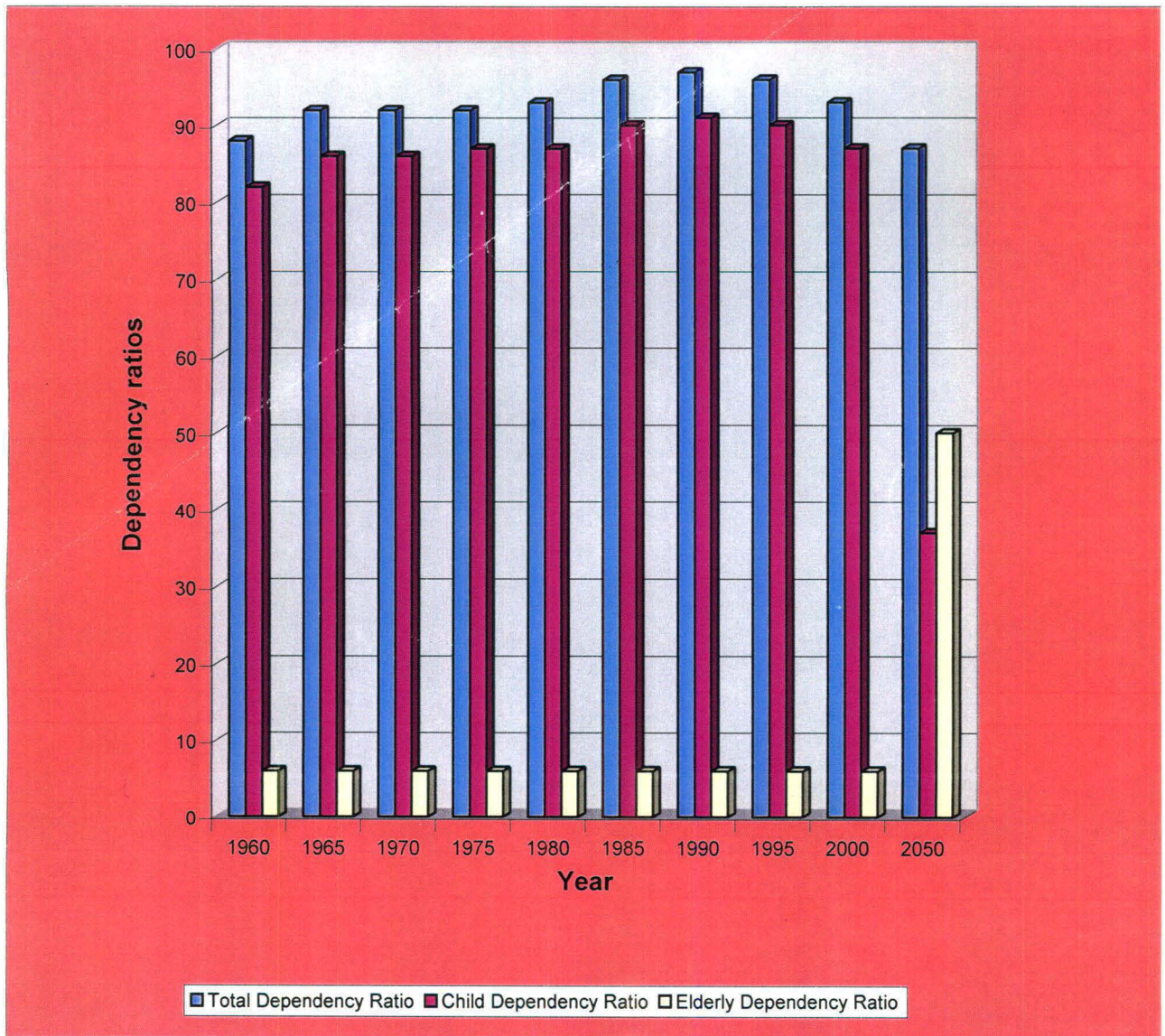
⁶⁰ *FAO Year Book 1999*, (Rome: Information Division), table 1, p. 4.

⁶¹ Based on *Statistical Year Book, 1974*, op.cit., p. 34.

⁶² Calculated on the basis of population supplied in *World Population prospect, the 2000 revision*, op.cit, p. 652 and the Area supplied in *FAO Year Book 1999*, op.cit., p. 4.

Nigeria :Dependency Ratios(%)

Year	1960	1965	1970	1975	1980	1985	1990	1995	2000	2050
Total										
Dependency	88	92	92	92	93	96	97	96	93	87
Child										
Dependency	82	86	86	87	87	90	91	90	87	37
Elderly										
Dependency	6	6	6	6	6	6	6	6	6	50



Data Source-Based on ,*World Population Prospect:The 2000 Revision* (Newyork:UN Publications,2001),vol.1

Fig- 5

homogeneous, but her population density pattern shows an interesting pattern. Though, it is next to impossible to explain population pattern of Nigeria.

Western Africa shows a zonal pattern of population density arrangement and it is distinguishably divided into three belts. This zonal pattern is conspicuous in the case of Nigeria. Most populous belt is seaward belt, which approximately coincides with a zone of heavy rainfall and dense tropical rainforest. Second interior northern belt of relatively high density is located in the sub-humid Sudan Savanna. In between these two is the well known "middle belt" of presumed average population density, which coincides with the wooded guinea Savanna where rainfall amounts are intermediate to those of the rainforest to the south and the Sudan Savanna to the north.⁶³

The interior Sudan-Savanna belt, which has average population density, located along the Sahara's southern margins between 10° and 14° parallels. The relatively high-density region is associated with the state of Hausa that have risen and fallen there, over a millennium and a half of history. In this marshland, traditional markets flourished as a result of the exchange with Mediterranean Africa.⁶⁴ Similarly, seaward highest density region is an outcome of relative environment, which attracted native settlement because it permitted the production and overseas trade in a number of products desired from commercial tree crops. Between the humid forested seaward belt and the Sahel-Sudan Savanna zone belt of relatively high density, is an intermediate

⁶³ G.T. Trewartha, *The Less Developed Realm: a Geography of its population*, (New York, NY: John Wiley & Sons, 1972), p. 185.

⁶⁴ *ibid.*, p. 186.

belt of lower density, situated roughly between 7⁰ and 11⁰ N meridians. Relatively, low density of this region own to a low grade physical environment for agriculture, widespread tsetse fly infestation, slave raiding from both north and south. This region was also treated as a buffer region between various traditional cultural regimes. Besides these factors, this belt is scarcely populated because of the weakness or absence of the stimuli, both political and economic, that operated most strongly in the northern and southern belts, but were weaker in between the zones.⁶⁵

However, it does not mean that the belts are homogeneous, as far as distribution of population is concerned. Rather on the density map, conspicuously a nodal pattern along the main concentrations are found. This is nucleated or cellular-pattern of population, which has evolved through the interaction of both cultural and physical factors. Actually, the Nigerian population is divided into a bewildering number of social groups or communities, each of them have some common social bond. Communities may be further subdivided into states and tribes. With such a hierarchy of socio-political subdivisions, it is not difficult to appreciate the complex nature of population nodes in Nigeria within its two populous belts of settlements. Nigeria displays three striking nodes of dense population, those of the Ibo in the Southeast, the Yoruba in the southeast and the Hausa and Fulani in the north around KANO.⁶⁶ The single biggest high-density cluster of population is that of Iboland situated in the south east of the Niger river. Significance of

⁶⁵ *ibid.*, p. 188.

⁶⁶ *ibid.*, p. 193.

Slave trade, availability of land of sufficient size and quality to support the group and defensive sites for the villages were the main factors, to stimulate population accumulation in this region. Second main nodal area of population lies within the southwest region in Yorubaland. This area shows complete contrast with Iboland - rainfall is less and more reasonable, follow periods are longer; soils; derived from pre cambrian rocks, are distinctly better; water is widely available and cacao; rather than oil palm, is the main commercial crop.⁶⁷ A third major population concentration is within the northern region, i.e., Kano and grouped around the Kano along Karvan ways. Supportive factors for high density in this region are easily tilled soil, relative freedom from tsetse fly and tilling efficiency of the Hausa people.

As far as population of Nigeria according to political units is concerned, Lagos and Kano are the two most populous states of Nigeria, having a population 5.68 and 5.32 million respectively, in the 1991 census. Federal capital territory and Kwara are the least populated states of Nigeria. In general, the new census gives the Moslem (Hausa-Fulani dominated) northern states 46.9 million people and the southern (Ibo and Yoruba dominated) states approaching 41.3 million, a difference of over 5 million. However, one of the most interesting aspects of the new count is the apparent numerical strength of minority ethnic group. Perhaps 27 million altogether, compared to a Hausa - Fulani total of around 27 million and an Ibo - Yoruba total of nearly 30 million.

⁶⁷ *ibid.*, p. 196.

The so called "Middle Belt" minorities are beginning to emerge politically as a challenge to both the main northern and southern ethnic group.⁶⁸

Sex Ratio

Nigeria is one of those third world which have countries having favourable sex ratio. In 1963, the sex ratio of 102 was recorded as against a lower figure of 96 in 1953.⁶⁹ This sex ratio is almost static during the last 40 years when sex ratio varied only marginally between 97 to 100 percent. It is a good sign for Nigerian demographic structure. However, data cannot be relied upon entirely.

Rural-Urban Composition

At the time of independence major part of population was rural. The 1963 census gave a figure of 81 percent of areas with less than 20,000 people.⁷⁰ However, there were great inter-regional differences as western region was highly urbanised even at that time because 50.9 percent population was living in Urban centres. Meanwhile the urbanisation growth rate is very explosive in Nigeria in the post independence period. By 1980, 27.1 percent⁷¹ of the population was urban and it is estimated that it may have reached to the level of 44 percent by the year 2000,⁷² that means 5.6 crore population is urbanised.

⁶⁸ C. Porter, "Nigerian Census Surprise", *Geography* (Oxford), vol. 7 (4), October 1992, p. 371.

⁶⁹ A.A. Afolayan, "Population" In J.S. Ogitoyinbo, et.al. (eds.), op.cit., p. 124.
⁷⁰ *ibid.*, p. 118.

⁷¹ Assessment is based on *UN Statistical Year Book 1990-91*, op.cit., p. 72.

⁷² Assessment is based on *UN Statistical Year Book 1997*, op.cit., p. 46.

Occupational Characteristics and Labour Forces

The Size of labour force is very important for the development of any country as their quality. The 1963, census gave a figure of 18,305,836 as total labour force in Nigeria. However, reliability of the given data can be questioned because the census had given a figure of 98.1 percent as being employed. This census shows that 56.8 percent of Nigeria's working force engaged in farming.⁷³ It is estimated that in 1980 total labour force was 29 million which increased to 48 million in 1998. During this period average annual growth rate of labour force was 2.8 percent.⁷⁴ According to World Bank report, 52 percent of male labour force and 57 percent of female labour force were indulged in agricultural activities whereas 38 percent and 38 percent of each were involved in services sector. Only 10 percent and 5 percent of male and female labour force were involved in Industries respectively.⁷⁵ (Please refer to figure 6)

Nature of Population Growth

The most revealing of the population characteristics, with regard to development of a country is perhaps its rate of growth. The two major factors that account for population growth are, natural increase and immigration. However, for deciding the nature of population growth the focus will be on natural increase.

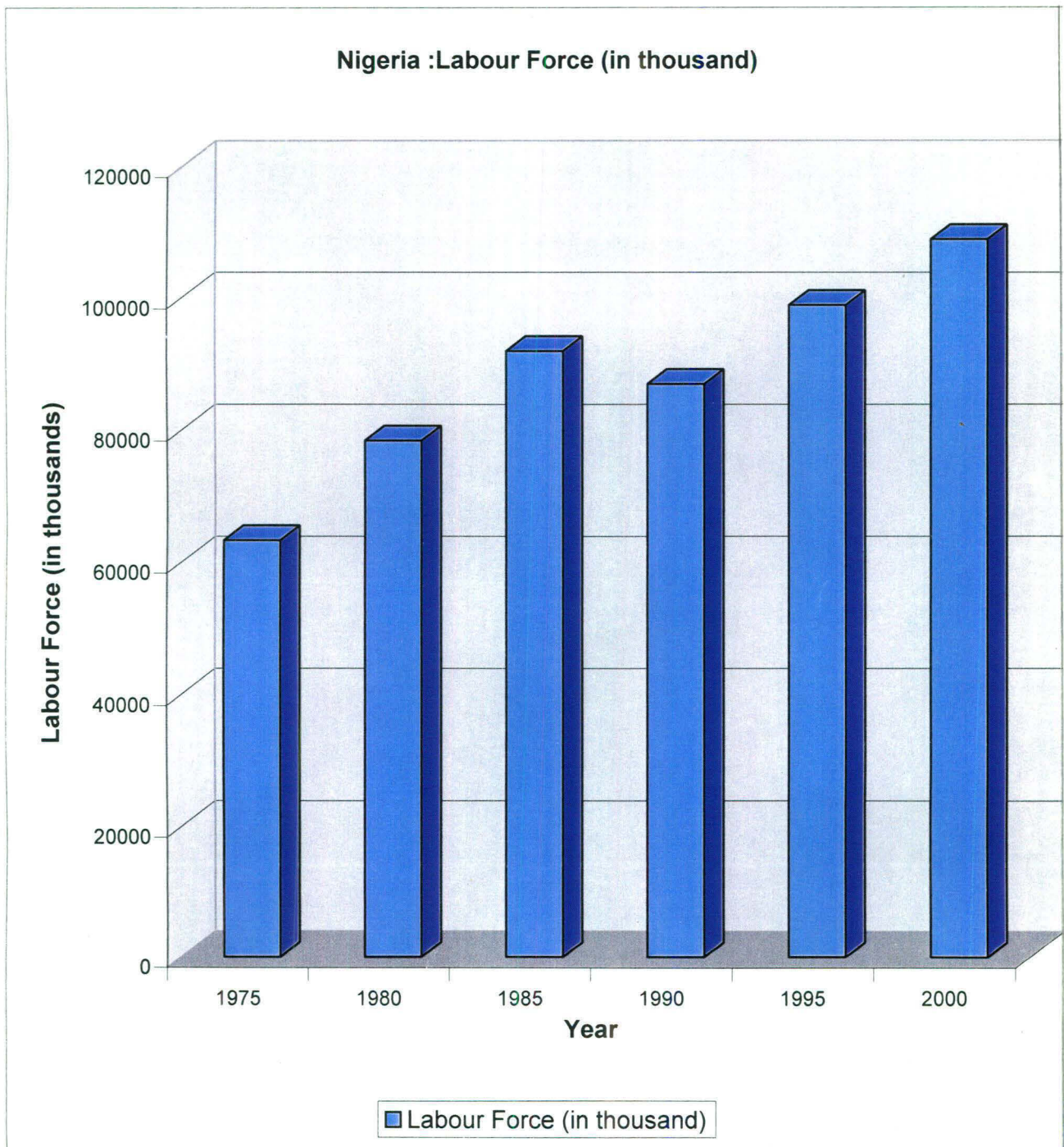
⁷³ n. 69, p. 121.

⁷⁴ Based on *World Development Indicator 2000*, op.cit., p. 17.

⁷⁵ Based on *ibid.*, p. 51.

Nigeria:Labour Force

Year	1975	1980	1985	1990	1995	2000
Labour Force (in thousand)	63346	78430	92016	87031	98952	108952



Data Source-FAO Year Book 1999 (Rome: FAO Publication,2000),table-3,p.21

Fig-6

The annual population growth rate of Nigeria during 1960-65 period was 2.43 and was 2.74 during 1995-2000, but the population growth rate of Nigeria during last forty years shows a distinct two phases. First phase was 1960-1980, when population growth was continuously increasing and it reached to a maximum level of 3.17 during 1975-80.⁷⁶ This increase was, perhaps because of decreasing crude death rate vis-à-vis crude birth rate. Crude birth rate was 48.4 per thousand during 1960-65 and it reached to 47.8 per thousand during 1975-80,⁷⁷ a slight decrease from 1960-65. During the same period, however, the crude death rate declined to 19.6 per thousand from 24.2 per thousand.⁷⁸ Hence, crude death rate declined by 5.2 units against 0.6 units of crude birth rate. (Please refer to figure 7)

The second phase started after 1980, when population growth rate started declining and it reached to 2.74 during 1995-2000.⁷⁹ This is due to relative decline in crude birth rate vis-à-vis crude death rate. As we can see that, crude birth rate declined to 41.7, a fall of 6.1⁸⁰ units as against 4.9 units in crude death rate during the same period of 1980-2000.⁸¹ We can analyse the population transition theory in Nigeria during the last 40 years and can draw the conclusion that Nigeria is passing through the second phase. The high population growth is basically an outcome of high fertility rate in Nigeria.

⁷⁶ The assessment is based on data provided by *World Population Prospects: The 2001 Revision*, op.cit., p. 522.

⁷⁷ Based on *ibid.*, p. 570.

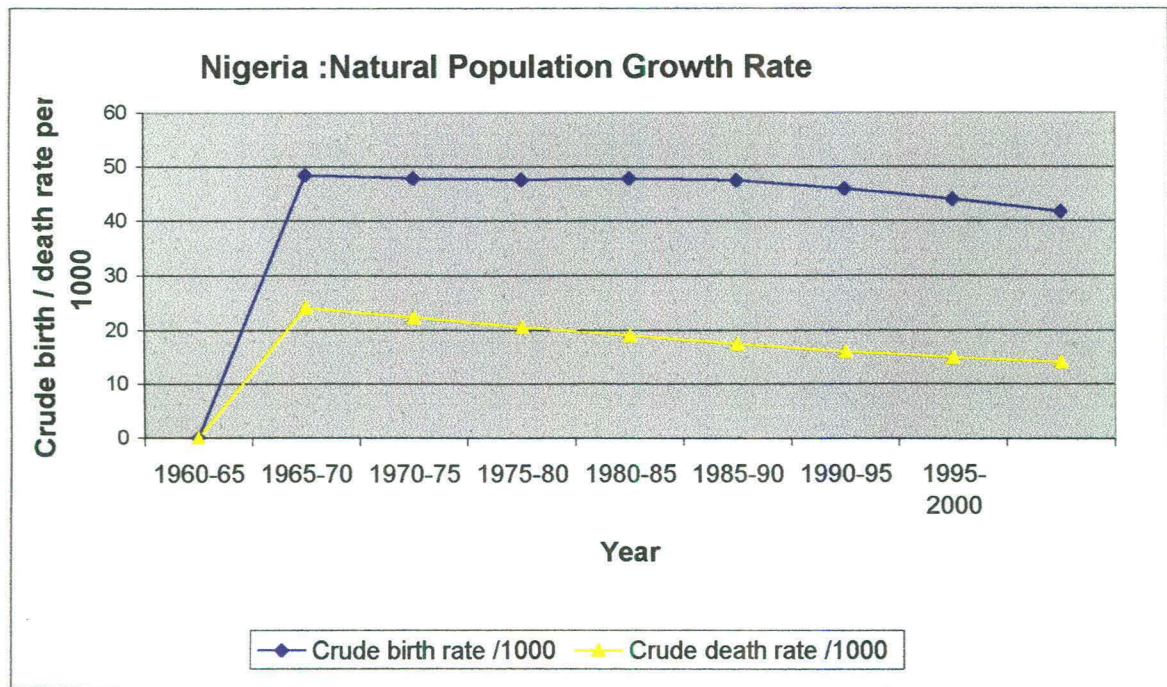
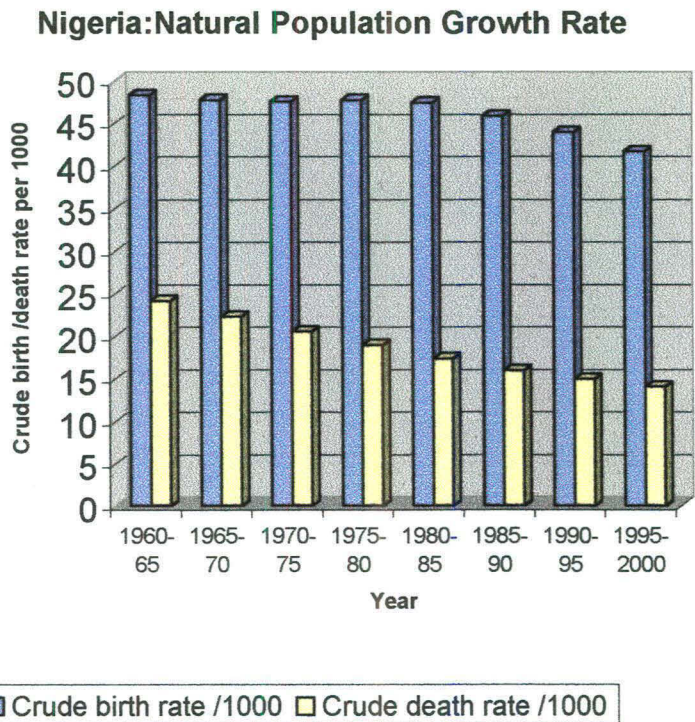
⁷⁸ Based on *ibid.*, p. 602.

⁷⁹ n. 76, p. 522.

⁸⁰ Calculated on the basis of n.76, p. 570.

⁸¹ Calculated on the basis of n.76, p. 602.

Nigeria: Natural Population Growth Rate		
Year	Crude birth rate /1000	Crude death rate /1000
1960-65	48.4	24.2
1965-70	47.8	22.3
1970-75	47.6	20.6
1975-80	47.8	19
1980-85	47.5	17.4
1985-90	45.9	16
1990-95	44	15
1995-2000	41.7	14.1



Data Source: Based on *World population prospect: The 2000 Revision* (New York: UN Publications) vol.1, table-A.11, p.495& table-A.27, p.602

Fig-7

In conclusion we find that the Nigerian socio-economic and demographic structure contains a high degree of accommodative nature of population growth. Population growth as it has appeared now is still proved to be the assets as human resource – which can strengthen the developmental and infrastrucural status to surplus production. The developmental pattern is needed with basic charges in the system, which could focus the society and people at large. Nigeria needs a shift in orientation from market production to socio welfare production. For that the development debate is to be related with population and its necessary role in developmental process rather accusing Nigeria of population growth for underdevelopment.

Chapter III
Nigeria:
Population Related Developmental Issues

CHAPTER - III

NIGERIA: POPULATION RELATED DEVELOPMENTAL ISSUES

Despite endowed with adequate natural and human resources, Nigeria is ranked by the World Bank as a low-income country, and is among the 20 poorest countries in the world on the basis of per capita income.¹ Nigeria is placed at the 136th spot among 162 nations, according to human development index. Eventhough her human development index value has improved from 0.322 in 1975² to 0.455³ in 1999, its position is way behind other developing countries except a few. Hence, Nigeria is considered, as a low human development status country.

International comparisons clearly indicate that, poor countries have higher population growth rates than rich countries. It has always been correlated that, high population growth neutralises developmental process of these countries and make them poor. The major developmental issues which are correlated with population growth are: economic development; rural-urban migration and its impact on urban development; Agricultural development and food supply; poverty and food security; social development and human resource development, particularly, with the help of education; health facilities and sustainable development. In general, where most of the countries of Sub Saharan Africa have

¹ Linda V. Buren, "Economy" in *Africa South of the Sahara 2001* (London: Europa, 2000), p. 830.

² *Human Development Report 1999*, (New York, NY: Oxford University Press) table - 6, p. 53.

been witnessing galloping population growth. Nigeria; which is experiencing sharp population growth rate along with her status of the most populous country of Africa, in particular are said to be lacking in development because of sharp population growth rates.

Economic Development

For almost a decade and half, most of the countries of Sub-Saharan regions have witnessed economic stagnation and declining living standards. According to the World Bank, more than half of the Sub-Saharan African population is in categories where, the GDP per head is less than \$400.⁴ However, Nigeria's per capita GDP, according to purchasing power parity in 1999, was \$853,⁵ slightly better than the category formed by the World Bank. In 1996, according to government estimates, Nigeria's gross national product (GNP), measured at constant 1994 price, was US \$31,651 million, equivalent to \$279 per head,⁶ and later it increased marginally in 1997 to \$280 per head.⁷ During 1985-95, it was estimated, that GNP per head increased in its real terms at an average annual rate of 1.2 percent, while the population increased by an annual average of 2.9 percent. Nigeria's gross domestic product (GDP) increased, in its real terms by an annual average of 1.6 percent during 1990-95, by 2.2 percent in 1996 and

³ *Human Development Report 2001*, (New York, NY: Oxford University Press, 2001), table - 1, p. 143.

⁴ Harjinder Singh, "Economic Crisis in Sub-Saharan Africa", *Africa Quarterly* (New Delhi), vol. 26, pp. 2-4.

⁵ See n.3, table-1, p. 143.

⁶ See n.1, p. 830.

⁷ *World Development Indicators 1999*, (Washington DC: WB Press), table -1, p. 145.

by an estimated 3.8 percent in 1997.⁸ In 1905 the GDP of Nigeria in real terms was US \$4.19 billion than it improved to US \$93.08 billion in 1980 and then declined to US \$64.57 billion in 1983⁹ to US \$40.47 billion in 1995¹⁰, ultimately falling to US \$35.0 billion in 1997.¹¹ This shows upward trend of GDP in Nigeria till 1980. After that it has been regularly declining. As far as GDP per capita is concerned it was maximum in the year 1997, at US \$1,122 per capita. GDP per capita annual growth rate during 1975-99 was 0.8 percent, a marginal improvement of to 0.5 percent during last decade.¹² During 1960-75 annual growth of GDP was more than 5 percent and per capita GDP growth rate was 3.0 percent. For market price annual average growth rate of total and per capita real GDP (please refer to the table given below).

Year	Annual Average growth Total real GDP	At market price (percent) per capita
1970-75	5.7	3.0
1975-80	3.3	0.5
1980-85	-1.9	-5.6
1985-90	5.3	2.3
1990-95	2.6	-0.4

Source: *UNCTAD Hand Book of International Trade and Development Statistics 1996-97*, (New York, NY: UN Publication, 1999). table 6.2, p. 326.

Urbanisation and Urban Development

One of the most significant post – Second World War demographic phenomenon, which promises to loom even in the future, is the rapid growth of cities in developing countries. In 1950, some 275 million people were living in

⁸ n.1, p. 830.

⁹ See *World Development Indicator 1985*, (Washington, DC: WB Press), table-3, p. 178

¹⁰ See *World Development Indicator 1997*, op.cit., table 4.2, p. 135.

¹¹ See n.1, table - 11, p. 180.

third world cities, 38 percent of the 724 million total urban population. According to United Nations estimates, World's urban population had reached 203 billion by 1990, with 61 percent (1.4 billion) living in metropolitan areas of developing countries.¹³ Africa is an example of high growth of urbanisation during last four decades, and during the same period Nigeria has witnessed phenomenal growth of urbanisation. Even though, urban life has a long history in Nigeria, with centres of population such as, Kano, Zaria, Ife and Benin dating from Middle ages; recent economic development has stimulated considerable rural-urban migration and led to the sharp growth of such cities as, Lagos, Ibadan, Kaduna and Post Harcourt.¹⁴ According to 1963 population census, only 19 percent of population was living in urban centres.¹⁵ In 1975, 23.5 percent of total population resided in urban region and in 1999 as much as 43.1 percent of total population lived in urban regions.¹⁶ Urban population growth of Nigeria is alarming during the last three decades and the annual urban population growth rate had been always more than 5 percent except during the last five years, where it was just below 5 percent.¹⁷

United Nations has estimated urban population for 2000 in different parts of the world, twice in 1980 and 1996. In the 1980's estimates, it has overestimated

¹² See *ibid.*

¹³ M.P. Todaro, "Urbanisation, Unemployment and migration in Africa: Theory and Policy", In Dharam Ghai (ed.), *Renewing Social and Economic Progress in Africa*, (Haundmills: Macmillan Press, 2000), p. 62.

¹⁴ A.L. Mobogunje, "Physical and Social Geography", In *Africa South of the Sahara*, *op.cit.*, p. 819.

¹⁵ A. A. Afolayam, "Population", "In J.S. Oguntoyinbo, O. O. Areola and M. Filoni (eds.), *A Geography of Nigerian Development* (Ibadan: Heinmann, 1978), p. 118.

¹⁶ See n.3, p. 156.

urban population of all the regions, except a few, which were later adjusted downward in 1996. However, Western Africa was among those regions, where urban population estimation was altered upwardly. Hence, Western Africa's urban population growth has been more than United Nations estimates unlike other region. Nigeria represents properly, the mode of urbanisation in Western Africa. In 1980 UN estimated the urban population of Nigeria for 2000 as 45.04 million which was later revised to 55.56 million in 1996. The revision shows 25.8 percent upward alteration in the urban population of Nigeria.¹⁸ The alteration is as much as 198.5 percent in Lagos city, which is the biggest among all cities of the World.

The pace of urbanisation is not uniformed in every part of Nigeria. Certain urban centres of Nigeria attracted more urban population than the rest of urban centres. Among those states, which attracted major chunk of urban population, Lagos, Oyo, Osun, Edo, Ogun and Ondo are situated in the southwest of country and Anambara, Enugu and Abia are located in south-eastern part of the country. Out of a total of 359 urban centres of Nigeria 125 are located in southeast and 102 are located in south western region of Nigeria.¹⁹ Hence Southwestern and Southeastern part of Nigeria are highly urbanized unlike other parts of the country. The level of urbanisation in Lagos state is as much as 93.69 percent.²⁰

¹⁷ See *African Statistical Year Book 1996*, (New York, NY: UN Publications), vol. 1, part 2, p. 2.19.2.

¹⁸ M. Brockerhoff, "Urban Growth in Developing Countries: A review of projection and predictions", *Population and Development Review*, (New York), vol. 25 (4), Dec. 1999, p. 761.

¹⁹ Interpreted on the basis of Nigerian population census 1999 cited In M.O. Lawal, Environment Technological Development and Women in Nigeria", *Geographical Review of India* (Calcutta) vol. 63 (2), June 2001, p. 187.

²⁰ *ibid.*, p. 187.

which is very high considering the fact that the level of industrialisation in Nigeria is not very high, and also it is a third world country.

The rapid growth of urbanisation with low level of urban development and urban planning, created a chaotic situation in most urban centers of Nigeria. The problems and challenges posed by rapid urbanisation in the country are immense. Among these are, inadequate shelter resulting in over crowding, inadequate and inefficient transportation systems, poor infrastructure facilities and services, development of slum areas in cities such as Lagos, Ibadan and Port Harcourt and poor environmental conditions. These problems can be summerised under four headings, i.e., unemployment, lack of serviceability, manageability and livability. Rapid population growth of Nigeria in general and galloping urbanisation growth rate in particular are blamed for these evils.

The rapid urbanisation in Nigeria rather than natural urban migration, alone accounts for about 75 percent of the population growth of Lagos.²¹ In Nigeria as much as 64 percent of the total urban growth is the result of rural-urban migration.²² So urbanisation cannot be deal in isolation. It is closely associated with rural development and rural-urban migration.

The government of Nigeria has adopted a number of urban development programmes to overcome the ill-effects of urbanisation. Problem of settlement is most severe in urban areas of Nigeria, therefore efforts have been made to

²¹ Accessed over internet, <http://www.altapedia.com/online/countries/Nigeria.htm>.

²² Based on K. Newland, "City Limits: Emerging constrains on urban growth" World Watch paper 38, World Watch, Washington, DC, 1980, p. 10 as cited in M.P. Tadaro, "Urbanisation, Unemployment and Migration in Africa: Theory and Policy", Dharam Ghai (ed.), op.cit., p. 66.

provide land requirement for human settlement development. The 1978 Land Use Act was important for addressing the problem of settlement. This act has been revised recently. Also, the Nigerian Urban and Regional Planning Law was promulgated in 1992 to regulate and guide spatial planning at all levels of government. Earlier the National Housing Policy was formulated and launched in 1991. The document outlines policies and strategies, to provide decent housing for all by the year 2000. Urban development policy was formulated in 1992 to provide guidelines for urban development and management.²³ For this purpose an Urban Development Bank was also established. The Federal Housing authority started the national housing programme in the year 1994. The objective of this programme is to produce 121,000 housing units for low, medium and high-income earners. So far 600 housing are being constructed in Lagos, Kaduna, Port Harcourt, Jos, kano and Lafia.²⁴

Besides these programmes, a number of efforts are being made to achieve the goal of improving urban management with the help of various international organisations like United Nations for Human Settlement, World Bank, United Nation Development Programme (UNDP), UNICEF etc. One of such programmes is, Sustainable Cities Programme (SCP) under which projects have been commenced in Ibadan, Kano and Enugu. The local governments, NGOs, community based organisations and private individuals are also encouraged to participate in these kind of programmes. Another landmark development

²³ Based on *UN report on Nigeria*, taken from
<http://www.un.org/esa/agenda21/natlinfo/countr/Nigeria/social.htm>.

²⁴ *ibid.*

programme targetting most low income families in cities, initiated by the then first lady Mrs. Maryam Sani Abacha in 1986, was Family Support Programme (FSP).²⁵

Despite these efforts the level of urban development in Nigeria is very low and most of Nigerian urban centres are confronting the problem of unemployment, lack of serviceability, manageability, and livability.

Rural Development and Rural-Urban Migration

Inter and Intra national migration is a common demographic feature of African countries. Broadly, every sort of migration is found in Sub-Saharan Africa. Nigeria is not an exception of this phenomenon. On the one hand, a large number of highly qualified people are leaving African continent in search of job. However, Rural-urban migration inside Nigeria is also very prominent. Even though, causes of the migration are numerous and needed a separate treatment, Increasing migration causes deteriorating urban conditions on one hand, it creates shortage of labour and diminishing productivity in rural areas on the other. The migration process started in the colonial period, when British encouraged movement of people to area of commercial crops, minerals etc. The post independence migration has not been only voluntary, but also unwanted. The migration pattern in post 1960 Nigeria has been guided by several factors. One of them is creation of new states; These new state capitals served as important growth center, in which, not only state secretariat but also a number of federal

²⁵ *ibid.*

department have been established.²⁶ These capital towns are also industrial centres. Another important driving force of migration has been persistent political turmoil in Nigeria. Nevertheless, the most important factor is urban-rural disparity. However, it is always argued that, high population growth in rural areas creates a situation where migration becomes inevitable. The rural population growth in Nigeria during last fifteen years was near 1.5 percent. It was 1.65 percent during 1985-90, 1.55 percent during 1990-95 and 1.32 percent during 1995-2000.

It is an inconvertible fact that majority of Nigeria's over 100 million dwell in rural areas of the country. Yet, the condition of rural regions are precarious. In the rural areas, per capita income is ridiculously low, as a result of their low productivity. The low level of productivity emanates mainly from poor infrastructures, poor transportation, poor road network, low standard inhabitable shelter, with thatched leaves, without electricity and water and other infrastructure.²⁷ Despite relatively low level of urban development in Nigeria, urban regions are endowed with better facilities, Such as basic infrastructure better accommodation, fat annual wages, better roads, better health facilities, proximity to education, adequate pubs, club houses, recreation centers, telephones, electricity, piped water, communication, post office and banking services, vis-à-vis their rural counterparts. The low level of rural development encourages exodus of rural population towards urban centres which in turn

²⁶ R. K. Udo, "Internal Migration and Development", In J.S. Oguntoyinbo, et.al. (eds.), op.cit., p. 127.

²⁷ M.O. Lawal, "Rural Development in Nigeria", *Geographical Review of India (Calcutta)*, vol. 59, no. 3, Sept. 1997, p. 232.

creates a situation where, there is a shortage of labour in the agricultural sector of rural areas causing low supply of food for the urban dwellers.

Actually in the rural areas majority of the people practice agriculture, per capita income is very low which restricts people to subsistence level existence without any savings.²⁸ The housing condition is deplorable, education facilities are unavailable, people have to travel miles to claim basic health facilities. The birth rate is very high which emanates from high mortality rates and low life expectancy.

Precarious situation of rural areas is aggravated due to a long spell of neglect of the region, first by British colonial master during first half of twentieth century and later by urban biased policy makers during last four decades. Nevertheless, last two decades witnessed efforts to improve rural environment. After realising the wide disparities in development levels of the rural and urban communities, a number of attempts have been made through various development schemes to reduce the gap. Although rural development programmes like, "School to Land Programme" for school leavers', operation feed the nation (OFN), River Basic Development Authorities and the Agricultural Development programmes (ADP), have been adopted earlier but their impacts were not felt to rural development. The real milestone of rural development was establishment of the Directorate of Food, Roads and Rural Infrastructures (DFRRI) on February 7, 1986. The most important contribution of DFRRI in the rural development is its success in identifying the age long problems of the rural areas in the area of

²⁸ *ibid.*, p. 236.

agriculture, infrastructure such as piped water, road, agriculture and providing solution to solve these problems.²⁹ The advent of DFRRI has heralded the rapid opening of the rural areas through the construction of road networks, particularly feeder roads in the rural areas which are meant to provide easy access to the food producing basket of the rural areas. It has also contributed in educational development of rural regions, in improving loan and credit facilities, and above all, in improving the level of awareness among the rural population.

At the same time, a number of non-governmental organisations (NGOs) are involved in the rural development programmes. The Nigerian Integrated Rural Accelerated Development Organisation (NIRADO) is a voluntary, non-sectarian, non-profit and non-governmental organisation formed in 1989 for this purpose. Through a programme titled Annual Local Planning and Facilitators Training, (NIRADO) has worked with 195 community based organisations in 13 states of the federation and promoted the use of participatory technology among development participators.³⁰

Despite these rural development efforts, rural areas of Nigeria are still in chaotic situation and for proper development of Nigeria these regions have to improve drastically. Another issue of rural development related to population growth, is agricultural development. The agricultural development, particularly for improving production of food crops, became much more important because of traditional debate that galloping population growth will create a situation where

²⁹ *ibid.*, p. 235.

³⁰ <http://www.icaworld.org/nigeria/>

per capita food availability would be nose dived.

Agricultural Development and Food Availability

Till 1965, agriculture was the main contributor to Nigerian economy. But after phenomenal expansion in the petroleum sector of the country and neglect by successive governments, the agricultural production growth declined sharply. As far as agricultural growth rate is concerned, after experiencing growth rates of 10 percent per annum during the early 1970s, the increase in agricultural production declined to around 4 percent per annum towards the end of the decade.³¹ The decline was much more severe during 1980s, when declined by 9.4 percent in 1983. However, it improved during 1990s mainly due to a succession of good harvests, higher production prices and resurgence of public and private investment in crop production. In 1997 agriculture contributed an estimated 45 percent of GDP and employed 36.1 percent of total labour force.³²

Qualitatively, the agricultural population of Nigeria can be broken down into the following categories.

- Subsistence farmers and simple farmers, they are practicing pre-European Agriculture techniques.
- Subsistence-cum-cash crop farmers. They produce not only for their subsistence and that of their dependents but also for the world and domestic markets.

³¹ n. 1, p. 831.

³² *ibid.*, p. 831.

- Subsistence farmer-cum-trade. They have one foot in subsistence farming and other in economic activities outside agriculture.
- Cash crop farmers-cum-trade. They have one foot in cash crop farming and the other in economic activities outside agriculture.
- Cash crop farmers pure and simple.³³

Food crops are grown mainly by first, categories and by second and third categories in small amount. They mainly adopt traditional farming techniques and have small holding.³⁴ Traditional small holding farmers, who use simple techniques of production and the bush-fallow system of cultivation, account for around two-thirds of Nigeria's total agricultural production.³⁵ Secondly, subsistence food crops are grown mainly in limited geographical region i.e. in the central and western areas of Nigeria and are traded largely outside the cash economy.

The diffusion of the use of technology in agriculture sector has been very low in Nigeria. In 1961-65 only 660 tractors were used in agriculture³⁶, in 1975 it rose to 7,500 tractors,³⁷ further increased to 11,500 in 1990.³⁸ The use of tractor per hectare of arable and permanently cropped land was only 0.1 in 1970, which

³³ M. Igbozurike, *Problem Generating Structures in Nigeria's Rural Development* (Uppsala: The Scandanian Institute of African Studies Press, 1976), p. 45

³⁴ S.I. Abumere, "Traditional Agriculture systems and staple food Production", In J.S. Oguntoyinbo, et.al (eds.), op.cit., p. 208.

³⁵ See *UN Statistical Year Book 1997* (New York, NY: UN Publications, 2000), table 25, p. 100.

³⁶ See *UN Statistical Year Book 1979* (New York, NY: UN Publications, 1982) table 25, p. 98.

³⁷ See *UN Statistical Year Book 1994* (New York, NY: UN Publications, 1996) table 46, p. 451.

³⁸ The analysis is based on n.3, table A2.3, p. 58.

increased marginally to 1.0 in 1998, which is very low in comparison with even other developing countries, like India where the ratio is 9.1.³⁹ Similarly, use of fertilizer in agriculture in general and in food crops in particular is very low; in 1970 0.2 kg fertilizer was consumed per hectare of arable and permanently cropped land, and it increased to 6.1 kg by 1998. Still it is very low in comparison with other developing countries. For example in India, it is about 100 kg per hectare. Low production of fertilizer in Nigeria could be one of the reason. In 1997-98 the production of Nitrogenous fertilizer in Nigeria was 41.2 thousand tons and of phosphate fertilizer 5.0 thousand tons in comparison with their respective consumption of 77.1 and 21.4 thousand tons.⁴⁰

The total food production of Nigeria in 1960 was 32.559 million tons and in 1970 it was 39.06 million tons in which main cereals like sorghum, millet, maize, rice, wheat etc. constitute 7.278 million tons and 8.84 million tons respectively.⁴¹ Cereals production during 1980s declined before recovering by late 1980s. The cereal production in 1989-91 was 18.10 million tons and in 1999 it was 23.23 million tons.⁴² Total food production during this phase improved drastically. The food production indices were 94.7 and 156.0 in 1990 and 1999 respectively.⁴³

On the basis of food crop production, the nutrients available per capita per day from the food crop amounted to some 2013 kilo calories and 46.35 grams of

³⁹ The analysis is based on *ibid.*

⁴⁰ The analysis is based on n. 35, table 42, p. 404.

⁴¹ Calculated on the basis of n.34, p. 215-17.

⁴² Based on *FAO Year Book 1999* (Rome: FAO Publications, 2000), vol. 53, table 15, p. 67.

⁴³ Based on *ibid.* table 4, p. 35 (calculated on the basis of base year 1989-91 = 100)

proteins in 1960.⁴⁴ In 1966-68 calories per capita per day was 2189 kilo calories which increased to 3327.4 kilo calories in 1993-95, similarly proteins availability per day were 50.6 grams, 105.8 grams and 617 grams during these years respectively.⁴⁵ (Please refer to fig. 8)

This shows that per capita food availability improved till 1980 despite high population growth rate and then declined partially before improving in 1990s. The Nigerian government has adopted a number of development programmes in agriculture field in general and in food crops production in particular. The number of programmes introduced during the last two decades, recognised dire need of improvement in this area; particularly under the auspices of Ministry of Water Resources and Rural Development. Important among them are, Formulation of irrigation policy, Nation wide River Basins irrigation Planning Study, Survey and Inventory of Irrigation projects in Nigeria, Agricultural Land Resource Programme, National Seed Service (NSS) programme, Agricultural Finance Programme, Establishment of the Federal Agricultural Coordination Unit (FACU), establishment of the National Agricultural Research project (NARP) and the establishment of the National Agricultural Land Development Authority (NALDA).⁴⁶ The adaptation of these programmes resulted in increased food crops production in Nigeria during the last two decades.

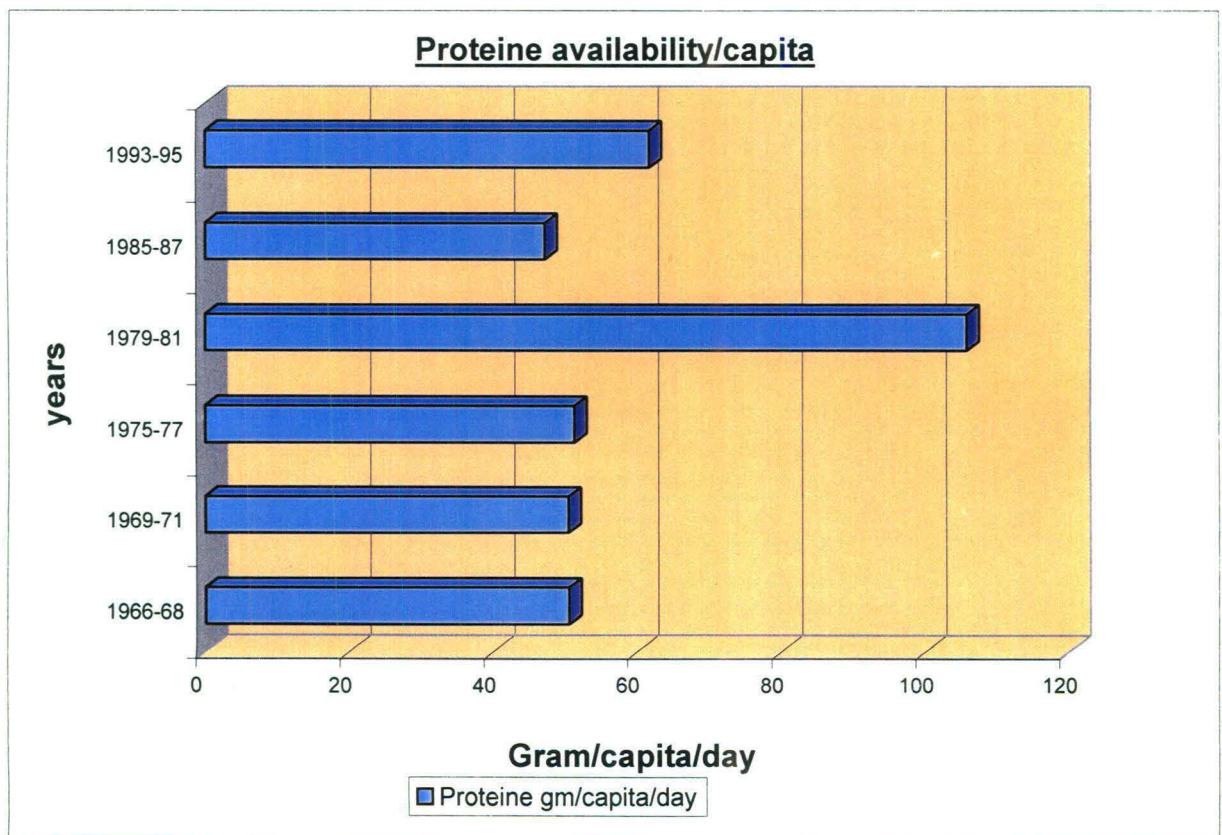
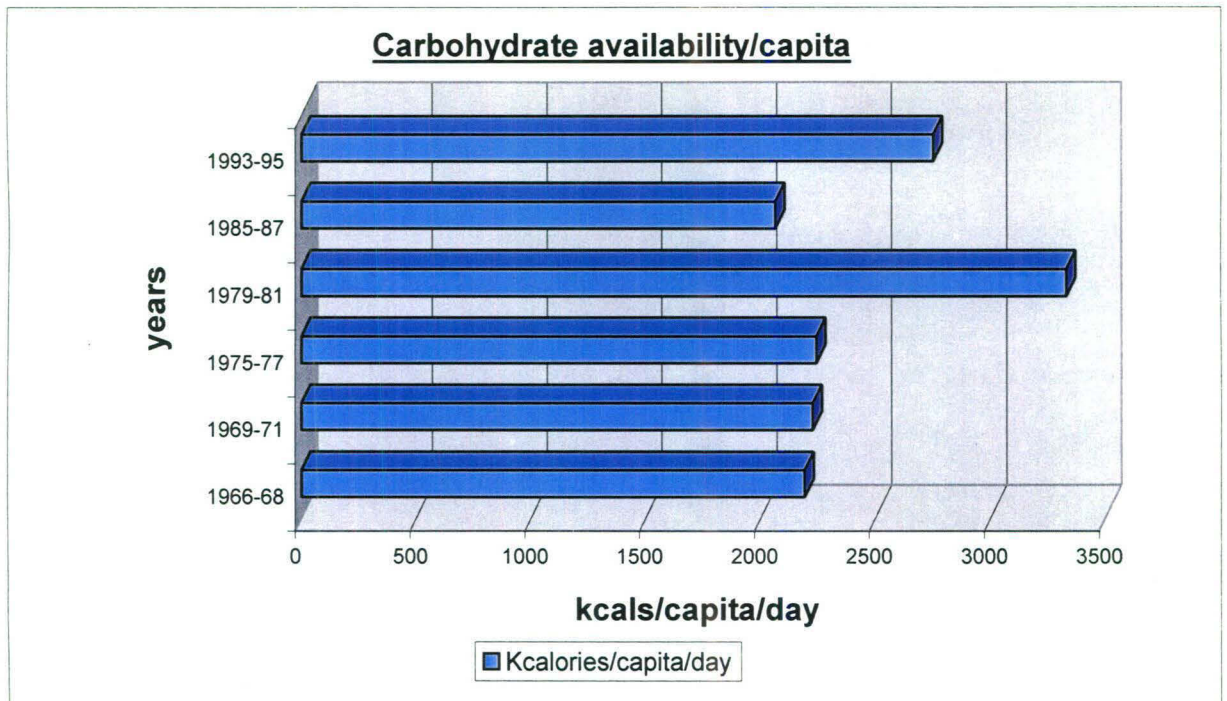
⁴⁴ n.34, p. 214.

⁴⁵ On the basis of *UN Statistical Year Books; 1982*, table – 96, p. 567, 1987, table – 77, p. 411, 1997, table – 14, p. 102.

⁴⁶ Based on the report of UN, access on <http://www.un.org/esa/agenda21/natlinfo/counter/Nigeria/natur.htm>.

Nigeria :Food Supply

Year	1966-68	1969-71	1975-77	1979-81	1985-87	1993-95
Kcalories/capita/day	2189	2225	2241	3327.4	2062.8	2749.6
Proteine gm/capita/day	50.6	50.5	51.3	105.8	47.2	61.7



Data Source:baesd on *UN Statistical Year Books* ;(New York: UN Publications) ;
1982,table-96,p.567;1987,table-77,p.411;1997,table-14,p.102

Fig- 8

Social Development

Poverty

Poverty alleviation has been the top priority of development endeavors over many years. Yet, despite the fact that a big progress has been made in improving living standards in almost all developing countries, more than 1.2 billion people in developing world still live on less than \$1 a day (1993 PPP US \$) and 2.8 billion on less than 2 a day.⁴⁷ That means about 26 percent of total population in developing countries live below the poverty line. Relative poverty has also increased. Over the past 15 years the world has seen spectacular economic advances for some countries and unprecedented decline for others. The gap in per capita income between the industrial and developing countries tripled from US \$5,700 in 1960 to US \$15,400 in 1993.⁴⁸

Poverty situation in Nigeria is even worse. In 1997, 70.2 percent of the total population was living below US \$ 1 a day increase and 90.8 percent below US \$ 2 a day.⁴⁹ According to national poverty line in 1985, 43.0 percent of the total population out of which, 49.5 percent of rural population and 31.7 percent of urban population was living below poverty line. The situation improved marginally in 1992-93, when out of 34.1 percent of total, with 36.4 percent of rural and 30.4 percent of urban population was under poverty line.⁵⁰ The situation of relative poverty in Nigeria has been equally disappointing. In 1992-93 lowest

⁴⁷ n.3 p. 9.

⁴⁸ *Human Development Report 1996* (New York, NY: Oxford University Press), p. 8.

⁴⁹ See *World Development Indicators 2000*, (Washington DC: WB Press) table 2.7, p. 63.

⁵⁰ *ibid.*, table 2.7, p. 63.

10 percent of population had control over 1.3 percent of total income or consumption, even lowest 20 percent had control over only 4.0 percent of total income or consumption. At the other hand highest 10 percent had control over 31.4 percent and highest 20 percent had control over 49.4 percent of total income or consumption.⁵¹

By the end of 1993, the World Bank (WB) completed poverty assessment of 28 countries, 18 of them were from Sub Saharan Africa. Surprisingly Nigeria was not one of the countries. It does not mean that Nigeria is not struggling with poverty. The main cause of inability of WB to deal with the issue may be the absence of relevant statistical materials in Nigeria. However, a greater percentage of Nigerians were in poverty in 1983-84 than previously. Thereafter, the level of poverty became worse. At 1983 prices, 50.7 percent of urban population was below the poverty line in 1975 which further rose to 64.4 percent in 1983-84.⁵²

Employment

The emphasis on full employment, as perhaps the main objective of economic policy had only in late 1960s been extended to developing countries. Earlier it was thought that the unemployment was a characteristic only of industrial countries.

In Nigeria the number of unemployed has been increasing since 1970. Only phase of decline, as far as number of unemployed are concern was 1960s. In

⁵¹ See *World Development Indicator 1998* (Washington DC: WB Press) p. 109.

⁵² Felix E. Onah, "Measuring an Monitoring Urban and Rural Poverty in Nigeria", In Apollo Rwomire (ed.), *Social Problem in Africa* (Westport: Praeger Publication, 2001), p. 120.

1963 the number of unemployed were 16.3 million⁵³ it decreased to 13.5 million in 1970.⁵⁴ During 1970-75 the number of unemployed increased about by 5 million mainly because of decline in agriculture sector. Later it declined to 16.9 million in 1980⁵⁵ and than upward trends continued. (Please refer to the table given below).

Number of unemployed (in million)

1963	16.8
1965	20.9
1970	13.5
1975	20.5
1980	16.9
1985	28.3
1990	57.1
1993	68.6

Source: Compiles on the basis of *UN Statistical Year Books*, 1974, table 22, p. 91; 1976, table 22, p. 90; 1982, table 22, p. 95, 1987, table 17, p. 91; and 1992, table 31, p. 311.

Education and Human Resource Development

Demands better education has been a standard accompaniment of the development process in all post - colonial societies, and in this respect Nigeria is certainly no exception. There is a real asymmetry between what is called 'human capital' (such as education, skill, good health etc.) and "physical capital". The constituents of human capital, which are parts of human lives, can be valued for their own sake - above and beyond their instrumental importance as factor of

⁵³ See *UN Statistical Year Book 1974* (New York, NY: UN Publications, 1977) table 22, p. 91.

⁵⁴ See *UN Statistical Year Book 1982* (New York, NY: UN Publications, 1985) table 22, p. 95.

⁵⁵ *ibid.*

production.⁵⁶ At the one hand it is argued that education would enable people to perform their social role, hence would make them obey strict family planning, and in turn would control population growth. At the same time it has also been emphasised that sharp population growth is a major hurdle in providing universal education to third world countries.

In recognition of the critical role of education and training, Nigerian government since independence adopted policies, plans and budgets for the attainment of desired objectives in the sector. In the 1969 National Curriculum Conference it was announced that, education should be made priority number one in the development plan. After independence, British-colonial pattern of education continued for more than a decade. At that time one of the problems in Nigeria had been educational diversity from state to state. In most of southern Nigeria, the educational system was based upon a 6-5-2-3 year plan,⁵⁷ i.e., six year's primary education, five year's secondary, two year's higher school certificate course and three year's degree course. The secondary education was neither free nor compulsory.

However, the Federal government in 1977 formulated the first national policy on education (NPE) and this was revised in 1981 and 1991. It is popularly referred to as the 6-3-3-4- system and marked a radical departure from the British system of education. Basically, it adopted the American system of 6 years of primary education, 3 years of junior secondary school, 3 years of senior

⁵⁶ Jean Dreze and Amartya Sen, *India: Economic Development and Social Opportunity* (New Delhi: Oxford India Press, 1995), p. 43.

⁵⁷ Guy Arnold, *Modern Nigeria* (London: Longman, 1987), p. 104.

secondary school, and 4 years of university education. Primary education being made free but not compulsory.⁵⁸ A major emphasis in the National Primary Education (NPE) is the teaching of pre-vocational subject to all students at the junior secondary level. The national Universal Primary Education (UPE) scheme, which made primary education free and compulsory, was launched in 1976. But the financing burden of implementation of the scheme on the federal government became onerous and the responsibility was transferred to state and local government such that by 1981, federal government funding on primary education was completely phased out. In September 2000, the Universal Basic Education (UBE) was started to provide universal free and compulsory education to every Nigerian child of school age, up to secondary school level. Another education programme Mass Literacy Programme (MLP), which is for adult education, is expected to operate parallel with the UBE.

During 1993-94 Academic year, there were 38,254 primary schools, 5959 secondary schools, 55 colleges of education, 45 polytechnics and college of technology and 35 universities in Nigeria.⁵⁹ The number of universities later rose to 41 in 2000.⁶⁰ Though some critics consider these numbers inadequate for a country of over 100 million people, the number of institutions represents a phenomenal rate of expansion of the education system between 1960 and 1993. Indeed, at independence there was only one university college, one college of technology and no colleges of education, and 443 secondary schools.

⁵⁸ Cordelia C. Nwagwu, "The Environment of Crisis in the Nigerian Education System", *Comparative Education* (London) vol. 33, no.1, 1997, p. 87.

⁵⁹ *ibid.*, p. 88.

⁶⁰ *Federal Ministry of Education, Lagos.*

In 1960 less than 20 percent of total population was literate⁶¹ and it increased to 64.1 percent in 2000.⁶² Between 1965-82 number enrolled in primary school as percentage of appropriate age group improved drastically from 32 to 98.⁶³ But major cause of concern was dismal enrollment ratio in secondary and higher education. It was only 16 percent and 3 percent in 1982.⁶⁴ Hence, it can be noticed that the education system has developed quantitatively but it lacks many of the ingredients needed for qualitative growth. However, in the education arena Nigeria has performed well vis-à-vis most of the African countries.

Health Facilities

Health is another important development issue which has two way relationship with population growth rate. At the one hand it is argued that poor health facilities in developing countries emanate from sharp population growth rate. At the same time it is an established fact that sound health facilities along with good education system halt the galloping population growth and improve human resource development process.

As far as health conditions in Nigeria are concerned, it is less than satisfactory. There has been unacceptably, high maternal mortality rate of 800-1500 per 100,000 and child mortality has been estimated as 100-144 per 1,000 live births.⁶⁵ The Pandemic like HIV/AIDS has emerged as the main challenge to

⁶¹ n. 57, p. 103.

⁶² See *UNESCO Statistical Year Book 1999*, (Paris: UNESCO Publication, 1999) table II-2, p. II-2.

⁶³ See n. 9, p. 222.

⁶⁴ *ibid.*

⁶⁵ See Statement delivered by A. E. Osio, Head of Permanent Mission of Nigeria to the United Nations in the 21st Special Session of the UN General Assembly, New York, July 1, 1999.

development in Nigeria. Although Nigeria's 5.8 percent HIV prevalence rate, reported in a November 2001 government of Nigeria Sentinel Survey, is relatively low compared to other African countries. The United Nations has ranked Nigeria as the fourth worst affected country in the world in 1999 based on the number of HIV infections. In the country about 8 percent of the total population in 1996/98 was under nourished, in 1995-2000 31 percent of the total children under 5 year age group were under weight and 593 per 100,000 people in 1997 were suffering from Malaria cases.⁶⁶ Life expectancy at birth during 1995 - 2000 was at a low of 51.3 years, even though it improved from 1970-75, when it was only 44 years.⁶⁷ However, in the other health area Nigeria has improved substantially. In fact Infant Mortality Rate (IMR) was estimated at 177 out of 1,000 children born in 1968. That figure fell to 119 in 1990 and 77 in 2000. This decline is positive sign but by comparing the IMR of Nigeria to other countries in Africa (56 in Ghana, 45 in South Africa), it is evident that she needs to increase the quality of medical treatment available to expectant mothers.⁶⁸

Basic facilities in Nigeria are not adequate, in 1998 only 49 percent of total population had access to safe drinking water and only 5 percent of total population was enjoying adequate sanitation facilities.⁶⁹ Health facilities has also been insufficient. Population per physician has been very high, it was estimated at

⁶⁶ n.3, table 7, p. 164.

⁶⁷ See *ibid.*, Table 8, p. 168.

⁶⁸ Accessed over internet <http://www.prcnj.org>.

⁶⁹ See *UNCTAD Hand Book of Statistics 2000* (New York, NY: UN Publications, 2000), table 6.4, p. 322.

5208 in 1998⁷⁰ and was 25,548 in 1972⁷¹ and 9,591 in 1980.⁷² There were 61,628 Beds available in various hospitals and population per bed was 1251⁷³ which is slight better as compared to 1972, when it was only 1378.⁷⁴

Though health facilities in Nigeria are not sufficient and need to be developed much more, her health facilities has improved since independence. Despite sharp population growth, above given figure support the fact that Nigeria has done well in this particular area. This is the result of continuous efforts by various government agencies. Actually, health care and health delivery programmes have become major source of concern in the post independence Nigeria. In the recent past improved fertility, better health, increased life expectancy and population control are being pursued as mutually compatible programme in Nigeria.

Population Policies and Family Planning

Most of developing countries, except a few like India, did not have clear population policy till 1974. Similarly in Africa till 1974 only Mauritius (1958), Kenya (1967) and Ghana (1969) had formulated national population policies primarily to reduce fertility. However, Kenya was the first Sub-Saharan country to adopt an official family planning in 1967, but the programme had received

⁷⁰ ibid.

⁷¹ *UN Statistical Year Book 1974* (New York, NY: UN Publications, 1977), table 203, p. 781.

⁷² n. 45, table 53, p. 335.

⁷³ ibid.

⁷⁴ n. 71, p. 781.

substantial financial support only during the third five-year plan (1975-1979).⁷⁵ Yet it received little support domestically. Although the emerging independent African government during pre 1974 period perceived rapid growth of population as a problem, few adopted a formal population policy. In Nigeria the ever first step targeted to deaccelerate population growth was adopted in the form of maternal-child health and family planning programme during 1970s. Although this integrated programme fostered the pulling of funds, strengthened supervision and enhanced better use of facilities, but this was made handicapped by the lack of infrastructure and personnel, were concentrated on women and located mostly in urban areas. The second generation of population policies in African countries, derived considerable impetus and momentum from three major developments during the 1974-94 period: the adoption of the world Population Plan of Action (WPPA) at Bucharest (1974); the adoption of the Kilimanjaro programme of Action (KPA) at the second African Population Conference (APC2: Arusha 1984); and the adoption of the Dakar Ngor Declaration (DND) at the Third African Population Conference (APC3: Dakar, 1992).

After Bucharest summit the attitudes of governments of some Sub-Saharan African countries are beginning to change. At the Bucharest summit it was recognised for the first time that population growth was itself an outcome of underdevelopment. At the UN International Population Conference, Mexico, certain governments affirmed support for family planning and Kenya, Nigeria and

⁷⁵ Mary Jo Huth, "Population Prospect for Sub-Saharan Africa: Determinants, Consequence and Policy", *Journal of Contemporary African Studies* (Pretoria) vol. 5, (1-2), April/October 1986, p. 178.

Ghana took a lead in obtaining international assistance for their family planning programmes.⁷⁶ By the end of 1984, the Nigerian government decided that something had to be done about the high rate of population growth. The task was assigned to the Ministry of Health.

A policy was drafted and approved by the larger Inter-ministerial consultative committee by the middle of 1985. A politically necessary process of regional review of the draft policy, as well as internal debate within the government prevented policy from being officially adopted until February 1988. In the interim, the National Population Bureau and other groups developed an extensive awareness campaign in the states on population and development, organised institutional structures for implementation of the policy, formulated a National Family Planning Action Plan and organised state and local government authority plans for family planning services delivery.

The National Policy on population for development, unity, progress and self - reliance, like similar documents, includes section on mortality, youth, women's status, population distribution and other basic issues. A fundamental goal of the policy is to achieve lower population growth rates that are compatible with the attainment of national social goals. Lower growth rates are to be achieved by reducing birth rates through voluntary family planning.⁷⁷ Nigeria has drawn up a national population policy and allocated sufficient amount for the implementation of its population targets. It includes family planning as an

⁷⁶ Peter Dodds, "Family Planning in Africa", *Africa Insight* (Johannesburgh), vol. 15 (4), 1985, p. 257.

⁷⁷ Thomas J. Goliber, "Africa's Expanding Population: Old Problems, new Policies", *Population Bulletin*.

essential element. The government launched a programmed in 1988, to reduce population growth rate to 2.5 percent by the year 2000.⁷⁸ Though the primary objective was to reduce the total fertility rate, estimated at 6.3 to 7.0 children per women, to a 4 child per women average by 2000, population growth rate to 2.0 percent per year, also by 2000. The country's first population policy in 1988 recommended a maximum of four children for each woman.⁷⁹

The National Population Commission (NPC), established in 1982, was abolished in December 1983 following the federal Minister of Planning advised to the Head of the State that, urgent action needs to be taken about the country's rapid population growth rate. The Head of Sate assigned the task of preparing a national population policy and implementation plan to the Federal Minister of Health (FMOH) who then delegated same to the Director of Health Planning.⁸⁰ Following the promulgation of the population policy into law on 14 April 1989, the implementation of the policy measures was hampered by the long delay in policy preparation with consequent loss of key personnel through retirement, replacement, reassignment etc., and the decision to abandon the creation of an Office of Planning and Coordination for Population Programme (OPCPP) in preference to establish the Department of Population Activities (DPA).⁸¹

⁷⁸ The Economist Intelligence Unit, *Country Profile of Nigeria 1992-93* (London: The Economist Intelligence Unit Ltd. , 1993), p. 9.

⁷⁹ PANOS, "Fourth Attempt at Census in Nigeria", *Link* (New Delhi), vol. 33. June 1999, p. 23.

⁸⁰ United Nations Economic Commission for Africa, *Evaluation of Institutional Arrangements for the Formulation of national Population Programmes in ECA Member States* (Addis Ababa: Addis Ababa University Printing Press, 1995), p. 2.

⁸¹ *ibid.*

Simultaneously a number of NGOs and international organisations provided assistance, technical and financial, to Nigeria in order to encourage the family planning efforts. One of them is USAID, which has been providing technical assistance and commodities to the public and private NGO sectors through the Family Health Services Projects (FHSP). David and Lucile Packard Foundation another organisation, which supports the goal of the government of Nigeria to slow population growth and improve the quality of life, by funding local as well as international organizations: the Foundation Supports Family Planning Programmes particularly in Northern Nigeria.

However, family planning programmes seems to have lost momentum in Nigeria and have performed badly. First important cause behind the dismal performance of family planning has been the protest by local organisations and people. Women's organisations rejected these programmes most vociferously by claiming they had not been consulted in the consensus building process. Further, representatives of women's groups protested widely that the target of reducing fertility to four children per woman by the year 2000 was discriminatory because men were merely "encouraged to have limited number of wives and optimum number of children then can foster within their resources".⁸² They further rejected it on the basis that it would suit to male domination in already existing patriarchal family system in the country. Some of them have rejected the proposal on the basis that it is non religious. Hence, it became clear that any kind of exogenetic

⁸² Ruth Dixon - Mueller and Adreinne Germain, *The New Politics of Population, Conflict and Consensus in Family Planning* (New York, NY: Population Council, 1994), p. 205.

mode of family planning and control measure cannot be successful unless it would be linked with socio-economic development. Further, traditional means of child spacing, such as prolonged breast feeding, postpartum abstinence and residential separation of married couple should be encouraged in Nigeria.

Sustainable Development

During last three decades the issue of environmental degradation got prominence. However, in the 1960s the problem of environment degradation was added to the list of the consequences of expanding population. The period coincided with peak in the population growth in the less developed countries. The ecological movement received widespread currency in the west, particularly in North America, and growing population began to be held responsible for not only poverty in the south but also environmental problems around the world. The 1994 International Conference on Population and Development (ICPD) held in Cairo adopted a programme of action calling for new approaches to address the relationships between population and sustainable development.⁸³

As far as environmental degradation problem in Nigeria, is concerned the most threatening problem is, large-scale desertification particularly in northern part of Nigeria. The major affected areas are the north-west corridor, running from Niger/Benin Republics through Sokoto, Kalsin, Niger and Kwara state.⁸⁴ The other affected area is the north-east corridor emanating from Niger/Chad republic and running through Borno, Jigawa, Kano, Plateau and Yobe and

⁸³ n. 49, p. 36.

⁸⁴ Based on report of Federal Ministry of Environment of Nigeria accessed at internet <http://unccd.int/actionprogrammes/Africa/national/2001/Nigeria/eng.pdf>

terminating in the Benue/Niger rivers sub-routes emanating from all the states through which they criss-crossed the corridors. Both corridors from parts of Sahel eco-zone run through Sudan Savana and terminate at the Guinea zone of middle belt and some southern states. These carry millions of heads of cattle annually.

The major agent of desertification in Nigeria is deforestation. As a result of the demand of food for construction, fishing and other uses, the removal of trees, shrubs, herbaceous plants and grass cover, fragile land of Sahel will continue to accelerate the degradation of the soil to desert like community people in surrounding countryside find the sole to the town people a useful supplier for meager cash incomes. It has been estimated that three quarter of Kano city's yearly firewood requirement, weighted 75,000 tons, are brought in by donkeys mainly within a radius of about 20 kilometers.⁸⁵ Situation of drought makes this situation much more severe.

In a nutshell, the high forest areas are under pressure from four different kinds of human activities (1) food crops cultivation and the establishment, by both government and individuals, of the tree crops plantation (2) lumbering (3) the establishment of exotic tree plantation including *techtona grandis* and *gmelina orborea*, by the various forestry divisions and (4) road construction and laterite quarrying activities that have been responsible for large scale forest clearance, for example, in parts of the Lagos coastal region and Benin forests, among other places.⁸⁶

⁸⁵ *ibid.*

⁸⁶ Olusegun Areola, "Sail and Vegetal Resources", in J.S. Oguntoyinbo, et. al. (eds.), *op.cit.*, p. 88.

Another environmental problem in Nigeria is the problem of oil spillage particularly in the Niger Delta region. The Niger Delta, one of the world's largest wetlands and the sixth largest exporters of crude oil, is notorious for environmental pollution.⁸⁷ This area is confronting with a relatively new kind of environment hazard. Oil spillage in this areas mainly affecting marine biosphere and activities like fishing in this region are getting deadly blew. At the same time highly urbanised regions like Lagos, Kano etc. have been confronting large-scale air pollution. The CO₂ emission in 1960 was 934,000 tons⁸⁸ and 248,36,000 tons in 1995.⁸⁹ So it has increased by about 27 times during the last 35 years.

After discussing the major developmental issues related to population growth in Nigeria; i.e., economic development, urbanisation, rural-urban migration, poverty, education, health and sustainable development; attention should now be shifted on the core the issue, i.e., how much these developmental issues are related with the population growth of Nigeria.

⁸⁷ Caroline, "Oil, NGOs & Youths: Struggling for Resource Control in the Niger Delta", *Comparative Education* (London), vol. 1, 2001, p. 99.

⁸⁸ See *UN Statistical Year Book 1992* (New York, NY: UN Publications, 1994), table 83, p. 746.

⁸⁹ See n. 35, table 70, p. 650.

Chapter IV

*Population Growth and Development in Nigeria:
An Analysis*

CHAPTER - IV

POPULATION GROWTH AND DEVELOPMENT IN NIGERIA: AN ANALYSIS

Nigeria, during the last four decades, has been passing through the second phase of demographic transition, with a very high birth rate and a declining death rate. At the same time, its developmental performance too has been dismal. The economic growth, after an initial boom, fared badly. Also, the social development level is yet to show any drastic improvement as social opportunities have not been provided sufficiently. The environmental degradation too has been widespread. Here it is important to note that for long it has been emphasized that a high population growth has hindered the developmental process in Nigeria.

It has been repeatedly said that per capita GDP production, per capita GNP production and general economic developmental prospects of Nigeria have been hampered due to its high population growth rate. The researcher, on the contrary, tends to contradict the long held view that Nigeria's high population growth has restricted its economic development.

Population Growth and Economic Development

The high population growth has been envisaged as a major hurdle to economic development in the third world countries. This assumption is based on the proposition that a higher dependency ratio leads to lower savings. Several economic-demographic models of developing countries, focusing on the predicted impact of population change on economic development, found a

very large impact of population growth on economic development. A number of economists and demographers argue that rapid population growth could have a deteriorating effect on inter-household distribution of income and intrahousehold individual economic well-being on the basis of age and sex.

However, in the case of Nigeria, above observations are not applicable. The dependency ratio of Nigeria was maximum in 1990, whereas the population growth was maximum during 1975-80 and which started declining only after 1980¹. The second thing, which is equally important, is that it is not necessary that a decline in population growth would lead to a decline in dependency ratio. It has been projected that the population growth of Nigeria would be 1.09 percent during 2045-50² as compared to 2.74 percent during 1995-2000³. At the same time, dependency rate is expected to decline only marginally, from 93 in 2000 to 87 in 2050. (Please refer to fig 5). With improvement in health conditions life expectancy would increase, which may lead to changes in dependency pattern and not in dependency ratio, and there may also be substitution of one form of dependency (children) with another (elder).

As far as the economic performance of Nigeria is concerned, it does not show any negative link with population growth rate, as the total GDP and the GDP per capita had been improving till 1980. During the very same period, population growth had also been showing an upward trend. Population growth

¹ See *World Population Prospect: The 2000 Revision* (New York: NY UN Publication, 2001), vol. 1, table A.35, p.724.

² *ibid.*, p. 523.

³ *ibid.*, p. 522.

started declining only after 1980, which coincided with the beginning of the worst phase of Nigerian economy. The economy performed so disastrously that its bad impacts are felt even today. This means that the decline in total GDP and GDP per capita during the 1980s was engendered due to reasons other than population growth rate. (Please refer to fig. 9)

Prior to the onset of economic crisis, the Nigerian economy enjoyed almost a decade of unprecedented revenue boom due to increased petroleum prices in the 1970s. As a major exporter of crude petroleum, upon which it came to depend for an increasing proportion of its foreign exchange earnings from early 1970s, Nigeria was a key beneficiary of the two so-called 'oil shocks' of the 1970s⁴. While most of the African states suffered economic stagnation and decline, Nigeria enjoyed an unstoppable economic boom. In the early 1980s, the Nigerian economic boom came to an abrupt end and a serious crisis set in, rapidly engulfing country's industry, agriculture, payment position, domestic price level, and the general living condition of majority of the people⁵.

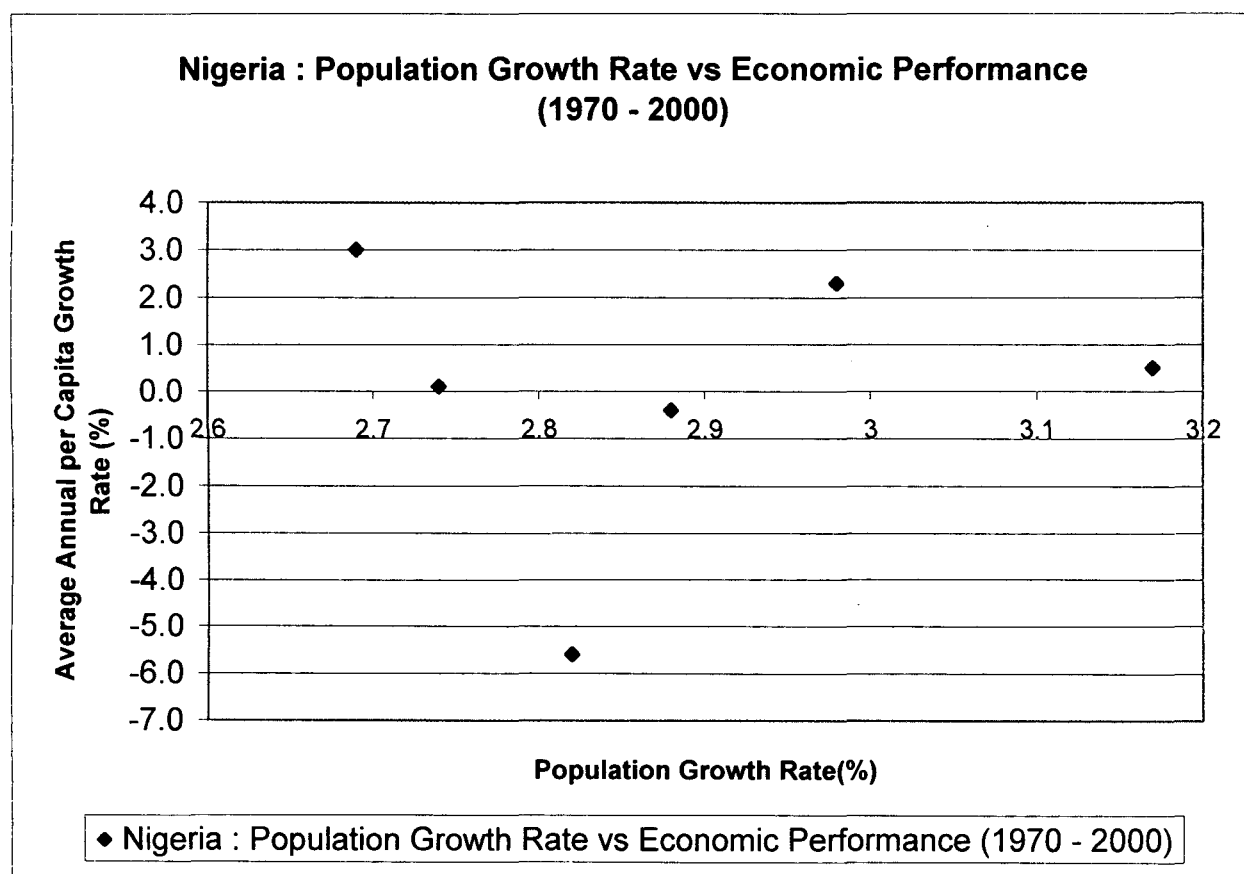
Besides continuation of the colonial pattern of economy, the roots of the Nigerian economic crisis could be traced to the lopsided character of the two post-colonial development path followed by the state. After the rise of oil economy during 1970s, the state began to neglect the cash crop sector of the Nigerian economy. This development led to total collapse of the agricultural

⁴ A. O. Olukoshi, "General Introduction: From Crisis to Adjustment in Nigeria", In Adebayo O. Olukoshi (ed.), *The Politics of Structural Adjustment in Nigeria* (London: James Currey, 1993), p.1.

⁵ *ibid.*, p.1.

Nigeria : Population Growth Rate vs Economic Performance (1970 - 2000)

Year	Population Growth Rate (%)	Annual average Total GDP Growth Rate (%)	Average Annual Per Capita Growth Rate (%)
1970-75	2.69	5.7	3.0
1975-80	3.17	3.3	0.5
1980-85	2.82	-2.9	-5.6
1985-90	2.98	5.3	2.3
1990-95	2.88	2.6	-0.4
1995-2000	2.74	3.2	0.1



Data Source -Based on *World Population Prospect: The 2000 Revision* (Newyork;UN Publication,2001),table-A.15,p.522 and UNCTAD Year Book 96-97(Newyork

Fig-9

sector, as cultivation of traditional food crops had already reached to a dormant state. As a result, Nigerian economy became fully dependent on oil sector. Fall in oil prices during early 1980s triggered the economic debate in the country. At the same time the Nigerian import-substitution industrial strategy based on external inputs had also neglected the domestic agricultural sector. The contradiction in the post-colonial industrial and agricultural development strategy combined with structural inter and intra-sectoral imbalances, underlined the fragility of the Nigerian economy and its acute vulnerability to volatile external environment.⁶

To overcome the prevailing economic situation, the Babangida administration introduced a Structural Adjustment Programme (SAP) sanctioned by the IMF and the World Bank in July 1986. By this time, the sharp decline in the country's GDP, winding capacity utilization in industry, widespread unemployment and lowering general standard of living made the acceptance of an IMF/World Bank-inspired programme of structural adjustment inevitable. The country's external debt had grown from about N2 billion in 1979 to N12.8 billion in 1981, and subsequently rose to N21.2 billion in 1985. The SAP has further deteriorated the existing poor economic situation of Nigeria, because at the one hand it neglected the agricultural sector of the country, and on the other hand, it also created a serious debt trap for the country. Funds were not utilized properly as there was no accountability. As a result, large-scale resentment was witnessed in various parts of Nigeria.

⁶ *ibid.*, p. 3.

Hence, it would be wrong to say that population growth has been causing economic deterioration as far as GDP per capita is concerned. It was due to ill-management on the part of successive governments, the structural weaknesses of Nigerian economy and adoption of the SAP, which created the situation for the current economic chaos. Moreover, recent models have found the negative impact of population growth on economic growth to be smaller than what was previously thought to be. Infact, few models have found the impact to be positive in the long run. It is possible that population pressure can favourably affect individual motivation and lead to changes in production techniques that can overcome the negative consequences of population growth⁷.

Therefore, it is better to concentrate on strengthening the basics of the economy rather than blaming population growth for its failure.

Population Growth and Urban Development

Nigerian urban centers have been expanding at an explosive growth rate. The growth rate far exceeds the capacity of these centres. Till 1975 there was not even a single Nigerian city which could be termed as a mega city. However, in 2000, Lagos was at the seventh position among the mega cities. It is further projected that it would soon rise to the third position on the basis of its 23.2 million large population⁸. A number of problems are coming up because of high urbanization rate in Nigeria. Important among them are problems of urban unemployment, lack of serviceability, manageability and

⁷ A.P. Thirlwall, *Growth and Development* (London: Macmillan, 1999), p.202.

⁸ UNFPA – *State of World Population 2000* – taken from <http://www.unfpa.org>

livability. However, growing urbanisation has its own set of complex problems and only population growth cannot be blamed for the problem. (Please refer to fig. 10)

As far as unmanageable urban unemployment is concerned, the problem is a consequence of many factors notably the educational system which not only discouraged agriculture but also trained people for non-existent white-collar jobs in cities⁹. This is true to Nigeria, as in most other developing countries. This is not a direct consequence of industrialization, but a result of centrifugal tendencies existing in rural areas, which encourages migration towards urban regions.

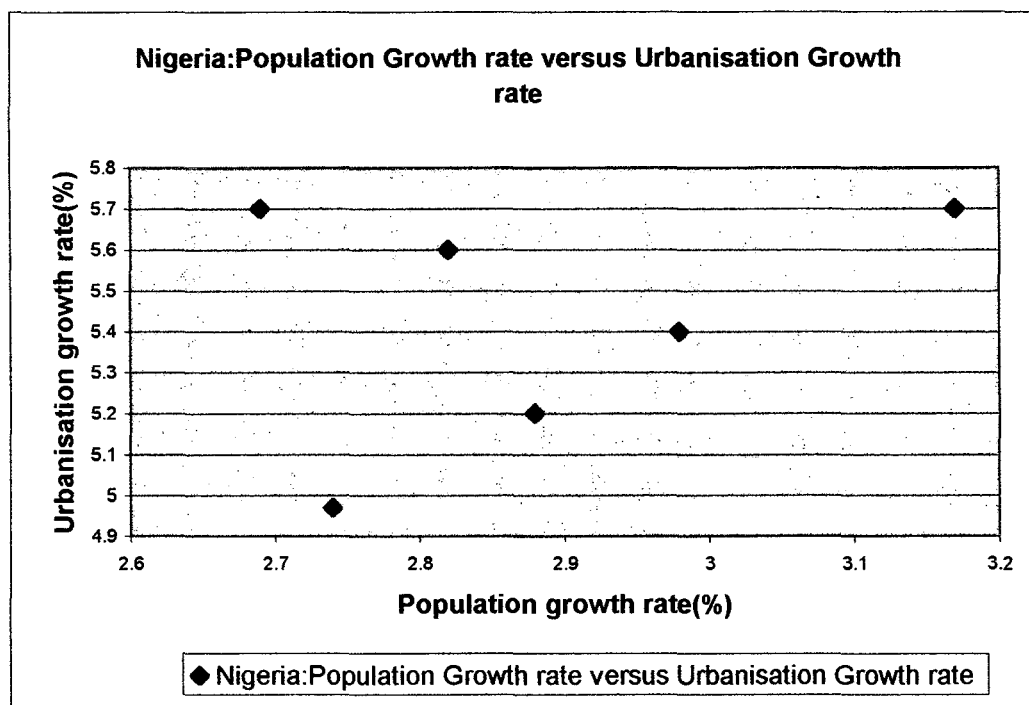
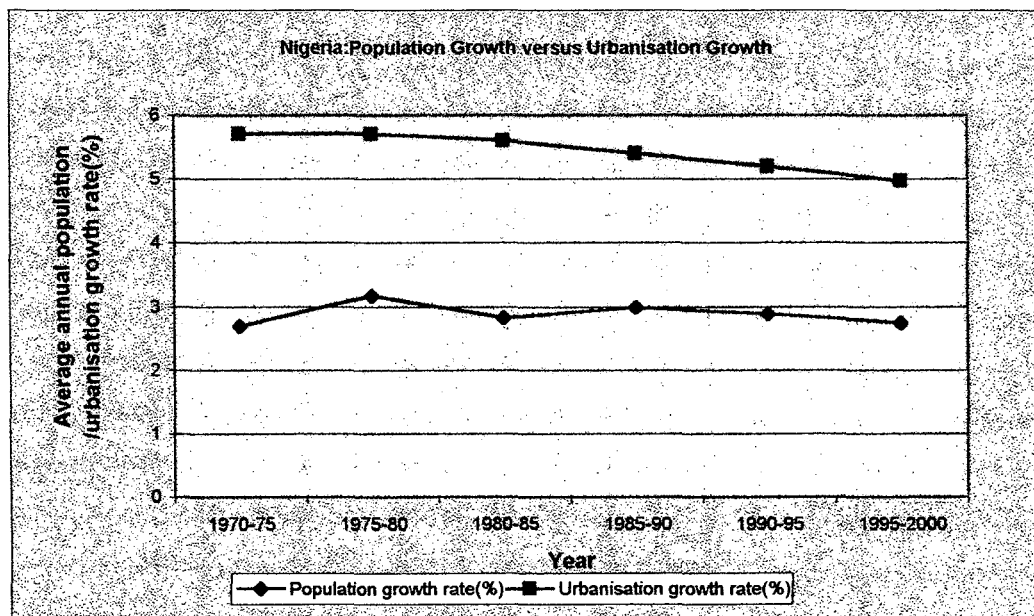
The problem of serviceability is due to the colonial pattern of urban development, which did not let them integrate into the Nigerian national economy. The post-colonial Nigerian administration failed to re-integrate these cities into the emerging national economic system at the one hand, and got limited success in generating service facilities vis-à-vis rapidly growing cities at the other hand. Limited capacity to generate income to meet the required expenses for providing services poses greatest challenge to the future of urban development.

Urban management problems began with the colonization of the country. Prior to colonization, the upkeep of the city, maintenance of the roads, markets and other systems were firmly in the hands of traditional rulers, who

⁹ M.A.O. Ayeni, "Pattern, Process and Problem of Urban Development," In J.S. Oguntoyinbo, O.O. Areola and M. Filani (eds.), *A Geography of Nigerian Development* (Ibadan: Heinemann, 1978), p.171.

Nigeria:Population Growth rate versus Urbanisation Growth rate

Years	1970-75	1975-80	1980-85	1985-90	1990-95	1995-2000
Population growth rate(%)	2.69	3.17	2.82	2.98	2.88	2.74
Urbanisation growth rate(%)	5.7	5.7	5.6	5.4	5.2	4.97



source:Based on World Population Prospect: The 2000 Revision, (New York: UN Publications, 2000), vol.1,table -A.11, & African Statistical Year Book, (New York: UN Publications), vol.1,Part-2,1996 ,table-5,p.2-19.2

Fig-10

delegated authority appropriately¹⁰. The impact of colonization eroded the existing modus operandi by building new townships and developing modern towns adjacent to old urban centres. General poverty, particularly in the case of old cities, where houses are of such low quality that they cannot command any economic rent. The problem of manageability in the cities are so severe that the role of local authority has been curtailed and a chaotic situation has emerged during the last forty years. The problem of livability is yet another major problem in urban areas. In this context, livability means not only the creation and maintenance of a decent environment but also the ease with which people and goods move within the urban system¹¹. The problem of livability is also the result of environmental degradation leading to high levels of pollution in the cities.. Housing shortage and growing slums are other exponents of the problem.

This phenomena got prominence particularly after a sharp economic and industrial slump during 1980s. Similarly, serviceability problem is reflected in the failure of the Nigerian cities to provide adequate health, education, recreation and other social services for its population and those of its tributary areas. In addition to it, it was also unable to stimulate raw material production in the hinterland.

Population growth rate and rate of urbanization cannot be solely blamed for problems of livability as it itself is a product of many of the problems already discussed. Problem of environmental deterioration arises from the

¹⁰ ibid., p. 172.

¹¹ ibid.

inadequacy of the existing urban facilities and their over-utilisation¹². The housing shortage and growth of slums are also the consequence of deficient basic infrastructure and amenities.

Further, the government's various efforts at attaining sustainable urban development faced several constraints of planning and implementation, due to faltering socio-economic standards, fund limitations, quality human resource deficiencies, fluctuating political will, unmitigated policy focus, dearth of base map, inadequate database of planning and monitoring, and insufficient foreign technical assistance.

Hence, population growth is only a marginal factor behind the rapid rate of urbanization. The problem appears to be much more deep-rooted. Moreover, besides the above explained factors, rural-urban migration, as a result of precarious rural situation, also creates condition for a rapid growth in urban population.

Population Growth and Rural Development

It is an established fact that rapid growth of urbanization in Nigeria is an outcome of rural-urban migration. Migration takes impetus by precarious rural environment rather than population growth because at the one hand rural population growth in Nigeria has not been so threatening and a rural urban disparities in Nigeria is very severe at the other.

It is noteworthy that until very recently, there had not been much development in rural areas of Nigeria. Not only has rural areas been neglected

¹² ibid.

in the various development plans of the government, but the taxes and proceeds obtained from the rural agricultural product have also been used to develop and maintain the urban centres. Thereby leaving the rural population in abject poverty, frustration of life, and lack of infrastructural facilities to improve their standard of living¹³. As a matter of fact, the various National Development Plans, taken up from 1975 to 80 and 1981 to 85, have revealed that faulty government policies have been mainly responsible for the neglect of rural areas. This neglect resulted in large-scale drift of rural population towards urban centres.

A number of rural development programmes have been launched by the government in the recent past. However, these programmes have not shown positive results, as was envisaged by the policy makers. The major problem constraining rural development is the lack of statistical data and research into rural development. It is also due to urban bias and ignorance of the policymakers.

A genuine strategy for rural development would be the relocation of certain socio-economic, political and cultural activities that have been urban based to the rural areas, as it will help in bridging the rural-urban gap. At the same time, the status of infrastructure needs to be improved. Research into all spheres of rural development must be encouraged and adequately funded¹⁴. The role of media and communication should be improved and there should be an

¹³ M. Lawal, "Rural Development in Nigeria", *Geographical Society of India* (Dehradun), vol. 59(3), September 1997, p. 234.

¹⁴ *ibid.*, p. 244.

appropriate pool of rural information. Modernization of agricultural techniques should be taken up. The administrative bottlenecks, red-tapism and bureaucratic tangles should not come in the way of institutions charged with the responsibility of carrying out development programmes. Participation of community and woman should be encouraged. Last but not the least, rural and urban programmes should be coordinated in such a way that that they are complimentary and not contradictory to each other.

Population Growth and Food Availability

Most of the African countries have an inadequate food availability scenario. There has been a sort of trend to establish a negative relationship between population growth and food availability in Africa.

As far as Nigeria is concerned the food availability was maximum in 1979-81, when carbohydrate availability in Nigeria was 3327.4 Kilocal per capita per day and protein availability was 105.8 grams per capita per day. At the same time the population growth rate was maximum between 1975-80, which was 3.17 percent. Similarly, during 1966-68 the carbohydrate availability was only 2189 K cal per capita per day and protein availability was only 50.6 grams per capita per day¹⁵, when population growth rate was only about 2.5¹⁶. (Please refer to fig. 8)

The food availability vis-à-vis absolute population shows positive relationship in Nigeria. It is noteworthy that with increase in population per

¹⁵ *UN Statistical Year Book 1982* (New York, NY: UN Publications, 1985) table 96, p. 576.

¹⁶ *World Population Prospect: The 2000 Revision* (New York, NY: UN Publications, 2001), vol. 1, table A. 11, p. 49.

capita calcs, the protein availability has also been improving. A decline in food supply was noticed during 1980s, but we cannot blame the then prevailing population growth for that. It was more a result of the cumulative effect of unfavorable weather conditions and economic debacle at one hand and political turmoil at the other.

Infact, the reality is quite different in Nigeria where surplus land is available, particularly in the low-density 'middle belt', the cross-river plain in south-eastern Nigeria and parts of Borno state in north-eastern Nigeria¹⁷. Population growth may be creating some pressure on land, nevertheless, in Nigeria land is sufficient for agriculture in general and to meet the demand for food supply for her population in particular. The problem is much more deep rooted. One of the main problems is unscientific and obsolete methods of cultivation. Other factors constraining food supply, as identified by FMANR, are social constrains and also pests and other diseases especially common in the tropics¹⁸. The agricultural productivity in Nigeria has been very low. As far as productivity of cereals is concerned, it was only 1,191 Kilogram per hectare during 1995-97, which was very low even in comparison with other developing countries, for example, India's cereal yield was 2,189 kilogram per hectare during the same period¹⁹. The problem of marketing, research and extension constrains, old land tenure system, and poor response by farmers to economic incentives and innovations are further aggravating the already existing

¹⁷ S.I. Obumere, "Traditional Agriculture Systems and Staple Food Production", In J.S. Oguntoyinbo, et. al. (eds.), op.cit., p.209.

¹⁸ *ibid.*, p.215.

¹⁹ *World Development Indicators 1999* (Washington D.C: The World Bank Publication), table-3.3, p.129.

problem. Multiplicity of land tenure system and disputes over land use rights are the other problems emanating mainly due to traditional land practices. The colonial legacy of encouraging the cultivation of cash crops rather than food crops, remains unchallenged even after forty years of independence. It has created a situation where Nigeria has to depend upon foreign imports for her food requirements. Furthermore, the adoption of a neo-liberal policy by countries of sub-Saharan Africa in general and Nigeria in particular in the 1980s, forced them to engage in a primary exports thrust that led to a rise in export growth rate from 6 to 14 percent per annum but at the same time the supply of food grain declined and then finally stagnated²⁰. Infact, the very idea of planning the population growth to meet the demand for food supply is only an excuse to hide the failure of policy makers and the western world to provide a sustainable agricultural production and to meet the food requirements of the total Nigerian population.

Hence, need of the hour is to modernise agriculture so that it can cope up with the task of providing enough food for Nigerians. The transformation and modernization of the agricultural sector is called for. In this respect the problem of spreading agricultural innovations amongst peasants and farmers, as well as problems of land tenure and marketing of food crops and finding a suitable alternative to the unscientific agriculture practices, will have to be looked into very seriously. Provisions of economic infrastructure, such as, power, water supply, roads and communication too needs to be improved.

²⁰ C.P. Chandrasekhar, "Famine and Conquest in Africa", *Frontline* (Chennai), July 19, 2002, p. 109.

Population Growth Versus Poverty and Unemployment

High fertility rates have historically been strongly correlated with poverty, high infant mortality rate, low status and educational level of woman, deficiencies in reproductive health service and inadequate availability and acceptance of contraceptives. Falling fertility rates are generally associated with improved standard of living, such as increased per capita income, increased life expectancy, lower infant mortality, increased adult literacy and higher rates of female education and employment. It is generally assumed that poverty and unemployment in the third world in general, and Nigeria in particular, is an outcome of high population growth rate.

Even though a regular and reliable data have been lacking but still the available data of the last four decades contradict the above assumption. As far as the rate of poverty in Nigeria is concerned, the situation became serious only after 1983-84, not only in absolute but also in relative terms. Before 1980 the problem of poverty was not as threatening as it is today. The rate of population growth till 1980 was explosive, when it crossed 3.0 percent mark.²¹ At the same time, Nigeria plunged into the economic crisis as a result of which it entered into a phase of large-scale poverty. This was also the phase when population growth rate started to show downward trends. Hence, it appears more likely that the poverty situation in the country is a by-product of economic debacle rather than population growth.

²¹ See *World Population Prospect: The 2000 Revision* (New York, NY: UN Publications, 2001), vol. 1, table A-15, p.522.

The problem of unemployment vis-à-vis population growth in Nigeria shows similar trends. Unlike other African countries unemployment was never a problem for Nigeria until 1980s, when hostile external environment and adoption of SAP proved fatal for her economy. The prospects of employment generation got a severe blow which created a pool of unemployed people. The neglect of agricultural sector alongwith a low level of industrial development created a situation where unemployed people did not have much option. This situation created an atmosphere of intense frustration among them and provoked them to take to anti social activities, which resulted in social upheavals. The need of the hour is not to make hue and cry over population growth rate, rather to revamp the basics of the economy by rejuvenating the agricultural sector encouraging community participation, particularly in the area of food production and agro-industries. By any means Nigeria cannot be termed as over populated. Its population density is about half of the many developed countries, like UK and Germany. With such a large reserve of natural resources Nigeria can develop into a strong nation. There are various sectors of Nigerian economy which are suffering from labour shortage, e.g. cash crop sector²². Infact, a proper planning needs to be done to proportionately distribute the human resource available among the different sectors of their economy. Moreover, population growth gives further impetus to economic growth by providing for a regular demand, which in turn would stimulate the dormant manufacturing sector of Nigeria. A healthy manufacturing sector

²² See *Africa South of the Sahara 2001* (London: Europa, 2000), p.831.

would absorb the surplus labour. However, Nigeria's manufacturing sector is still in a nascent stage and most of manufacturing goods are imported from the western countries and raw materials are exported. Manufacturing goods account for as much as one-fourth of the total imports of the country²³. This phenomena creates a situation where labourers of foreign countries get employment in Nigeria and local labourers are left unemployed.

Hence, the problem of poverty and unemployment in Nigeria is not due to population growth, rather it is the outcome of weaknesses inherent in the country's economic system. Simultaneously, the structural adjustment programmes under the diktat of World Bank and IMF has further worsened the situation.

Population Growth and Education

Despite an impressive showing by Nigeria's educational system, qualitatively it did not perform well. Even though 64.1 percent of the total population of Nigeria is literate, the number of illiterates in Nigeria is still as high as 22.8 million people. Most of the literate people have acquired only primary education and the dropout rate is also very high. The unemployment rate is highest among primary school dropouts who did not attain enough education to qualify for any remunerative job²⁴. For all these ills a high population growth rate is blamed. It is said that government's effort to provide quality education has failed because of sharp increase in population. Further, it

²³ Calculates on the basis of *ibid.*, p.843.

²⁴ Guy Arnold, *Modern Nigeria* (London: Longman Group, 1997), p.143.

is argued that a high population growth will lead to lower per capita public and private education expenditure.

However, in case of Nigeria the above arguments do not seem to apply. Despite a high population growth, the literacy rate has improved drastically in Nigeria. Even absolute number of illiterates has been declining continuously, except for a small period in 1980s. Whatever increase in the number of illiterates has been there, it was mainly due to Nigeria's poor economic performance. During this period, the percentage expenditure on education decreased drastically. Total expenditure on education as percentage of GNP was 4.1 percent in 1976 and 3.6 percent in 1979, but it decreased to 1.2 percent in 1985 and to 1.0 percent in 1990. In 1995 it further declined to 0.5 percent²⁵. Further, the pupil-teacher ratio in Nigeria has also been very high. Infact, Nigeria's performance in the field of education was low from 1980 to 1990, when population growth rate was on decline. Hence, population growth and achievements in education do not show any negative linkages in Nigeria. The number of people added due to population growth can be provided with proper education through proper planning and could be developed into a healthy human resource.

The Nigerian education system witnessed tremendous expansion between 1960 and 2000. However, the rate of growth of literates declined after 1986 when economic depression led to the introduction of the Structural Adjustment Programme. Major causes behind that may be summarized as

²⁵ See *UNESCO Statistical Year Book* (Paris: UNESCO Publication, 1990), table II-18, p.II.194.

frequent change in the government due to military coups, a depressed economy and an unplanned and a poor education policy, all created an environment of crisis in the education system. The crisis was mainly due to poor funding, inadequate facilities, admission and certificate racketeering, examination malpractices, general indiscipline and the emergence of secret rule. Personnel management problems further resulted in frequent strikes and closures and the abandonment of academic standards.

In spite of the efforts and achievement in educational growth rate, Nigeria is still far from adopting an educational programme that prepares the country and its citizens for self-reliance and for the task of nation building. There are neither any worthwhile inventions, nor any revolutionary utilization of local raw materials so richly provided by nature. Even those who have been responsible for pioneering and developing western education in the country until recently, did not concern themselves either with issues of real development, nor did they pursue those goals with clear vision and seriousness. The point to be emphasized is that the educational programmes ought to take a more serious cognizance of morals and positive efforts to inculcate them.

A developing country can benefit from educational growth only when its educational policies and programmes are linked to various aspects of national development and which focuses on agricultural revolution as the foundation for industrial, technological and educational revolution.

Unfortunately, the Nigerian education system is not sensitive to the prevailing socio-economic conditions. An educational system cannot be

regarded as developed if it fails to solve the socio economic problems of the population, that is, mounting urban unemployment, problems of underemployment, shortage of critical and relevant skills, dependence on foreign countries for subsistence and erratic availability of the basic amenities of life. Similarly, a nation has not developed if it fails to provide an educational system that prepares the population to boldly confront the different challenges faced by the country.

If an educational system is developed keeping in view the socio-economic conditions of the country, then it would contribute to human resource development, and surplus population would be an asset for the country rather than a liability. Further, in the longer run population growth would tune itself with stages of development.

Population Growth and Health Facilities

Health sector is one of those sectors of Nigeria which performed quite well as far as the availability of per capita health facilities are concerned. However, need of the hour is to improve it drastically. Traditionally, it is emphasized that health facilities are lacking in Nigeria because of rapid population growth, which neutralizes the efforts made in the area. It is argued that per capita health expenditure, public as well as private, decreases with rise in population. Similarly, it is said that per capita health facilities, like number of doctors per capita, number of hospital beds per capita etc. are affected by sharp population growth.

In the case of Nigeria, per capita health facility has been on rise ever since her independence, despite a high population growth rate over the last four decades. The partial distribution of these facilities drastically varies from region to region. The southern part of the country has better facilities vis-à-vis northern region. Similarly, urban regions have better facilities than rural regions. However, population per bed and para-medical staff is still very high. A major cause behind this regional imbalance is the neglect of medical sector. This is well reflected in the fact that Nigerian government has been decreasing the expenditure on health, in terms of percentage of total expenditure. In 1972, 3.6 percent of the total expenditure was allocated to the health sector, whereas in 1989 it was slashed to 0.8 percent of the total expenditure. During 1990-97, only about 1.0 percent of the gross domestic product of the country was invested into health sector, and the health expenditure per capita was only US \$11. Hence, the health sector has been neglected continuously by successive governments²⁶.

Public health system has an important role to play in the development of health facilities in any country. Public health in any nation is a direct function of the system put in place by the government to deliver basic health care services and to deal with health emergencies. The presence of adequate infrastructure- roads, transportation, electricity, clean water supply- are also necessary for an effective health care system. The success of any public health system depends largely on the willingness and ability of government to allocate

²⁶ See *World Development Report 1985* (Washington D.C: World Bank Publications), table 26, p.224.

appropriate funds to support it. Sub-Saharan countries in general and Nigeria in particular spend very less per patient per year on all health care. As a result, public health system in Nigeria failed to deliver health care products and services to the people who really need them.

The establishment of health facilities in Nigeria is often based on political factors or on physician's choice, rather than the need and convenience of the population. Health facilities are mainly concentrated in cities, leaving rural areas almost without coverage. According to the World Bank, the number of health facilities in 30 Nigerian states range from one per 200 people in Lagos state to 129,000 in Benue state. Three-fourth of Nigeria's health facilities are in urban areas, where only 30 percent of population lives. A World Bank study showed that a disproportionately small part of public budget was allocated to preventive care and routine equipment maintenance in public hospitals in Nigeria. At the same time, the number of health care personnel are insufficient to meet the demands of public health system. Nigeria seeks to have proper training facilities to create a new pool of health care personnels.

The already poor condition of the health care system is further exacerbated by infrastructural problems - few roads, lack of safe water, poor access to electricity and marginal communication system. Ill-maintained roads and poor transportation network impedes quick access to health facilities and delivery of medical supplies. Without electricity hospitals cannot function effectively, and vaccines too lack proper refrigeration, rendering them unusable. Phone and fax service often does not exist or is unreliable,

frustrating all efforts to communicate throughout the network of health facilities.

Hence, to blame population growth for the improper development of health facilities is only an excuse to hide the failures of government to fulfil the basic health requirements. If population growth poses problem to the policy makers before developing health related infrastructure, it will give an opportunity to develop a pool of efficient health personnel through education and proper training. In the short term, it is possible that access to proper health facilities might lead to a drastic fall in death rate, thus accelerating the population growth rate. But lower death rates (particularly infant and child mortality rates) would create a sense of security in the minds of families, ultimately reducing drastically the birth rate in Nigeria. This phenomenon has already been witnessed in many regions of the world over the last 30 years. Therefore, in place of artificially controlling the population growth, it is better to improve health facilities in Nigeria in particular, and the third world in general.

Population Growth and Sustainable Development

Nigeria is one of those countries of sub-Saharan Africa, which is confronted with large-scale environmental degradation. Major environmental problems are those of deforestation, desertification and water pollution due to oil spillage, particularly in the Niger Delta region, and the problem of air pollution in the urban regions. Western world in general and neo-Malthusians in particular blame population growth for the problem of environmental

degradation. It is true that population expansion exerts pressure on the forest resources of a country to meet the growing requirements of the population. A large concentration of population in urban areas is a major cause of pollution in the urban areas. However, merely blaming the population growth for these problems would divert our attention from other deep-rooted issues of concern.

As far as the problem of desertification in Nigeria is concerned, it has mainly affected the dry lands of Nigeria. The soil of this region has low water holding capacity and low level of organic matter. At the same time, frequent droughts and climatic variations have also aggravated the problem. The nature of economic activity i.e., livestock herding and increasing migration of livestock from the neighbouring countries, such as, Chad, Niger and Cameroon, makes the situation much more worse. Other causes are, unscientific ways of cultivation; low level of education and public awareness; conflicting policies and regulation; uncoordinated research on problems relating to drought and desertification; obsolete research and meteorological equipments; low and erratic funding for desertification projects; sectoral approach to project planning, formulation and implementation; insufficient involvement of all stakeholders etc. However, successive governments did try to combat the growing problem of desertification, but without success.

Main problems behind these national efforts are the top-down approach to environmental resource management, frequent policy shifts, inappropriate technology and the neglect of indigenous technology in harnessing and managing the natural resources. Thus, environmental conservation approach in

Nigeria has been top-down, with limited consultation among the various stakeholders. Such an approach usually turns out to be at variance with the ideas of general masses. Resource users and other stakeholders commonly have no access to the decision-making process that directly affects them and their resources²⁷.

Most farmers are marginalized from the process of development and production. This has made them more vulnerable to such environmental hazards as drought and desertification. More and more people are being increasingly pushed to the marginal lands, which further contributes to the process of environmental degradation²⁸. Efforts to check environmental degradation and to combat desertification have been adversely affected by frequent shifts in policy by successive governments. Such policy shifts and frequent change in leadership had negative implications for the Nigerian economy. At the same time, use of inappropriate technology and neglect of indigenous knowledge has also vitiated the problem²⁹.

Any effort to combat desertification cannot be successful unless it is based on the philosophy of self-reliant development and self-determination at local level. This involves the use of indigenous technology and resource, learning and adopting from the farmers their traditional knowledge of environment and various survival strategies. This is based on the bottom-up

²⁷ Report of Federal Ministry of Environment of Nigeria, taken from <http://www.unccd.int/actionprogrammes/africa/national/2001/nigeria-eng.pdf>

²⁸ *ibid.*

²⁹ *ibid.*

approach to development and planning, and autonomy for the local population to determine the nature of agricultural production and other related practices.

The problem of oil-spillage is created by unsustainable extraction practices by transnational oil corporations, which are mainly concerned with profit rather than local environment. These transnational oil corporations lay down pipelines in swamps, build flow stations and evacuate millions of barrels of crude oil from oil terminals on coastal 'benches'. At sea, vast oil derricks define points of extraction while gas flares shine bright red from dusk to dawn. These are the points where multinational companies intersect with local subsistence economies, and in the process, impoverishing many, polluting the water resources, degrading the soil and destroying the fisheries³⁰.

However, it is true that the problem of pollution in urban centres is implicitly an outcome of rapidly growing urbanization due to unrestrained rural-urban migration. But we cannot blame population growth solely for migration rather it is a symptom of rural plight and negligence. Yet the level of emission of polluting gases in Nigeria is dismal when we compare it with developed countries. In 1991, USA's total carbon dioxide emission was 134969 thousand ton which was almost 5.5 times than that of Nigeria³¹. At the same time, per capita chlorofluro-carbons (CFCs) consumption in Nigeria was 0.1 Kg (1995), whereas it was 0.88 kg in USA and 1.27 Kg in UK³². USA

³⁰ Caroline Ifeka, "Oil, NGOs & Youths: Struggle for Resource Control in Niger Delta", *Review of African Political Economy* (Moscow), no. 87, 2001, p. 99.

³¹ Calculated on the basis of *UN Statistical Year Book 1992* (New York, NY: UN Publications, 1994), table 83, p. 746.

³² See *UN Statistical Year Book 1997* (New York, NY: UN Publications: 2000), table 70, p. 650.

contributes as much as 14.17 percent of world's total CFC emission, whereas Nigeria's contribution is only 0.09 percent. Per capita carbon dioxide emission is also low in Nigeria, it was estimated to be 0.3 ton in 1996³³ (Please refer to fig. 11). Hence, the level of air pollution in Nigeria is less than the developed countries. However, it would be better to change the consumption pattern of fuel, particularly the use of wood as fuel should be discouraged. As far as water resource are concerned, they should be primarily utilized for electricity generation, as about two third of total electricity in Nigeria is generated by thermal plants³⁴. At the one hand, it would be a tool for the sustainable use of hydrocarbons and at the same time, it would control air pollution. The above analysis clearly shows that the role of population growth in hindering the development process has been overemphasized in the case of Nigeria. However, to an extent, the population in general and population growth in particular may be a cause, but certainly not the leading cause, which hampers the developmental prospects of Nigeria.

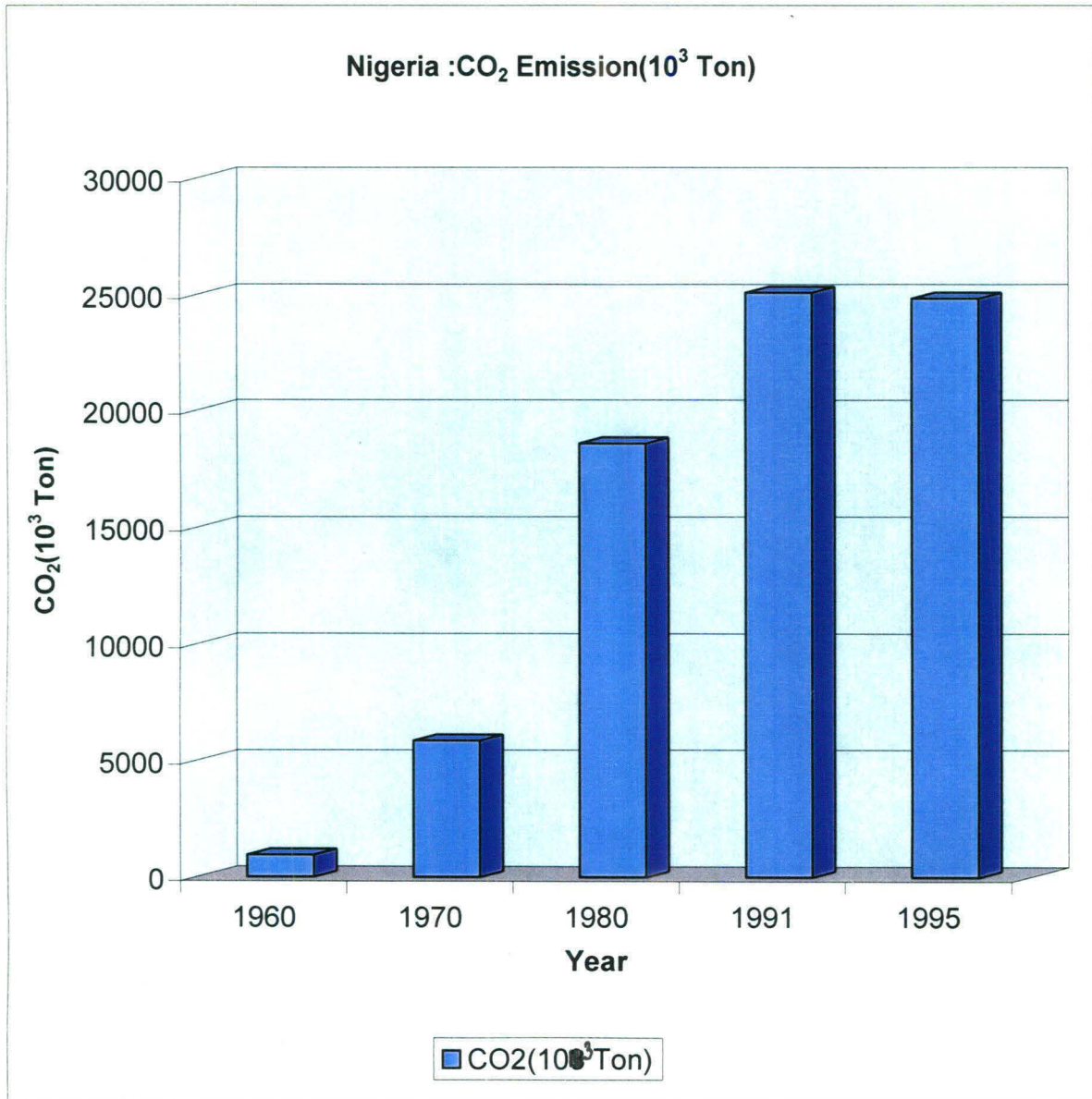
Population growth versus development debate must be seen in the light of resource availability of a nation. Population, being the most easy and pervasive target, is often accused for the underdevelopment of Nigeria. Nevertheless, it is one of those countries which has a huge resource base with low to moderate population density. It is most unlikely that the population growth has halted the developmental process in Nigeria. It is important to note

³³ See *Human Development Report 1999* (New York: UNDP, Publications, 1999), table 18, p.207.

³⁴ Calculated on the basis of *UN Statistical Year Book 1982* (New York, NY: UN Publications, 1985), table 159, p. 798.

CO₂ Emission in Nigeria (10³ ton)

Year	1960	1970	1980	1991	1995
CO ₂ (10 ³ Ton)	934	5855	18588	25090	24836



Data Source- UN Statistical Year Book 1997, table 70, p.650.

Fig-11

that till 1980 Nigeria was one of the fastest growing economies of Africa. That was also the period when population growth rate was relatively high in Nigeria. The economic growth of Nigeria during this period was certainly due to oil boom that country witnessed in the mid-sixties and seventies. Further, the negative economic growth during 1980s and the subsequent stagnation of economy during 1990s, was caused mainly due to economic mismanagement, failure of oil sector and the adoption of SAP.

Thus, the prevailing socio-economic and environmental problems in Nigeria have sources other than population growth. We find that the over-population in urban areas is due to the neglect of rural and agricultural sector. Similarly, the prevailing social underdevelopment in Nigeria is mainly due to mismanagement, lack of planning, lack of fund allocation etc. lack of social opportunities give further momentum to rapid population growth. On the other hand, the environmental degradation in Nigeria emanates from unsustainable and unscientific practices.

Therefore, the role of population growth as a hindrance to the development process in Nigeria is meager, and that too is caused by lack of awareness. Infact, the population aspect has been made a scapegoat for all the ills and lack of development in Nigeria.

Conclusion

CONCLUSION

During the second half of the twentieth century, majority of the third world countries have witnessed some of the most astronomical population growth rates, which in-turn have brought to the fore, the revival of Malthusian paradigm in its new form. Even though during the short span of fifty years, population-development debate took various shapes, the period can easily be divided into three distinct phases on the basis of prominent nature of the debate. Prior to Bucharest (1974), it was generally viewed that rapid population growth rates create strong barriers in the path of development in general and economic development in particular. It was argued that high population growth would have its implication on the country's employment generating capacity, provision of educational facilities, raising per capita income and attaining other elements of development. Infact, it was at the Bucharest conference, where two-way relationship between population growth and development was established. It was also recognized that population growth does not hamper the developmental process of a country, rather rapid population growth itself is a symptom of underdevelopment of a country. However, the conference at Cairo marked can be visualised as the watershed in bringing about a paradigm shift regarding relation between population growth and development. By now a new term, 'sustainable development' had been coined and environmental concerns were associated with population-development nexus. At this point of time, neo-Malthusian view was on its peak with worldwide support from certain sections, even though it was rejected at the domestic arena of most of the countries.

Irrespective of the nature of the prevailing debate concerning population-development-environment, the fact remains that there is no causation between demographic factors, economic change and socio-cultural factors. Together they complicate the debate and act as a prelude in identifying population as an independent variable, in the context of population – development-environment debate. Empirical evidences reflect that various societies have registered rapid decline in population growth and faster economic growth at the same time. However one should not misinterpret that, economic growth is a result of declining population growth. Infact, this is due to educational advancement, institutional and cultural inheritance and receptiveness to innovations.

Mathematical models in order to establish the causal relationship between population-development-environment forget to include other factors, which led to severe problem in assessing the actual position. For example, dealing with technical relationships among, population, economy, resources and environment, they often forget to consider that, the political relationship could link population with the social order and cultural factors. Hence there could be no precise relationship between population growth and any particular set of economic, social or cultural outcomes. Precisely it means that prediction are based on simple causal relationship.

On the basis of the above findings however, we can not generalize that population growth is not a factor behind the developmental process of a country, it can be said that population can be ‘a’ factor but not the ‘only’ factor in developmental process. However, population has both positive and negative

impacts. The actual size of the net impact, strong or weak, cannot be determined on the basis of existing evidences; only the direction of the impact can be predicted. For this prediction too, the grand realities of a particular country should be kept in mind, because it varies from country to country, society to society, political configuration to political configuration and last but not the least, nature of governance to nature of governance. Furthermore, development is affected by various other factors like leadership, nature of planning, resource availability, efficiency, distribution, political sanctity, participation of woman and community etc.

In stark contrast to Malthusian and Neo-Malthusian paradigm, development took place in the present days developed world from 1750 to 1920s and 1930s at a time when the region witnessed high population growth rate. But this was the period when economic growth rate and social development process got impetus in this part of the world. Hence, the positive association observed between the rise in population growth and the rise in per capita product, refuted pessimists assumptions. Hence, the relationship between population growth and socio economic development is a tricky issue. If explosive population growth can halt the process of development, its efficient use can be a source of development.

As far as socio-economic conditions of Nigeria, is concern, it is endowed with plenty of resources. It has ample amount of water resources, broad belt of fertile and semi fertile land, and a large area of timber resources. Cattle, goats and sheep to lesser extant, constitute important animal resources. Coastal waters are becoming important fishing grounds. Mineral resources are

varied, although considerable exploration remains to be carried out. Nigeria was until 1968, Africa's main producer of tin, extension reserves of medium grade iron ore exist, and iron and steel production is being developed. Fuel resources include deposits of lignite and sub-bituminous coal. Nigeria has been Africa's leading producer of petroleum and natural gas. Northern and middle Nigeria has great agricultural potential.

The demographic structure of Nigeria is very diverse and have more than 200 ethnic groups, along with a number of religious groups. Sex ratio has been around 100 and dependency ratio around 90. Nigeria is experiencing explosive population growth due to the second phase of demographic transition. Another striking feature of Nigerian demographic structure has been galloping rate of urban population growth.

Despite above-mentioned potential, Nigeria is placed very low in the Human Development Reports prepared by UNDP. Even though its human development index has been improving regularly the improvement is such a meager that per capita achievements looks dismal. However, the period of 1960-2000 can be divided into two distinct phase i.e. 1960-80 and 1980-2000. The first phase (1960-80) witnessed sharp improvement in almost all the fields. GDP growth rate during this period was tuned with high population growth rate, per capita GDP and per capita GNP show an upward trends. However, the situation got a deadly blow, when, after a sharp boom the oil dominated Nigerian economy nose dived. As a result, GDP growth rate plunged downward. By this period, population growth rate started to show downward trends. Thus negative correlation between population growth and economic

growth looks invalid as far as Nigeria is concerned. If population growth rate contributes to discourage the rate of investment in a country, than population pressure creates demand and make way for technological inventions, it further encourage people to change consumption pattern and adopt new situations. Another issue of concern is sharp population growth rate which could result in a would create a large pool of younger people creating adverse dependency ratio. But these younger people are raw material, which can be developed as viable human recourse by proper education training. In turn, it would stimulate development process. Furthermore, population control in the long run would create a number of elder people and hence would make dependency ratio much more severe. Horizontal, as well vertical expansion of urban center along with other related problems like, mushrooming of slum dwellers, problem of serviceability etc is threatening urban development in Nigeria. It is a by product of a number of factors than only population growth. Further, in Nigeria large-scale urbanization growth rate emanates from large-scale rural-urban migration. The migration in Nigeria has been guided by rural push rather than urban pull, because the level of development in rural Nigeria is a cause of concern. Similarly, poverty and unemployment was created by poor planning and politico-economic turmoil.

As far as environmental problem in Nigeria is concerned, desertification is the result of over cropping, overgrazing deforestation and poor irrigation practice. Though population pressure force people to reach virgin marginal land the main reason behind the expansion is low level of technological application and traditional cultivation practices, which always puts them short

of their needs. Problem of oil spillage in Niger delta region is due to weakened legitimacy of state, over the resources, and tighten noose of multinational companies over the resource bases. Even in the Cairo conference (1994), it was recognized that population pressure was far less important to environmental degradation than consumption pattern of developed world.

Inconsistent any in food supply has been an emerging problem in Nigeria particularly during the last two decades, even though, the per capita calories and protein availability has been improving regularly. The problem of 'food insecurity' in Nigeria is a result of longstanding neglect of agriculture sector in general and of food crops in particular, rather than population growth.

Influenced by various international conferences, successive governments have adopted population control policies and related family planning programmes. But family planning and population control measure failed to achieve their goals. The problem behind these policies were, that these were not integrated with local realities and were exogenetic in origin. These measures were opposed by various organization in the country. Further, most of the programmes were not integrated with other health facilities. The success of each and every initiatives hinges over its integrity and association with the local socio-economic conditions. Furthermore, underdevelopment of Nigeria discourage the people to adopt above discussed measures.

The above observations shows that, it is not the population growth which hampers the developmental process in Nigeria, rather the problem of underdevelopment is deep rooted in her Socio-economic realities and historical legacies. Further, the situation has been vitiated by several administrative

failures, political turmoil and uncertainties, which hampered the process of continuity of policy implementation. The situation became much more precarious and irrevocable with economic failures the country experienced during 1980s and the adaptation of exotic Structural Adjustment Programme. (SAP).

In reality, even today Nigeria is moderately populated and its density is much lower than that of many of the developed countries on one hand and developing countries like India on the other. Except a few urban centres, most of the other regions, require much more population for their proper development. Even important sectors like cash crop cultivation are struggling from the problem of labour shortage. The middle belt of the country is in dire need of population to kick-start the economy of the region. On the other side, due to high population growth there is a pool of younger people in Nigeria, but the younger people are treated more of a obligation than assets.

The problem lies in the education system which cares only about formal and primary education as a result resource development is very low. Moreover, we are passing through the era of technological transformation. The developing countries may gain high rewards from new technologies, but Nigeria has not been able to keep pace with the existing, technological transformation. Hence, it is lagging behind in building human capabilities and to have proper access to the resources needed for a decent standard of living. Level of technological diffusion, particularly in the area of agriculture is very low in Nigeria and it is clubbed in the bottom group of the countries as far as technological

achievement index is concerned. Further, level of community participation and human involvement in the developmental process is very low.

Suggestive Measures

Poor performance of the Nigerian economy has been a major hurdle in the development of the country. The oil boom led to the expansion of commercial activity especially in urban areas, leading to neglect of agriculture and rural areas. Modernisation of price policies; extension of credit; modern technical device to improve cultivation; infrastructure revamping; genuine land reforms, and improvement in financial institutions with greater investments in agriculture are the various factors which if taken care of, can substantially increase the agricultural production of Nigeria and in turn would kick start the stagnant Nigerian economy. It would further enhance, rural situation and would stop the rural-urban migration and urban deterioration. Further, it would absorb surplus labour and unemployment problem would be minimized step by step. Simultaneously, condition of food security would be improved. At the same time, health facilities should be taken care of. Food security along with improved health facilities would stop high rate of mortality, particularly child mortality and would provide the feeling of security in the minds of families and would automatically discourage, unwanted population growth. Educating woman may be another factor, because not only, it would empower them to work outside but also empower them to take decision in family matters. Proper development planning may be the best contraceptive, because any exogenetic and enforced measure of family planning would have serious ramifications in the multifaceted Nigerian Society.

Environment degradation in general and the problem of desertification and deforestation in particular can not be curbed by discouraging population growth. Awareness about the consequences of environmental degradation among grass root level people can only solve the problem, which could be an extensive programme on the part of Government Policy. Furthermore, bottom to top approach of development and change in the matter of domestic and commercial energy resource consumption would support sustainable development.

In Nigeria, the dire need of the hour is to conduct regular and accurate census, because it is very necessary for accurate and effective planning. The issue of population census should be depoliticised and should be non manipulative. In addition to this there is a need to integrate the population growth and demographic structure with to this national planning. For doing so, democratic setup should be developed in a proper way, as only political system of a democratic nature can only be accountable to the people.

To put it in other words, it can be said that, it is better to improve the table manner of the dinner rather than to make policies, to reduce the number of forks around the table.

Bibliography

BIBLIOGRAPHY

Primary Sources

FAO, *FAO Year Book 1999* (Rome: Information Division, 2000).

Nigeria, Federal office of Statistics, Lagos, *Statistical Survey* as cited in *Africa South of the Sahara 2001* (London: Europa Publications, 2000).

Nigeria, Federal Office of Statistics, Lagos, *Statistical Survey* as cited in *Africa South of the Sahara 2000* (London: Europa Publications, 1999).

The United Nations, *African Statistical Year Book 1985* (New York, NY: UN Publications, 1988), Part 2.

The United Nations, *UN Statistical Year Book 1974* (New York, NY: UN Publications, 1976).

_____, *UN Statistical Year Book 1982* (New York, NY: UN Publications, 1985).

_____, *UN Statistical Year Book 1987* (New York, NY: UN Publications, 1990).

_____, *UN Statistical Year Book 1992* (New York, NY: UN Publications, 1994).

_____, *UN Statistical Year Book 1997* (New York, NY: UN Publications, 2000).

The United Nations, *World Population Prospects: The 1994 Revision* (New York, NY: Population Division, 1995).

_____, *World Population Prospects: The 2000 Revision* (New York, NY: Population Division, 2001).

The World Bank, *World Development Indicators 1997, 1998, 1999 and 2000* (Washington, DC: World Bank Publications).

_____, *World Development Report 1981, 1985 and 1991* (Washington, DC: World Bank Publications).

UNDP, *Human Development Report 1992, 1993, 1996, 1997, 1999, 2000 and 2001* (New York, NY: Oxford University Press).

UNESCO, *UNESCO Year Book 1999* (Paris: UNESCO Publications, 1999).

Secondary Sources

Books

Aboyada, *Foundation of an African Economy: A Study of Investment of Growth of Nigeria* (New York: F.N. Fraeger, 1989).

Akinyemic, A.B., *Nigeria and the World* (Ibadan: Oxford University Press, 1978).

Arnold, Guy, *Modern Nigeria* (London: Longman Group Limited, 1977).

Arrow, K. I., ed., *The Balance Between Industries and Agriculture in Economic Development* (London: MacMillan, 1988), vol. 1.

Ayittey, George B.N., *Africa in Chaos* (Houndmills: MacMillan Press, 1998).

Bhende, A.A. and Knitkar, Tara, *Principles of Population Studies* (Bombay: Himalaya Publishing House, 1985).

Bowen, Ian, *Population* (Cambridge: University Press, 1960).

Buchanan, K. M. and Pugh, J.C., *Land and People in Nigeria* (London: University of London Press, 1955).

Carl, K. Eicher and Liedholm, Carl, eds., *The Growth and Development of the Nigerian Economy* (East Lansing: Michigan State University Press, 1970).

Chamberlain, Neil E., *Beyond Malthus Population and Power* (New York: Basic Books Inc. Publishers, 1970).

Chandana, R.C., *A Geography of Population* (Ludhiana: Kalyani Publications, 1986).

Clarke, J.I., Curson, P., Kayastha S.L. and Nag, Prithrith, eds., *Population and Disaster* (Cambridge: Basil Blackwell, 1989).

Clarke, J.I., *Population Geography* (Oxford: Pergamon Press, 1972).

Coale, Ansley J. and Heover, Edgar M., *Population Growth and Economic Development in Low-Income Countries: A Case Study of India's Prospects* (Princeton: Princeton University Press, 1972).

Dreze, Jean and Sen, Amartya, *India: Economic Development and Social Opportunity* (New Delhi: Oxford University Press, 1995).

Everett, A.H., *New Ideas on Population* (New York: August M. Kelly, 1970).

Ghai, Dharam, ed., *Renewing Social and Economic Progress in Africa: Essays in Memory of Philip Ndegwa* (New York: St. Martins Press, 2000).

Gupta, Pranay, *The Crowded Earth: People and the Politics of Population* (New York: W.W. Norton & Co., 1984).

Harbeson, J.W., Rothchild, Donald and Chazan, Maomi, eds., *Civil Society and the State in Africa* (Boulder: Lynne Rienner Publishers, 1994).

Harrison, Paul, *Inside the Third World* (London: Penguin, 1979).

Hopkins, A.G., *An Economic History of West Africa* (London: Longmans, 1973).

Igbozurike, Martin, *Problem-Generating Structures in Nigeria's Rural Development* (Uppsala: The Scandinavian Institute of African Studies, 1976).

Jarnett, H.R., *Africa* (London: Macdonald and Evans Ltd., 1974).

Johnson, Stanley, *The Politics of Population* (London: Earthscan Publication Ltd., 1995).

Johnston, B. and Kilby, P., *Agriculture and Structural Transformation: Economic Strategies in Late Developed Countries* (London; Oxford University Press, 1975).

Jones, E.L., and Wolf, S.J., *Agrarian Change and Economic Development* (London: Methun & Co. 1969).

Kayode, M.O. and Usman, Y.B., *The Economic and Social Development of Nigeria* (Lagos: Z. Stein Publishers, 1983), vol. II.

Kiessling, K.L. and Landberg, H., eds., *Population, Economic Development and the Environment* (Oxford: Oxford University Press, 1994).

Kifle, Henock, Olukoshi A. and Wohlgemuth, L., eds., *A New Partnership for African Development: Issues and Parameters* (Stockholm: Nordiska Afrikain Stitutet, 1997).

Kuznats, S., *Population, Capital and Growth* (New York: W.W. Norton, 1973).

Lamb, David, *The Africans* (New York: Randon House, 1982).

Lesthaeghe, R., ed., *Reproduction and Social Organisation in Sub-Saharan Africa* (California: University of California Press, 1989).

Maitra, Priyatosh, *Population, Technology and Development* (London: Gower Publishing Co., 1986).

Mehta, S.C., *Development Planning in an African Economy: The Experience of Nigeria (1950-80)* (New Delhi: Kalinga Publications, 1990), vol. 1.

Meier, Gerald M., *Leading Issues in Economic Development* (New York: Oxford University Press, 2000).

Moreland, R. Scott, *Population Development and Income Distribution* (New York: St. Martins Press, 1984).

_____, *Population Development and Income Distribution* (New York: St. Martins Press, 1986).

Oguntoyinbo, J.S., Areola, O.O. and Filani, M., eds., *A Geography of Nigerian Development* (Ibadan: Heinmann Educational Books Limited, 1978).

Olorunsola, Victor A., *Soldiers and Power: The Development Performance of the Nigerian Military Regime* (Stanford: Hoover Institution Press, 1977).

Omoldun, John O., *Nigeria Africa and the World* (New Delhi: Print India, 1981).

Onyemelukwe, J.O.C., *Nigeria in Maps* (New York: African Publishing Company, 1982).

Oppong, Christine, *Sex Roles, Population and Development in west Africa* (Portsmouth: Heinmann, 1987).

Oydiran, Oyediran and Agbaje, A., eds., *Nigeria Politics of Transition and governance 1986-1996* (Basford: Russell Press Ltd., 1999).

- Rasheed, Sadig, *Development, Participation and Democracy in Africa: Four Essays* (Pretoria: Africa Institute of South Africa, 1996).
- Ross, John a., and Mauldin, W. Parker, eds., *Berlson on Population* (New York: Springer-Verlag, 1988).
- Sen, Amartya, *Resources, Values and Development* (Oxford: Harward University Press, 1984).
- Sharma, Raj, *The "Missing Middle" in Sub-Saharan Africa* (New Delhi: Interest Publication, 1993).
- Simon, J.C., *The Economic and Population Growth* (Oxford: Basil Blackwell Ltd., 1986).
- Singh, Deep Manvinder, *Indo-Nigerian Economic Relations* (New Delhi: Kalinga, 1996).
- Southgate, D.D. and Disinger, J.F., eds., *Sustainable Resource Development in the Third World* (Boulder: West View Press, 1994).
- Stockwell, Edward G. and Lindlaw, Karen A., *Third World Development: Problems and Prospects* (Chicago: Nelson-Hall Inc. Publishers, 1981).
- Sundberg, Barbara and William, Moomaw, *People and their Planet: Searching for Balance* (London: MacMillan Press Ltd., 1999).
- Tebah, Leon, *Population Growth and Economic Development in Third World* (Dolhain: Ordina Editions, 1996).
- Thirlwall, A.P., *Growth and Development* (Houndmills: MacMillan Press Ltd., 1999).
- Tolba, M., *Saving Out Planet: Challenges and Hopes* (London: Chapman and Hall, 1992).
- Uroh, Chris, ed., *Africa and Challenge of Development* (Ibadan: Hope Publications, 1998).
- Usoro, E.J., *The Nigerian Oil Palm Industry* (Ibadan: Ibadan University Press, 1974).

World Bank, *Population Growth and Policies in Sub-Saharan Africa* (Washington, DC: World Bank Publications, 1986).

Articles in Periodicals

Ahlburg, D.A., "Julian Simon and the Population Growth Debate", *Population and Development Review*, vol. 24, no. 2, June 1998, pp. 317-27.

Aja, Egbeke, "Urbanisation Imperatives in Africa: Nigerian Experience", *Philosophy and Social Action* (Dehradun), vol. 27, no. 1, 2001, pp. 13-22.

Ajayi, S., "Women in Agriculture as a Strategy for Food Security in Nigeria", *Journal of Rural Development & Administration*, (Peshawar), vol. 29, no. 4, Autumn 1997, pp. 11-17.

Ani, A.O. and Kwaghe, P.V., "Rural Development and the Future of Agricultural Development Policy in Nigeria", *Journal of Rural Development & Administration*, vol. 29, no. 4, Autumn 1997, pp. 1-10.

Arene, A.O., "Community Leadership and Development of Education Projects in Rural Nigeria", *Journal of Rural Development & Administration*, vol. 29, no. 2, Spring 1997, pp. 110-119.

_____, "The Role of Resource Persons in Community Development Process in Nigeria", *Journal of Rural Development & Administration*, vol. 28, no. 3, Summer 1996, pp. 25-32.

Arene, C.J. and Aneke, G.C., "Loan Repayment and Technical Aid Among Women in Agriculture in Nigeria", *Journal of Rural Development & Administration*, vol. 29, no. 1, Winter 1997, pp. 10-19.

Arora, Gurjit K., "Environment, Population and Development Issues in Developing Countries in the Emerging Global World", *India Quarterly*.

Askew, Ian and Fisher, Andrew, "Using Operations Research to Guide Family Planning Program Development and Policy Formulation in Sub-Saharan Africa", *Population Research and Policy Review* (Dordrecht), vol. 14, 1995, pp. 373-95.

Behraman, J.R. and Knowles, J.C., "Population and Reproductive Health: An Economic Framework for Policy Evaluation", *Population and Development Review* (New York, NY), vol. 24, no. 4, December 1998, pp. 697-737.

Blanchet, Didier, "Population Growth and Income Growth During the Demographic Transition: Does a Malthusian Model Help Explain Their Relationship", *Population* (Paris), vol. 2, 1990, pp. 37-50.

Bledsoe, C., Banja, F and Hill, A.G., "Reproductive Mishaps and Western Contraception: An African Challenge to Fertility Theory", *Population and Development Review*, vol. 24, no. 1, March 1998, pp. 15-57.

Bongaarts, John, "Population Pressure and the Food Supply System in the Developing world", *Population and Development Review*, vol. 22, no. 3, September 1996, pp. 483-503.

Boserup, Ester, "Development Theory: An Analytical Framework and Selected Applications", *Population and Development Review*, vol. 22, no. 3, September 1996, pp. 505-15.

Braun, Michela, "Functional Change of Periodic Markets in Densely Populated Areas in South-East Nigeria", *Applied Geography and Development* (Tubingen), vol. 52, 1998, pp. 27-40.

Brockhoff, Martin and Brennan, E., "The Poverty of Cities in Developing Regions", *Population and Development Review*, vol. 24, no. 1, March 1998, pp. 75-114.

Caldwell, John R., "Malthus and the Less Developed World: The Pivotal Role of India", *Population and Development Review*, vol. 24, no. 4, December 1998, pp. 675-95.

Eboh, E.C., "Socio-Economic and Agronomic Impact of Use Intensification and the Prospect of Resource Conservation in Rural Anambara, Nigeria", *Journal of Rural Development and Administration*, vol. 27, no. 4, Autumn 1995, pp. 39-48.

Enchaulegui, Maria E., "Low-Skilled Immigrants and the Changing American Labour Market", *Population and Development Review*, vol. 24, no. 4, December 1998, pp. 811-24.

Feng, Wang and Yang, Quanhe, "Age of Marriage and the First Birth Interval: The Emerging Change in Sexual Behaviour Among Young Couples in China", *Population and Development Review*, vol. 22, no. 2. June 1996, pp. 299-320.

Gobalet, J.G. and Thomas R.K., "Demographic Data and Geographic Information Systems for Decision Making", *Population Research and Policy Review*, vol. 15, December 1996, pp. 537-48.

Golini, Antonio, "How Low Can Fertility Be? An Empirical Exploration", *Population and Development Review*, vol. 24, no. 1, March 1998, pp. 59-73.

Hansen, N., "Impacts of Small and Intermediate Sized Cities on Population Distribution: Issues and Responses", *Regional Development Dialogue* (Nagoya), vol. 11, no. 1, pp. 67-93.

Heuveline, Patrick, "The Global and Regional Impact of Mortality and Fertility Transitions, 1950-2000", *Population and Development Review*, vol. 25, no. 4, December 1996, pp. 681-702.

Ifeka, Caroline, "Oil, NGOs & Youths: Struggles for Resource Control in Niger Delta", *Review of African Political Economy* (Moscow), no. 37, 2001, pp. 99-140.

Ikelegbe, Augustine, "Civil Society, Oil and Conflict in the Niger Delta Region of Nigeria: Ramifications of Civil Society for a Regional Resource Struggle", *Journal of Modern African Studies* (Cambridge), vol. 39, no. 3, pp. 437-69.

Johansson, S. Ryan, "Complexity, Morality and Policy at the Population Summit", *Population and Development Review*, vol. 21, no. 2, June 1995, pp. 361.

Kalam, Abdul, "The Development of the Demographic Transition Theory and its Applicability to Third World Countries", *Journal of Indian Anthropological Society* (Delhi), vol. 25, 1990, pp. 1-8.

Kelly A.C. and Schmidt, Robert M., "Aggregate Population and Economic Growth Correlation: The Role of the Components of Demographic Change", *Demography* (New York, NY), vol. 32, 1995, pp. 543-55.

Ladele, A.A. and Omotesho, O.A., "Improved Agricultural Support System Through Farmers' Cooperatives in Nigeria", *Journal of Rural Development & Administration*, vol. 29, no. 3, summer 1997, pp. 55-60.

Lawal, M.O., "Rural Development in Nigeria", *Geographical Review of India* (Calcutta), vol. 59, no. 3, September 1997, pp. 232, 247.

Lesthaeghe, Ron, "One Theory Development: Application to the Study of Family Formation", *Population and Development Review*, vol. 24, no. 1, March 1998, pp. 1-14.

Lloyd, Cynthia B. and Blanc, A.K., "Children's Schooling in Sub-Saharan Africa: The Role of Fathers, Mothers, and Others", *Population and Development Review*, vol. 22, no. 2, June 1996, pp. 265-98.

Main, Hamish, "Urban-Rural Symbiosis and Environmental Sustenance in Africa: The Case of Kano, Nigeria", *Geographical Review of India*, vol. 62, no. 2, June 2000, pp. 107-115.

Mason, Andrew, "Population and Housing", *Population Research and Policy Review*, vol. 15, December 1996, pp. 419-35.

Mc Nicoll, Geoffrey, "On Population Growth and Revisionism: Further Questions", *Population and Development Review*, vol. 21, no. 2, June 1995, pp. 307-40.

Mcintosh, C. Alison and Finkle, Jason L., "The Cairo Conference on Population and Development: A New Paradigm", *Population and Development Review*, vol. 21, no. 2, June 1995, pp. 223-60.

Menicoll, G., "Malthus for the Twenty - First Century", *Population and Development Review*, vol. 24, no. 2, June 1998, pp. 309-16.

Meyerson, F.A.B., "Population, Carbon Emissions, and Global Warming: The Forgotten Relationship at Kyoto", *Population and Development Review*, vol. 24, no. 1, March 1998, pp. 115-30.

_____, "Toward a Per Capita-Based Climate Treaty: Reply", *Population and Development Review*, vol. 24, no. 4, December 1998, pp. 804-10.

Mohi, F.L. and Mott, S.H., "Household Fertility Decision in West Africa: A Comparison of Male and Female Survey Results", *Studies in Family Planning* (New York, NY), vol. 16, 1985, pp. 88-99.

Najam, Adil, "A Developing Countries' Perspective on Population, Environment and Development", *Population Research and Policy Review*, vol. 15, February 1996, pp. 1-19.

Nwagwu, Cordelia C., "The Environment of Crisis in the Nigerian Education System", *Comparative Education* (London), vol. 33, no. 1, 1997, pp. 87-95.

Nweze, N.J. and Igbokwe, E.M., "Agricultural Land Development: A Appraisal of the National Land Development Authority in Southern Nigeria", *Journal of Rural Development & Administration*, vol. 29, No. 4, Autumn 1997, pp. 18-26.

Oruguloye, I.O., "The Implications of the Demographic Transition Theory for Fertility Change in Nigeria", *International Journal of Sociology of the Family*, (New Delhi), vol. 21, Autumn 1991, pp. 161-74.

- Perlman, Mark, "The Population Summit: Reflections on the World's Leading Problems", *Population and Development Review*, vol. 21, no. 2, June 1995, pp. 341-49.
- Preston, Samuel H., "The Effect of Population Growth on Environmental Quality", *Population Research and Policy Review*, vol. 15, April 1996, pp. 95-108.
- Prothero, R. Mansell, "John Hippesley on the Populousness of Africa: A Comment", *Population and Development Review*, vol. 24, no. 3, September 1998, pp. 609-12.
- Qizilbash, Mozaffar, "Sustainable Development: Concept and Rankings", *The Journal of Development Studies* (London), vol. 37, no. 3, February 2001, pp. 136-61.
- Rajesh, "Population Growth and Women's Development", *Social Change* (New Delhi), vol. 25, no. 4, December 1995, pp. 105-08.
- Renne, Elisha P., "House, Fertility and the Nigerian Land Use Act", *Population and Development Review*, vol. 21, no. 1, March 1995, pp. 113-125.
- Rothschild, Emma, "Echoes of the Malthusian Debate at the Population Summit", *Population and Development Review*, vol. 21, no. 2, June 1995, pp. 351-59.
- Rudel, Thomas K., "Population, Development and Tropical Deforestation: A Cross-National Study", *Rural Sociology* (Bellingham), vol. 54, no. 3, 1989, pp. 327-38.
- Sa, Paul De, "Population, Carbon Emission, and Global Warming: Comment", *Population and Development Review*, vol. 24, no. 4, December 1998, pp. 797-803.
- Schejtman, Alexander, "Urban Dimension in Rural Development", *Cipal Review* (New York, NY) vol. 67, April 1999, pp. 15-33.
- Shoremi, O.I.A., Oyegade A. and Odiaka N., "A Review of the Status of Rural Women in Farm Animal Production: The Nigeria Experience", *Journal of Rural Development & Administration*, vol. 29, no. 1, Winter 1997, pp. 83-90.
- Singh, Kumud R., "Country Profile: Nigeria", *Africa Quarterly* (New Delhi), vol. 41, no. 1-2, Jan/June 2001, pp. 215-240.

Swanson, D.A., Burch, T.K. and Tedrow, L.M., "What is Applied Demography?", *Population Research and Policy Review*, vol. 15, December 1996, pp. 403-18.

Tayman, Jeff, "Forecasting, Growth Management and Public Policy Decision Making", *Population Research and Policy Review*, vol. 15, December 1996, pp. 491-508.

Umar, M.S., "Education and Islamic Trends in Northern Nigeria: 1970s - 1990s", *Africa Today* (Boulder), vol. 48, Summer 2001, pp. 127-150.

Vaughan, O., "Assessing Grassroots Politics and Community Development in Nigeria", *African Affairs* (New Jersey), no. 94, pp. 501-18.

Wawer, M., Mcnamara, R. McGinn, T. and Lauro, D., "Family Planning Operation Research in Africa: Reviewing a Decade of Experience", *Studies in Family Planning*, vol. 25 (5), pp. 279-93.

Wils, A. and Gaiyon, A., "Diffusion of Education in Six World Regions, 1960-90", *Population and Development Review*, vol. 24, no. 2, June 1998, pp. 357-68.

Relevant Websites

<http://www.Africa.2000.com/RNDX/rlist.html>

<http://www.allafrica.com/stories/200109030085.html>

http://www.apps3.fao.org/abcdq/abcdq.jsp?username=&country_ID=159

http://www.ashoka.org/global/aw_Africa.Nigeria.efm?country47 & order name

<http://www.derdata.worldbank.org/eternal/dgcomp.asp?rmdk=110 & smdk=500001>

<http://www.eia.doe.gov/emeu/cabs/Nigeria.html>

<http://www.einanti.cornell.edu/pdp/pdpwp.htm>

<http://www.esa.un.org/techcoop/portfolio details.asp/it state>

<http://www.familyplannet.org/feature dproj5.php>

<http://www.fao.org/media/press/2002>

<http://www.google.com/search?q=nigeria + population + policy>

<http://www.igc.org/worldnews/awpgpide/popula.html>

<http://www.ilo.org/public/english/protection/migrant/inlands/umedia.htm>

<http://www.int/actionprogrammes/Africa/national/2001>

<http://www.packar.org/index/countries/Nigeria.htm>

<http://www.tradeport.org/ts/countries/Nigeria/flt.html>

<http://www.uaf.edu/rahi/papers/tatina98.html>

<http://www.undp.org.ng/images/thirdafrica>

<http://www.un.org/popin/unpopcom/32ndsess/grass/state/niger/pdf>

<http://www.unfpa.org/modules/dispatch/issues/2001/june01/Nigeria.htm>

<http://www.un.org/news/press/docs/2001/pop792toc.htm>

<http://www.un.org/esa/agenda21/natinfo/counter/Nigeria/social.htm>

<http://www.un.org/esa/agenda21/natinfo/indicate/nature.htm>

<http://www.usaid.gov/country/afr/ng>

<http://www.who.int/productive-health/mps/Nigeria2.en.html>

Magazines and Newspapers

Deccan Herald (Bangalore)

Down to Earth (New Delhi)

Frontline (Chennai)

Geography and You (New Delhi)

Indian Express (New Delhi)

Seminar (Delhi)

The Courier (Brussels)

The Economist (London)

The Hindu (Chennai)

The International Herald Tribune (Paris)

The Statesman (Calcutta)

The Times of India (New Delhi)

The Tribune (Chandigarh)

Weekly Main (Johannesburg)

West Africa (London)

Periodicals

Africa Development (Dakar)

Africa Diary (New Delhi)

Africa Economist Digest (London)

Africa Studies Monographs (Kyoto)

Africa Today (Boulder)

African Affairs (New Jersey)

African Communist (Johannesburg)

African Confidential (London)

African Studies Review (Atlanta)

Indian Africanist (New Delhi)

Journal of African History (Cambridge)

Sechaba (London)

Appendix

APPENDIX

Appendix I

Nigeria : Area, Population and Density

Area (sq.km)	923768*
Population (census results, 28-30 November 1991)	44544531
Males	43969970
Females	88514501
Total	
Population (official estimates at mid-year)	
1993	93265251
1994	95223821
1995	97223521
Density (per sq. km) at mid-1995	105.2

*365669 sq.miles

Source: Federal office of statistics, cited in Africa south of Sahara in 2001, (London: Europa)

Appendix II

Population and Economically active population						
	1960	1970	1980	1990	1995	2000
Nigeria						
Population /Age (Thousands)						
Both sexes						
Total	37446	47980	64325	85953	99278	113862
0-9	12171	15653	21314	28916	32763	36616
10-14	4143	5844	7737	10852	12797	14684
15-19	3689	4975	6592	8826	10643	12581
20-24	3201	3872	5651	7289	8591	10372
25-29	2741	3404	4789	6090	7007	8230
30-34	2352	2920	3710	5142	5810	6625
35-39	2018	2476	3207	4321	4896	5477
40-44	1703	2097	2688	3329	4103	4612
45-49	1395	1769	2241	2865	3143	3852
50-54	1155	1459	1857	2363	2681	2930
55-59	939	1152	1505	1912	2176	2465
60-64	778	894	1167	1510	1710	1948
65+	1162	1465	1867	2539	2959	3471

Men						
Total	18452	23797	32192	43135	49928	57383
0-9	6094	7890	10788	14671	16633	18600
10-14	2072	2935	3912	5509	6502	7463
15-19	1844	2486	3334	4473	5402	6391
20-24	1593	933	2849	3674	4349	5262
25-29	1355	1691	2355	3057	3530	4172
30-34	1160	1444	1863	2571	2918	3348
35-39	994	1221	1603	2142	2448	2756
40-44	833	1031	1332	1657	2032	2307
45-49	672	864	1102	1421	1559	1901
50-54	547	703	904	1156	1321	1443
55-59	435	543	724	924	1054	1202
60-64	355	412	551	720	817	933
65+	496	641	836	1161	1363	1605
Women						
Total	18995	24183	32133	42817	49350	56479
0-9	6077	7762	10526	14245	16130	18015
10-14	2070	2909	3825	5344	6295	7231
15-19	1845	2489	3258	4353	5241	6190
20-24	1608	1939	2802	3615	4242	5110
25-29	1386	1713	2394	3033	3477	4058
30-34	1952	1476	1848	2571	2892	3278
35-39	1024	1255	1603	2179	2448	2721
40-44	669	1066	1356	1671	2071	2305
45-49	723	904	1139	1444	1584	1991
50-54	609	756	953	1207	1360	1487
55-59	504	609	782	988	1121	1263
60-64	423	482	616	790	891	1015
65+	665	823	1031	1378	1596	1866
Economically active Population/Age (Thousands)						
Both Sexes						
Total	16523	20389	26503	33954	39160	45129
10-14	1347	1807	2272	3014	3315	3527
15-19	2201	2825	3567	4526	5259	5978
20-24	2235	2609	3678	4561	5465	6701
25-29	2033	2467	3393	4212	4934	5902
30-34	1790	2179	2724	3690	4206	4842
35-39	1565	1911	2472	3307	3763	4224
40-44	1339	1647	2111	2612	3221	3636
45-49	1118	1427	1817	2336	2564	3139
50-54	943	1195	1523	1940	2185	2366
55-59	742	906	1189	1488	1674	1875
60-64	563	635	816	1037	1159	1304
65+	657	780	950	1232	1415	1633

Men						
Total	10282	12890	17093	22200	25433	39013
10-14	929	1259	1603	2150	2313	2396
15-19	1386	1797	2313	2974	3418	3837
20-24	1453	1718	2467	3096	3644	4385
25-29	1133	1625	2287	2900	3339	3936
30-34	1131	1404	1805	2484	2816	3226
35-39	971	1191	1564	2087	2384	2683
40-44	813	1007	1301	1621	1986	2254
45-49	652	843	1080	1401	1536	1872
50-54	526	677	871	1115	1273	1390
55-59	412	514	684	872	994	1133
60-64	323	375	501	655	742	846
65+	376	480	617	846	987	1156
Women						
Total	6241	7499	9410	11754	13727	16017
10-14	418	548	669	864	1002	1132
15-19	815	1028	1254	1551	1841	2141
20-24	782	891	1212	1465	1821	2316
25-29	722	842	1106	1312	1595	1967
30-34	660	775	918	1205	1391	1615
35-39	594	720	909	1220	1378	1541
40-44	526	640	810	991	1235	1383
45-49	466	584	737	936	1028	1267
50-54	418	518	652	825	911	776
55-59	330	392	495	616	679	743
60-64	241	260	315	382	417	458
65+	271	301	333	387	428	478
Economically active Population/Age/Rates						
Both Sexes						
Total	44.13	42.50	41.20	39.50	39.44	39.64
10-14	32.52	30.92	29.37	27.77	25.90	24.02
15-19	59.66	56.79	54.11	51.28	49.41	47.51
20-24	69.83	67.39	65.09	62.58	63.62	64.61
25-29	74.16	72.47	70.85	69.17	70.42	71.72
30-34	76.12	74.62	73.41	71.76	72.40	73.08
35-39	77.57	77.20	77.10	76.53	76.56	77.13
40-44	78.61	78.54	78.52	78.45	78.51	78.85
45-49	80.14	80.67	81.09	81.55	81.56	81.49
50-54	81.65	81.89	82.03	82.09	81.49	80.77
55-59	78.98	78.64	78.34	77.83	76.93	76.09
60-64	72.39	71.04	69.96	68.67	67.81	66.96
65+	55.72	53.29	50.88	48.54	47.84	47.06

Men						
Total	55.73	54.17	53.10	51.47	50.94	50.73
10-14	44.83	42.90	40.97	39.03	35.57	32.10
15-19	75.16	72.27	69.39	66.50	63.27	60.03
20-24	91.19	88.88	86.58	84.27	83.80	83.33
25-29	96.72	96.10	95.48	94.87	94.60	94.33
30-34	97.49	97.20	96.92	96.63	96.51	96.38
35-39	97.69	97.60	97.52	97.43	97.39	97.35
40-44	97.54	97.62	97.70	97.78	97.74	97.70
45-49	96.99	97.51	98.04	98.56	98.52	98.48
50-54	96.16	96.26	96.36	96.45	96.39	96.33
55-59	54.75	94.62	94.49	94.36	94.30	94.24
60-64	90.94	90.95	90.96	90.97	90.86	90.75
65+	75.81	74.82	73.83	72.84	72.42	72.00
Women						
Total	32.86	31.01	29.28	27.45	27.82	28.36
10-14	20.19	18.84	17.50	16.16	15.92	15.67
15-19	44.16	41.32	38.48	35.64	35.12	34.59
20-24	48.66	45.95	43.24	40.53	42.93	45.33
25-29	52.09	49.15	46.21	43.27	45.87	48.47
30-34	55.33	52.52	49.70	46.88	48.08	49.28
35-39	58.04	57.36	56.67	55.99	56.32	56.65
40-44	60.47	60.08	59.69	59.29	59.64	59.99
45-49	64.46	64.58	64.69	64.81	64.87	64.93
50-54	68.62	68.53	68.43	68.34	67.01	65.67
55-59	65.38	64.38	63.38	62.37	60.59	58.81
60-64	56.83	54.00	51.17	48.33	46.72	45.11
65+	40.74	36.51	32.29	28.06	26.84	25.61
Economically active Population/Sector (Thousands)						
Both Sexes						
Agriculture	12087	14468	14289	14599		
Industry (Total)	1629	2144	2204	2362		
Industry (Manufacturing)	NA	NA	1256	1298		
Services	2807	3777	10010	16994		
Men						
Agriculture	7594	9158	8887	9424		
Industry (Total)	1254	1676	1754	1974		
Industry (Manufacturing)	NA	NA	810	912		
Services	1434	2056	6453	10803		
Women						
Agriculture	4493	5310	5402	5175		
Industry (Total)	374	469	450	388		
Industry	NA	NA	446	386		

(Manufacturing)						
Services	1373	1721	3558	6191		
Economically active Population/Sector (Percentages)						
Both Sexes						
Agriculture	73.15	70.96	53.91	43.00		
Industry (Total)	9.86	10.52	8.31	6.95		
Industry (Manufacturing)	NA	NA	4.74	3.82		
Services	16.99	18.52	37.77	50.05		
Men						
Agriculture	73.85	71.05	51.99	42.45		
Industry (Total)	12.20	13.00	10.26	8.89		
Industry (Manufacturing)	NA	NA	4.74	4.11		
Services	13.95	15.95	37.75	48.66		
Women						
Agriculture	72.00	70.80	57.41	44.03		
Industry (Total)	6.00	6.25	4.78	3.30		
Industry (Manufacturing)	NA	NA	4.74	3.28		
Services	22.00	22.95	37.81	52.67		

Source: ILO Datas

Appendix III

Nigeria: State and Population
States (census of November 1991)*

	Population	Capital
Abia	2297978	Umuahia
Adamawa	2124049	Yola
Akwa Ibom	2359736	Uyo
Anambra	2767903	Awka
Bauchi	4294413	Bauchi
Benue	2780398	Makurdi
Borno	2596589	Maiduguri
Cross River	1865604	Calabar
Delta	2570181	Asaba
Edo	2159848	Benin City
Enugu	3161295	Enugu
Imo	2485499	Owerri
Jigawa	2829929	Dutse
Kaduna	3969252	Kaduna
Kano	563040	Kano
Katsina	3878344	Katsina
Kebbi	2062226	Birnin Kebbi
Kogi	2099046	Lakoha

Kwara	1566469	Illorin
Lagos	5685781	Ikeja
Niger	2481367	Minna
Ogun	2338570	Abeokuta
Ondo	3884485	Akure
Osun	2203016	Oshogbo
Oyo	3488789	Ibadan
Plateau	3283704	Jos
Rivers	3983857	Port Harcourt
Sokoto	4392391	Sokoto
Taraba	1480590	Jalingo
Yobe	1411481	Damaturu
Federal Capital Territory	378671	Abuja
Total	88514501	

* In October 1996 the Government announced the creation of six new states.

Source: Federal office of statistics, cited in Africa south of Sahara in 2001, (London: Europa).