

**TITLE PAGE**

**AN APPRAISAL OF POVERTY ALLEVIATION  
PROGRAMMES IN NIGERIA: A CASE STUDY OF  
BENUE, NASARAWA AND PLATEAU STATES,  
1986 - 2003**

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of Jos, in partial fulfillment of the requirements for  
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**CERTIFICATION**

This is to certify that this thesis has been examined and approved for the award of the degree of **DOCTOR OF PHILOSOPHY in ECONOMICS (DEVELOPMENT ECONOMICS)**.



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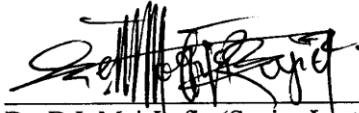
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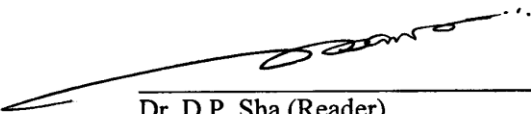
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**DECLARATION**

I hereby declare that this WORK is the product of my own research efforts; undertaken under the supervision of Professor Ode Ojowu and Dr. D. I. Mailafia and has not been presented elsewhere for the award of a degree. All sources have been duly distinguished and appropriately acknowledged.

**Alanana Christopher Abimiku**

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This work is dedicated to my father, Abimiku Otsobi of blessed memory.



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## **ABSTRACT**

In every economy, government policy interventions are aimed at, among other objectives, attaining higher rates of economic growth and development so as to improve the welfare of citizenry bearing in mind the prevailing conditions. The Nigerian military regime, which in the 1980s opted for Structural Adjustment Programme (S.A.P.) as a solution to the ailing economy later discovered that the poor were most adversely affected by the S.A.P. policies. The government therefore found it necessary to put in place programmes meant to provide safety nets for the poor. Some of the programmes that came into being as a result of this concern are the National Directorate of Employment (NDE), the People's Bank of Nigeria as well as the Primary Health Care (PHC). These three programmes are the focus of this research. The study, which relied on primary data generated from an administered questionnaire, was designed to assess the impact of these programmes on the level of poverty in Benue, Nasarawa and Plateau States. Two local government areas in each of the three states were randomly selected for the study. Literature review focused on concepts and measures of poverty, as well as some relevant theories of poverty that seek to expose the causes and effects of poverty in developing countries. In assessing the impact of these programmes in the study area, the research adopted a descriptive approach supported by the Foster, Geer and Thorbecke (FGT) poverty index as well as the Z test distribution at 5% level of significance. Our findings reveal that the



programmes have not been able to significantly reduce the level of poverty in the study area. The failure of the programmes to significantly reduce poverty is attributed to among others, the narrow coverage of the programmes and the fact that many of the beneficiaries did not put the skills acquired into use as was expected in respect of National Directorate of Employment; the loans acquired from People's Bank were diverted. Primary Health Care facilities were inadequate and failed to meet the minimum expectation of those who patronized them. One of the most significant reasons for the ineffectiveness of these programmes is the non involvement of the stakeholders, particularly the poor who were the target beneficiaries. Thus an important conclusion of the study is that the non involvement of the poor in the programme design and execution is a critical factor in the failure of the programmes. It is therefore the recommendation of this study that the involvement of the poor themselves in the conception, planning and implementation of programmes meant for them as well as the institution of good governance in the administration of pro-poor programmes are crucial in the efforts towards reducing poverty in Nigeria. The involvement of beneficiaries in the programmes ensures ownership and commitment that help to promote sustainability of such programmes thereby making the programmes more effective towards attaining the set goals.



## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 BACKGROUND TO THE STUDY**

Prior to the commercial mining of fossil oil in Nigeria, the economy depended mainly on agricultural products for its domestic food supply and foreign exchange earnings. This situation however, changed as the advent of oil boom led to the neglect of the agricultural sector. In addition, the nation's economic policies during the oil boom period paid little or no attention to the non-oil export sector. The result of this neglect was that Nigeria turned from being a major agricultural exporter and largely self-sufficient in food in the 1960s to a net food importer in the 1970s (Atoloye, 1997). The World Bank Report on Poverty and Welfare in Nigeria (World Bank, n.d.) which described the undesirable effects of developing one sector on the activities in other sector(s) of the economy provided a good illustration of the crisis in Nigeria.

The report revealed that though Nigeria has abundant land, oil and natural resources, many of her citizens are still very poor (World Bank, n.d.). The Bank observed that the country's earnings of about U.S. \$200 billion between 1970 and 1990 from oil had impacted little

on the welfare of the people, especially the poor, as the oil revenue had not been wisely invested in productive ventures to provide a sustainable stream of benefits to the poor.

The economic depression in the economy became glaring as the growth rates in the nation's gross domestic product (G.D.P.) which averaged 10 percent between 1970 and 1973; and 8% between 1974 and 1980 did not only decline but became negative from 1980 with an average of -6% between 1980 and 1984 (Osagie, 1992). According to Central Bank of Nigeria and World Bank (1999), as from the late 1970s, the nation has had to contend with deteriorating terms of trade, excessive importation and debt over-hang, amidst adverse economic environment caused by oil shocks and world economic depression.

The Nigerian government in a bid to curb the depression adopted the Structural Adjustment Programme (S.A.P) in 1986. The cardinal objectives of S.A.P included: diversification of the productive base of the economy so as to curtail dependence on the oil sector and imports to achieve a fiscal and balance of payments viability over the medium term; laying a solid foundation for non-inflationary growth and lessening the importance of non-productive investments in the public sector efficiency; intensifying the growth potential of the private sector

and attracting fresh foreign loans (Egwim, 1989).

During the implementation of the Structural Adjustment Programme, it was realised that unintended negative effects of the programme such as accentuation of income inequality, unequal access to food, shelter, education, health and other necessities of life became more prominent in the Nigerian state with the poor being the most affected group (National Planning Commission, 1995). As pointed out by Demery and Addison (1988), adjustment policies could affect the poor adversely in two ways: First, in the short-run, adjustment policies may reduce the real income and consumption of poor groups. They cited a World Bank study as having compared such initial adverse effects to a 'crossing of the desert' in which those who were least able to cope with the crossing require some temporary relief to tide them over. Secondly, in the long run, some poor groups may not benefit from the processes put in place by the adjustment effort. To Demery and Addison (1988), adjustment policies shape development and influence the distribution of income for years into the future and will have different effects on the poor. This view has been buttressed by Atoloye's (1997), who argued that marginalisation of the middle class in Nigeria's economic growth process especially since the introduction of S.A.P. had disrupted the traditional economic link between the

middle class and the low-income group (those mostly affected by poverty) by which the former complemented the latter. Hence, the problem associated with the Structural Adjustment Programme has gone beyond 'crossing of the desert' as the marginalization of the middle class, has, in addition to disruption of the economic link between this class and the low income group (the poor) led to the emergence of the new poor.

It is the realization of the adverse effects of S.A.P. on the poor that prompted the introduction of policies and programmes to alleviate poverty and provide safety-nets for the poor in the economy (National Planning Commission, 1995). These programmes include: the National Directorate of Employment (NDE); the People's Bank; the Community Bank Scheme; the Better Life Programme (BLP)/Family Support Programme (FSP); Family Economic Advancement Programme (FEAP); the Directorate for Food, Roads and Rural Infrastructure (DFRRI); the Primary Health Care (PHC); the Federal Urban Mass Transit Scheme; the National Agricultural Land Development Authority (N.A.L.D.A); the Poverty Alleviation Programme (P.A.P) and now, the National Poverty Eradication Programme (N.A.P.E.P).

According to Odejide (1997); Anyanwu (1997); Aku, Ibrahim and Bulus (1997), the following can be categorized as poor: (1)

illiterates, (2) wage earners, (3) households headed by older people and women whose nutritional needs are not being met adequately, (4) residents of isolated rural areas that lack essential infrastructure and (5) those who fall below the poverty line and whose incomes cannot afford their basic needs. Others are urban squatters and 'street' children, ethnic minorities and all those who are not only marginalized and deprived but also suffer economic, political, social and cultural persecution; those who have lost their jobs and youths who have not been able to find employment as a result of economic reforms under the SAP.

Though most Nigerians are quick to attribute the causes of failures of policies and programmes to corruption and implementation bottlenecks, it is expected that the trickle down effects of these policies and programmes should have at least reduced poverty instead of the present situation where NPC (1995), Onibokun and Kumuyi (1996) opined that government policies and programmes have not only aggravated the level of mass poverty in Nigeria but that poverty has been continuous and worsening. This is affirmed by data from Federal Office of Statistics (1999). These data indicate that while no State in Nigeria had more than half of its population categorized as poor in 1980, by 1996, only one state (Rivers) had less than half of its

population categorized as poor. The nation's general picture depicts a continuous rise in poverty incidence. While in 1980 only 27.2% of the Nigerian population were said to be poor, the proportion increased to 46.3%, 65.6% and 80% in 1985, 1996 and 1998 respectively. Though the trend according to Ogwumike (2001) and World Fact Book (2004) declined to 70% and 60% in 1999 and 2000 respectively, the fact that over 50% of the Nigerian population was still categorized as poor implied in the words of Kwanashie (2000) that the level of poverty has remained unacceptable.

The high incidence of poverty in Nigeria has become a concern to policy makers and indeed all well-meaning Nigerians because, as argued by United Nations Development Programme (2001), it has not only increased from 27.2% in 1980 to 80% in 1998 but it is estimated to be rising by 10% in every 3 years. In addition, despite several efforts by government, non-governmental organizations, international donor agencies, the nation's poverty situation has become worse judging by different indices.

The nation's pathetic poverty situation amidst rich resources endowment coupled with efforts to alleviate it has been summarized by Ali-Akpajiak and Pyke (2003:6) as follows:



all documentation, official or otherwise shows that poverty in Nigeria in all forms is rising at an increasingly fast pace. Nigeria's social statistics rank it among the worst in south Saharan Africa even though it possesses the greatest natural resources... Given that Nigeria is the seventh largest exporter of oil in the world, these revelations are distressing... The poverty profile of Nigeria does indeed present a very sombre picture of a rich nation in decline.

The nation's poverty situation becomes more disturbing when compared with nations that are similarly or even less endowed with resources as it has been described by Kwanashie (2000) as one of the poorest nations in the world despite its abundant resources.

Nigeria is world's seventh largest exporter of oil, sixth largest producer in OPEC, Africa's largest oil exporter and the fifth biggest source of United State's oil imports. This enormous wealth is a good potential for effective alleviation or reduction and possibly eradication of poverty (National Planning Commission, 2004; Oil Statistics, n.d.; Thomas and Canagarajah, 2002). Yet, Nigeria is not only one of the poorest countries in the world but also in Africa and indeed in south Saharan Africa. As long as majority of Nigerians remain poor, accompanied by limited social development, the nation's great natural wealth notwithstanding, it will be difficult for the country to meet the Millennium Development Goals (MDGs) argued National Planning

Commission (2004).

From the foregoing, the World Bank's 'crossing of the desert' has not only become an illusion but got more Nigerians 'trapped in the desert' as poverty has turned to be a widespread phenomenon in the country. It is an irony to witness worsening poverty level amidst efforts to alleviate it. Thus, the reality of persistent poverty in Nigeria along side various poverty alleviation programmes has compelled one to re-think the dynamics of the role of government in intervening to minimize social and economic inequalities, especially for rural people who are predominantly poor and in places where the poor people are located. It is in the light of this that a research into the appraisal of poverty alleviation programmes in the study area is considered worth while most especially that majority of the people in the study area are not only farmers but also rural dwellers.

## **1.2 STATEMENT OF RESEARCH PROBLEM**

Poverty alleviation programmes in an economy are aimed at improving the welfare of those who are categorized as poor. The poverty alleviation programmes considered in this study have been in place for about nineteen (19) years. However, available statistics do not appear to be suggesting any remarkable improvement in the

poverty situation in Nigeria. Nigeria has consistently been classified among the poorest countries in the world. According to 2005 World Bank report, Nigeria has been rated as the second poorest country in the world, only better than Ethiopia which was reported as the poorest in the world. In fact, World Bank's, United Nations Development Programme's, International Monetary Fund's and Federal Office of Statistic's figures show an increase in overall poverty level. This research is therefore designed to examine this phenomenon of a myriad of poverty alleviation programmes without commensurate results. Specifically, the study is aimed at providing answers to the following questions.

- (i). What is the extent of coverage of selected poverty alleviation programmes in the study area?
- (ii). How do benefiting communities/individuals perceive these programmes?
- (iii). Have poverty alleviation programmes reduced poverty incidence among beneficiaries in the study area?
- (iv). Have these programmes brought about a reduction in poverty levels in the study area?
- (v). How sustainable are these poverty alleviation programmes?

### **1.3 RESEARCH OBJECTIVES**

A way of studying the performance of any poverty alleviation programme in a particular area is by comparing its targeted objectives to achievements. This will enable one ascertain the extent to which such a strategy has contributed in reducing or eradicating poverty in the area.

Since many poverty alleviation programmes have been adopted in Nigeria, it is necessary to examine the contribution of each of them to poverty alleviation in specific areas of the country. This will go a long way to reveal the effectiveness or otherwise of the programmes in alleviating poverty in such areas and the nation at large.

The objective of this research is to determine whether or not Nigerian poverty alleviation programmes have significantly contributed to alleviation of poverty in Benue, Nasarawa and Plateau states. Within the framework of the above, the research has specifically sought to:

- a. Identify Nigeria's poverty alleviation programmes between 1986 and 2003 with the aim of finding out the ones that have been most beneficial to the poor in the study area.
- b. Identify the beneficiaries of such programmes and the location of the beneficiaries within the sampled states.

- c. Find out if the target population of such programmes in policy-making are actually reached in implementation.
- d. Examine the performance of such programmes in alleviating poverty in the study area.
- e. Find out if, in fact, poverty alleviation programmes have significantly led to poverty reduction in the research area or not.
- f. Identify reasons for non performance of the programmes, if indeed they have not performed well, and suggest possible remedial measures.

#### **1.4 SIGNIFICANCE OF THE STUDY**

It is the intention of this study to unveil problem areas in the implementation of poverty alleviation programmes as well as to proffer policy recommendations that would benefit both the governments and relevant poverty alleviation agencies in their quest for poverty alleviation and/or eradication in the three states and Nigeria in general. Examination of strategies used in implementing poverty alleviation programmes in Nigeria which have had little or no impact on the poverty situation in the country are expected be of significance to those that are saddled with the planning and implementation of

ongoing and future poverty alleviation programmes. It is hoped that this study has provided answers to questions asked on the fate of the poor in the study area amidst government poverty alleviation programmes. It is the intention of the study to stimulate further investigations into the problem of persistent rise in poverty incidence in Nigeria with a view of eradicating poverty in the country.

### **1.5 SCOPE OF RESEARCH**

The study covers the period 1986 to 2003. The poverty alleviation programmes covered are those implemented by the government of Nigeria. Specifically, the study has attempted to appraise the activities of the National Directorate of Employment (NDE), the People's Bank of Nigeria (PBN) and the Primary Health Care (PHC). For the purpose of this study, they are treated as poverty alleviation programmes since they have been aimed at providing safety nets for the poor. The choice of these three programmes is predicated on the fact that they seem to cover larger population unlike many that have been hijacked by the privileged class.

Each of the three states (Benue, Nasarawa and Plateau) in the study area was divided into two zones and in each zone; one local government area was randomly picked for the study. In selecting the

local government areas to be covered, both rural and urban areas were considered to enable us ascertain the proportion of beneficiaries of these programmes in both areas.

The choice of these states is based on the fact that prior to 1976, they were all in one state (Benue - Plateau). It is thus necessary to embark on a poverty study in these states that had a common socio-political background.

It is however important to note that although the work initially desired to study five local government areas in each of the three states, discussions during the seminar presentations led to the need to reduce the number of local government areas in each state to two due to limited time and financial resources. The reduction in number of local government areas has not in anyway affected the expected result as the programmes being studied are not restricted to selected local government areas by the policies that established them.

## **1.6 RESEARCH HYPOTHESES**

This research has been pre-occupied with finding out the extent to which poverty alleviation programmes have reduced poverty in Benue, Nasarawa and Plateau states. Specifically, the research was centered on three hypotheses. While the first hypothesis dealt with the

proportion of beneficiaries who live below or above the poverty line, the second and third hypotheses which are stated in chapter four focused on examination of statistical significance.

### **Hypothesis 1**

Ho<sub>1</sub>: Poverty alleviation programmes have not significantly reduced poverty in the three states.

Hi<sub>1</sub>: Poverty alleviation programmes have significantly reduced poverty in the three states.

Where: Ho<sub>1</sub> is the null hypothesis and Hi<sub>1</sub> is the alternative hypothesis. The apriori expectation of the hypothesis is that, if more than 50% of the sampled population lived below the poverty line at the time of data collection, the null hypothesis was to be accepted and the alternative hypothesis rejected but if less than 50% lived below the poverty line, the null hypothesis was to be rejected in favour of the alternative hypothesis.

## **1.7 RESEARCH METHODOLOGY**

The study of poverty has been approached from quantitative and qualitative perspectives. In Nigeria, available literature reveals that theoretical studies have rarely gone beyond identifying quantitative and qualitative methods of poverty measurement. In recent empirical



studies, participatory and descriptive methods have been used to identify and analyze poverty in the country. In the case of this study which is empirical, both descriptive and quantitative methods have been adopted. This section of the study highlights the processes involved in generating and analysing the expected data.

The National Consumer Survey of 1996/1997 was aimed at analysing the expenditure pattern of households in Nigeria in order to provide the basis for revising the weight for computing the consumer price index (F.O.S 1999). Though the survey's report contains data on the nation's poverty profile, it was not meant to assess any poverty alleviation programme. A nation wide survey on poverty covering 1993 – 1997 was conducted in three local government areas in each of the states in Nigeria (CBN and World Bank 1999). Though information contained in the study's report include employment, health and finance which are being considered in this research, the focus of the survey did not only involve private initiatives directed at poverty alleviation but was not targeted at evaluating any specific poverty alleviation programme. One of the most recent national studies is the Core Welfare Indicators Questionnaire Survey (CWIQ). Though the survey was aimed at providing basic welfare indicators for monitoring poverty alleviation programmes (F.O.S. 2001), the programmes to be

monitored were not clearly defined.

In the study area, some related researches have been conducted. A field survey report for Jos in Plateau state by Best (2002) used a participatory approach to poverty. While this survey report has been able to collect views from various groups in Jos concerning the concept of poverty and how it can be alleviated, it did not address the performance of any of the poverty alleviation programmes. In Benue State, an analysis of poverty, well being and wealth generation by Nweze and Ojowu (2002) as well as a preliminary assessment of poverty in the state (Nweze, Ojowu and Francis, 2002) provided current data on poverty situation in the state. However, the two studies were not targeted at assessing the activities of any particular poverty alleviation programme.

This study is not just a household survey but specifically, it attempts to find out the extent of the performances of some poverty alleviation programmes in the study area. The study is also unique as none of the studies mentioned above adopted the Foster, Geer and Thorbecke (FGT) index in the study area (Benue, Plateau and Nasarawa states). This index has been used to support data analysis in this research with respect to the study area.

### **1.7.1 Sources of Data**

The data for this study were obtained from World Bank Publications, Publications of the Federal Office of Statistics, Central Bank of Nigeria, and poverty alleviation agencies. The primary data was collected through the administration of questionnaire on selected households.

### **1.7.2 Sample Survey Units**

A sample survey unit is a single unit of a sample population. It has numerous attributes, which are related to the research problem. For our study, the sample survey units were made up of households in the various sample areas.

### **1.7.3 Sampling Frame**

This is a process of listing the sampling units to ensure that some are not left out. Most of the households in every sample area were listed according to the arrangement pattern of the households in the area. The researcher prepared a comprehensive list of the households to be surveyed before administering the questionnaire.

#### **1.7.4 Sample Designs**

Probability sample designs were adopted for this study. This is because as pointed out by Nachmias and Nachmias (1996), in probability sample designs, each sampling unit of the population under study stands the chance of being included in the sample. Though they identified four designs of probability sample (simple random sampling, systematic sampling, stratified sampling, and cluster sampling), for the purpose of this study, stratified sampling and simple random sampling were used.

Stratified sampling was used to arrive at the two local government areas studied in each state in order to ensure that different groups of the population in each of the three states were adequately represented in the sample. The choice of stratified sampling here was to ensure that a variable has the same distribution in the sample as in the population (Herzog1996). In essence, the distribution of poverty in the sample if obtained through stratified sampling will be a true representation of the distribution in the population. Thus, in addition to ensuring that the two local government areas are not from one senatorial district, stratified sampling endeavoured to include both rural and urban areas in the sample.

In order to obtain the sampling units for household survey, simple random sampling was employed. This method was considered most suitable because it gave every household an equal probability of being selected. Here, about 50% percent of the households were randomly selected out of the sampling units.

#### **1.7.5 Administration of Questionnaire**

The questionnaire (see appendix I) was administered by the researcher with the aid of research assistants.

#### **1.7.6 Methods of Data Analysis**

Generally, poverty is conceived to be absolute, relative or subjective. Relative poverty compares an individual's or household's position with the average income in the country, while absolute poverty deals with the comparison of an individual's or household's position with a poverty line whose value is fixed over time. Therefore, models designed to measure poverty fall into three groups namely absolute poverty measures, relative poverty measures and subjective poverty measures. Absolute poverty measures deal with the well-being of those considered poor thereby emphasizing that it is their condition that is important and not that of the society as a whole. On the other hand, relative poverty measures address the situation of an individual

or household compared with the societal average income. The relative poverty measures consider that segment of the population that is poor in relationship with the income of the general population (Anyanwu, 1997). The relative poverty measures (average income of the poorest segment of the population and the proportion of those whose income is less than or equal to the acceptable average income) presuppose that majority of the population are not in poverty. This is because poverty in the relative sense is determined not discretely but in relation to the overall income of the population. Subjective poverty is based on individual perception. This means that its measures depend on the individual or household being considered as well as the yardstick being used.

Since poverty in Nigeria is not only a widespread phenomenon but that whose trend is on a continuous increase, comparatively, absolute poverty is prevalent in the country. Thus, for any poverty study in the country, one or more of the absolute poverty measures would be preferred. The various kinds of absolute poverty measures that could be used are: the headcount ratio/incidence of poverty, the poverty gap/income shortfall, disparity of income distribution and composite poverty measures (Anyanwu, 1997).

### ***The headcount ratio/incidence of poverty***

This method which deals with the number of people who are poor is simply the ratio of the number of poor people to the total number of people in a given population. It is symbolically represented as:

$$H = \frac{q}{n} \text{-----} (1)$$

Where: H = poverty headcount

q = number of individuals below the poverty line

n = total number of people in the given population

Here, the level of poverty measured by H depends largely on q. If q is high, then it implies that the number of the poor will also be high and vice versa. It is nonetheless recognized that n matters, but not as much as q in the relation above.

Though this index is useful in finding out changes in the percentage of those below the poverty line, it does not consider the depth of poverty. This method has been used in this study to ascertain the percentage of those categorized as poor with ~~N~~43, 800 per head

per annum as poverty line. That is ₦120 per head per day. The ₦120 which was derived from the poverty line being used by the World Bank for international comparison set at one dollar (\$1) a day per person for developing countries resulted from the average between ₦110 and ₦130 as the prevailing exchange rates of naira to dollar at the time of data collection.

### ***The poverty gap/income shortfall***

This measures the difference between the poverty line and the average income of the poor whose result is the average depth of poverty.

The income gap ratio is:

$$I = \frac{Z - Y_a}{Z} \text{ ----- (2)}$$

Where:

I = income shortfall

Z = poverty line

$Y_a$  = average income of the poor

The main determinant of I is  $Y_a$ . If  $Y_a$  is high, the number of those with income shortfall will be less and vice versa.

Incorporating H and I into poverty level denoted by say  $P_1$ , we have:



$$P_1 = \frac{q}{n} \cdot \frac{Z - Y_a}{Z} \text{ ----- (3)}$$

Here,  $P_1$  is principally determined by  $q$  and  $y_a$ . While  $q$  is positively related to  $P_1$ ,  $y_a$  is negatively related to  $P_1$ . This implies that poverty remains high with high  $q$  and low  $y_a$  and vice versa.  $Z$  in the relation above is not as crucial as  $Y_a$ . If  $Z$  increases, the income shortfall ( $I$ ) also increases but only slightly. In the absence of severe inflation,  $Z$  (the poverty line) is expected to be fairly constant over time.

### ***Disparity of income distribution***

Here, the Lorenz curve and the Gini coefficient are used to measure income inequality among the poor. The Lorenz curve depicts graphically the relationship between cumulative shares of income and the cumulative percentage of the population. The Gini coefficient is the ratio of the area covered by the Lorenz curve and the diagonal line ( $45^\circ$ ) to the area between the diagonal line and the horizontal axis. These measures only address the issue of income distribution without identifying neither the number of those below poverty line nor the depth of poverty.

### ***The composite poverty measures***

The measures considered here are the Sen index and the Foster, Geer and Thorbecke (FGT) index

The Sen index (S) is symbolically written as:

$$S = H [I + (1 - I)GP] \quad \text{-----} \quad (4)$$

$$\text{Where: } I = \sum_{i=1}^n \left( \frac{Z - Y_a}{q_z} \right) \text{-----} (5)$$

where:

I = average income shortfall as a percentage of the poverty line.

$Y_a$  = average income of the poor

Z = poverty line

H = head count ratio  $\left[ \begin{array}{c} q \\ n \end{array} \right]$

$q_z$  = number of households whose incomes are below the poverty line.

Gp = Gini coefficient among the poor, ( $0 \leq GP \leq 1$ )

Here, 'S' (poverty) is determined by all the variables (H, I and GP) in the equation positively. That is to say, S

increases as all or either of them rise(s) and vice versa.

The Sen index is criticized on the ground that it depicts a situation of poverty reduction in which the least needy is addressed before the most needy.

(ii) The Foster, Geer and Thorbecke (FGT) index also known as the 'P' alpha measure is written

$$\text{as: } P_{\alpha} = \frac{1}{n} \sum_{i=1}^q \left( \frac{Z - Y_a}{Z} \right)^{\alpha} \dots\dots\dots (6)$$

where:

$P_{\alpha}$  = a class of additively decomposable measures

$n$  = the total number of people in the reference sample population

$q$  = the number of individuals below the poverty line

$Z$  = the poverty line

$Y_a$  = the average income of the poor

$\alpha$  = FGT index and takes the values of 0,1 or 2

The determinants of poverty here are the same as those of equation (3). The only difference is the introduction of alpha ( $\alpha$ ). Here, 'P alpha ( $P_{\alpha}$ )' is replaced by  $P_0$ ,  $P_1$  and  $P_2$  which denote headcount (incidence), depth and severity

respectively.

The methods described so far can be best applied if an entire population of a given nation is being studied. These methods are static and are only applicable to data for individual specific years which are not available in respect of the study area. Hence, in interpreting the data obtained for this study, descriptive analysis was employed. Here simple percentages were adopted to describe indicators like longevity (life span), and accessibility to health services. The choice of descriptive analysis enabled the study to incorporate opinions of stakeholders, particularly the poor which could not be captured by the main research instrument (questionnaire). The descriptive analysis was supported by the FGT index when interpreting the data basically to ascertain the number of those who were poor in the study area. The choice of this supportive method is justified on the basis of its additive property. This additive property implies that if any state or group is poorer,

aggregate poverty increases. Also, the 'Z' test was used to ascertain the effectiveness or otherwise of National Directorate of Employment and People's Bank.

The analysis of this research depended on primary data as well as secondary data. The primary data were collected through administration of questionnaire while the secondary data were obtained from existing literature.

## **1.8 OUTLINE OF THE STUDY**

The work has been divided into five chapters. Chapter one which is an introductory chapter also considers the methodology of the study, while chapter two reviews related literature. In chapter three, government poverty alleviation programmes are discussed. Chapter four which presents and analyses the secondary and primary data also discusses research findings. Chapter five which is a concluding one focuses on the summary of findings, conclusions and recommendations.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 INTRODUCTION**

This chapter has attempted to review relevant literature. The essence of literature review is to ascertain the relevance of major contributions in an area of study and also provide indications about existing gaps that need to be filled. In this regard, this review has tried to look at the major developments in the area of poverty with particular reference to: concepts and measurement, theories, causes and effects. The review enabled the work to be properly focused and tailored towards complementing existing body of knowledge. In addition, aspects of the review considered relevant to the study were adopted.

#### **2.2 CONCEPTS AND MEASUREMENTS OF POVERTY.**

A search of literature has shown that there is no general consensus on the definition of poverty. Since poverty affects many aspects of human condition such as physical, moral and psychological, a concise and acceptable definition of poverty is elusive as it cannot be captured only by income and consumption based measures (Anyanwu, 1997; Nweze and Ojowu, 2002). Similarly, Hulme and Mosley (1996)

opined that the definition of poverty, how it can be measured and who constitute the 'poor', are fiercely contested issues. Despite these views, different experts have defined poverty and its measurement based on their individual perspectives. Generally, asserted Nweze and Ojowu (2002), poverty concepts are categorized into three namely: absolute poverty, relative poverty and subjective poverty. These three concepts which form the basis of poverty alleviation programmes are reviewed below.

### **2.2.1. Absolute Poverty.**

The term absolute or subsistence poverty has to do with basic human needs and is measured by resources required to maintain physical efficiency (Haralambos and Heald, 1980; Kuper and Kuper, 1996). In the words of Miller (1968), Wedderburn (1974), Plotnick and Skidmore (1978), individuals, families or groups are considered to be in absolute poverty when they lack the resources particularly real income to obtain the types of diets needed to enjoy some fixed minimum standard of living determined by a given society. This minimum standard of living considers some amount of goods and services essential (Schiller, 1976) and those who are unable to obtain them are said to be poor. These goods and services include food,

clothing, housing, healthcare, water, sanitation and education (O'Donnell, 1997; Kuper and Kuper, 1996; Nweze and Ojowu, 2002).

Those categorized as poor or not under this concept are determined through a yardstick known as poverty line. The poverty line which is based on the level of income or consumption of individuals, households or groups in a given society (Balogun, 1999) provides a threshold whereby those whose income falls below are poor and those whose income is above are non-poor (Kankwenda, Gregoire, Legros and Ouedrago 2000; Haralambos and Heald, 1980). The poverty line used by the World Bank for international comparison is one dollar (\$1) per person per day (Kankwenda et al, 2000; UNDP, 1997; Ali-Akpajiak and Pyke 2003). Those below the poverty line according to Kankwenda et al (2000) and Balogun (1999) are grouped into two, namely, the poor and core or extremely poor giving rise to two poverty lines (upper poverty line and lower poverty line). While those whose income falls below the upper poverty line but above the lower poverty line are categorized as poor, those whose income falls below the lower poverty line are categorized as the core or extremely poor. In addition to using income as a yardstick, Meier (1964), Kuper and Kuper (1996) and World Bank (2004) opined that absolute poverty is a condition of life characterized by insufficient social services such as



health, education, safe drinking water, sanitation and public transport, with, in the words of Atoloye (1997), disease, low life expectancy, squalor as well as physical and mental retardation as consequences.

### **Absolute poverty measures.**

Absolute poverty can be measured through headcount ratio/incidence of poverty, poverty gap/income shortfall, disparity of income distribution and composite poverty measures as well as physical quality of life index and human development index (Ajakaiye and Adeyeye, 2001; Anyanwu, 1997; Balogun 1999) which are reviewed below.

#### *a. The headcount ratio/ incidence of poverty:*

This measure provides in percentage, an estimate of the people living below the poverty line (Kankwenda et al, 2000). It is simply the ratio of the number of people categorized as poor to the total number of people in a given population. The poverty headcount ratio (H) can be mathematically expressed as:

$$H = \frac{q}{n} \text{ ----- (1)}$$

Where: H = poverty ratio

q = number of people below the poverty line.

$n$  = total number of people in the sample population.

This gives the proportion of those whose income falls below the poverty line in the sample population. While this approach is useful in indicating the scope of poverty problem, it has been criticized for being insensitive to the differences between individuals who are below the poverty line. That is, it does not indicate how poor the poor are, thereby failing to measure the depth and severity of poverty.

*b. The poverty gap/income shortfall:*

This is the difference between the poverty line and the average income of the poor expressed as a ratio of the poverty line, World Bank (1993). It captures the degree of income shortfall below the poverty line, thereby, providing a statement on the level of income needed to raise the income of the poor to the poverty line. Symbolically, the income gap ratio is stated as:

$$I = \frac{Z - Y_a}{Z} \text{ ----- (2)}$$

Where:  $I$  = average income shortfall.

$Z$  = poverty line.

$Y_a$  = average income of the poor.

It measures the depth of poverty because it indicates the amount of money required to raise the income of the average poor person up to the poverty line. Taking the product of H and I which incorporates the number of those poor and depth of their poverty into a poverty level represented by  $P_1$  gives us:

$$P_1 = \frac{q}{n} \cdot \frac{Z - Y_a}{Z} \text{ ----- (3)}$$

Though the poverty gap index indicates the depth of poverty, it fails to capture its severity as it does not reflect the distribution of the standard of living among the poor.

*c. Disparity of income distribution:*

This measure according to Balogun (1999) and Echibiri (1997) deals with the Lorenz Curve and Gini Coefficient. Lorenz curve shows graphically the variance in the extent of income distribution from equality. It presents the relationship between the cumulative percentage of income of the poor (on horizontal axis) and the cumulative percentage of the poor population (on the vertical axis). The Gini Coefficient measures income inequality based on the Lorenz Curve. It is the ratio of the area covered by the diagonal line to the horizontal axis.

It is symbolically presented as:

$$G = \frac{\text{Area between the Lorenz Curve and the diagonal line.}}{\text{Area between the diagonal line and horizontal axis.}}$$

Where:  $0 \leq G \leq 1$ .

The higher the value of the coefficient, the greater the inequality in income distribution. Conversely, the lower the value of the coefficient, the more equitable the distribution of income. While a zero coefficient indicates perfect equality in income distribution, there is perfect inequality in income distribution if the coefficient value is one. These approaches measure income distribution but fail to consider the number of people below the poverty line and the extent of their impoverishment.

*d. Composite poverty measures:*

There are two measures here namely the Sen index as well as the Foster, Geer and Thorbecke (FGT) index (Anyanwu, 1997; Balogun, 1999; Ajakaiye and Adeyeye, 2001). In addition to counting the number of poor people, these measures reflect the distribution of living standards among the poor.

(i). The Sen (S) index.

This measure is an incorporation of the headcount index, poverty gap index and the Gini coefficient. It is symbolically written as:

$$S = H [I + (1-I) GP] \text{ ----- (4)}$$

Where:

$$I = \sum_{i=1}^n \left( \frac{Z - Y_a}{q_z} \right) \text{ ----- (5)}$$

H = headcount ratio.

I = average income shortfall as a percentage of the poverty line.

GP = Gini coefficient among the poor ( $0 \leq GP \leq I$ ).

n = total number of people in the sample population.

Z = poverty line.

$Y_a$  = average income of the poor.

$q_z$  = number of individuals whose income fall below the poverty line.

S is an increasing function of both the headcount index (H) and income shortfall (I). That is:

$$\frac{\partial S}{\partial H} > 0, \text{ and } \frac{\partial S}{\partial I} > 0$$

Since GP lies between zero and one, S is also an increasing function of Gini coefficient (GP). That is:

$$\frac{\partial S}{\partial GP} > 0.$$

This index has been criticized for being more sensitive to improvement in the head count than reduction in the income gap which implies that the least needy could be attended to before the neediest.

(ii). The Foster, Geer and Thorbecke (FGT) index.

This measure which subsumes the head count index and the poverty gap is also known as the 'P' alpha ( $\alpha$ ) measure because it uses a poverty aversion parameter ( $\alpha$ ). The index measures the average of individual poverty gaps raised to a power (of the value given to the parameter) depending on the degree of poverty. The higher the value assigned to the parameter ( $\alpha$ ), the greater the weight given by the index to the severity of poverty. The index can be expressed as:

$$P\alpha = \frac{1}{n} \sum_{i=1}^q \left( \frac{Z - Y_i}{Z} \right)^\alpha \dots\dots\dots (6)$$

Where:

$P\alpha$  = a class of additively decomposable measures.

$n$  = total number of people in the sample population.

$q$  = number of people below the poverty line.

$Z$  = poverty line.

$Y_a$  = the average income of the poor.

$\alpha$  = FGT index and takes the values of 0, 1 or 2.

If  $P_\alpha$  is substituted by  $P_0$ ,  $P_1$  or  $P_2$ , then it is used for measuring head count (incidence), depth and severity respectively.

*e. The Physical Quality of Life Index (PQLI) and the Augmented Physical Quality of Life Index (APQLI):*

The physical quality of life index which, in the opinion of Balogun (1999); Ajakaiye and Adeyeye (2001) is focused on social development uses qualitative measures of social well-being instead of income to determine the quality of life. The index is based on three indicators namely: infant mortality, life expectancy and basic literacy which are symbolically defined as:

$$PQLI = f(im, e, lit) \text{ ----- (7)}$$

Where: im = infant mortality

e = life expectancy

lit = basic literacy.

In order to obtain the PQLI, the indices from these indicators are summed up and the average computed using the formula below:

$$PQLI = \frac{(im_1 + e_1 + lit_1)}{3} \text{ ----- (8)}$$

Where:  $im_1$  = infant mortality index

$e_1$  = life expectancy index

$lit_1$  = basic literacy index

The PQLI in the words of Anyanwu (1997) was later revised to augmented physical quality of life index (APQLI) which measures the differential levels of human deprivation and sufferings experienced by people. The APQLI uses ten indicators namely: education, health status, women's status, the defense effort, economic, demography, geography, political participation, cultural diversity, and welfare effort.

This index is symbolically expressed as:

$$APQLI = f(ed, hs, ws, df, ec, dm, ge, pp, cd, wf).$$

Where: ed = education

hs = health status

ws = women status

df = defense effort

ec = economic

dm = demography

ge = geography

pp = political participation

cd = cultural diversity



wf = welfare effort.

As in the case of PQLI, in order to obtain the APQLI, the indices from the ten indicators are summed up and the average computed.

*f. Human Development Index.*

This index which according to Balogun (1999); Ajakaiye and Adeyeye (2001) combines both income and non-income factors measures the relative degree of deprivation in a country compared to what is obtainable globally. Its focus is on human development with longevity, knowledge and income being the variables used in the index. It is expressed as:

$$H D = f (e_o, lit, Y) \text{ ----- (9)}$$

Where:  $e_o$  = life expectancy at birth.

lit = literacy rate

Y = per capita income.

Longevity and knowledge are measured by life expectancy and literacy rate respectively. After the specification of these indicators as components of the index at the national level, a range of countries is considered for establishing the maximum and minimum value for each indicator. Once this is done, a deprivation index for a given indicator and a particular country can be defined thus:

$$I_{ij} = \left( \frac{\text{Max}_j X_{ij} - X_{ij}}{\text{Max}_j X_{ij} - \text{Min}_j X_{ij}} \right) \text{-----} (10)$$

Where:  $0 < I_{ij} < 1$

$X_{ij}$  = the indicator being considered in  $j$ th country.

The deprivation index for country  $j$  which is the average of the three indices for the country can be written as:

$$I_j = \left( \frac{1}{3} \right) \sum_{i=1}^3 I_{ij} \text{-----} (11)$$

The average is then subtracted from one (1) to obtain the human development index. This is expressed as:

$$(HDI)_j = 1 - I_j \text{-----}(12)$$

Where:  $(HDI)_j$  = Human Development Index for country  $j$ .

$I_j$  = average of the three deprivation indices in country  $j$ .

The HDI is used for comparative studies between countries and endeavours to view the relative achievement of the best country. It is thus an instrument used in comparative analysis as it deals with more than one country.

### **2.2.2 Relative Poverty.**

Relative poverty is a situation where an individual's or a household's income is less than the average income of the population in the society being considered. The result is that the individual or household has goods and services which are lower than those of other persons or households in the society (Schiller, 1976; Oladunni, 1999; Kuper and Kuper, 1996). In the words of O'Donnel (1997), those who are in relative poverty have their resources far lower than those possessed by average individuals or households to the extent that, they are, in effect excluded from ordinary living patterns, customs and activities. This definition is dynamic as it must be related to the needs and demands of a changing society.

#### **Relative poverty measures.**

Since relative poverty is unique in every society, its measurement depends on the judgment of the society being considered. This is because what is seen to be reasonable and acceptable standard of living and customs could vary from one society to another. It therefore means that people can be regarded as being in relative poverty only by reference to the standard of living of the members of that particular society (Schiller, 1976; Kuper and Kuper, 1996). Relative poverty, in the opinion of Meier (1964) can be measured through inequality by the

extent to which the income share of groups of individuals or households differs from the population share of income. For example, those at the lowest fifth of the income distribution could be regarded as poor. It can also be measured by taking one-third or two-thirds of the mean income as the poverty line (Nweze, et al 2002). The two types of relative poverty measures discussed by Anyanwu (1997), Ajakaiye and Adeyeye (2001) are the average income and the proportion of the population whose income is less than the mean income.

*a. Average income.*

This is average income of a specific percentage of the population that is poor in relation to the set income of the general population. The average income measure is made up of the average income of the poorest 40% of the population or the average income of the poorest 10% or 20% of the population.

*b. Those whose income is less than the mean income.*

This measure is concerned with the proportion of the population whose income is less than or equal to the predetermined percentage of the mean income. For instance, those whose income falls below 50% of the mean income can be categorized as being in relative poverty.

### **2.2.3 Subjective Poverty.**

This concept of poverty which is “expressed in a range of non-material and intangible qualities” (Nweze, et al 2002), is based on respondents’ perception of their standard of living. The feeling of whether one is poor or not depends on the absolute minimum standard of living below which one is categorized as poor (Vaidyanathan, 2002; Haralambos and Heald, 1980).

#### **Subjective poverty measures.**

Measurement of subjective poverty depends on individuals. This is due to the fact that the perception of being poor or not is determined by individual respondents. Results collated from participatory studies such as ‘voices of the poor’ (Nweze and Ojowu, 2002) are used to measure subjective poverty.

The review of various concepts of poverty and their measurement stressed the fact that absolute poverty deals with those who find it difficult to live a meaningful decent life due to financial constraint. This implies that they are poor because they lack the financial resources needed for them to obtain the basic necessities of life. Relative poverty has to do with a situation where a household or a person compares itself or himself/herself with another household or person. This means that even if the household or the person is able to

meet its or his/her basic necessities of life, it or he/she could still be comparatively poor. Since subjective poverty is concerned with the feelings of individuals, even those who are able to acquire basic necessities of life and much more might be categorized as poor depending on the yardstick being used.

This study is focused on absolute poverty as attempts made by the government to reduce poverty have led to the establishment of poverty alleviation programmes aimed at attacking absolute poverty. In addition, though all the concepts are prevalent in the study area and indeed, Nigeria and developing countries, poverty eradication under relative poverty is harder than when absolute poverty is being considered argued Kuper and Kuper (1996). The argument is predicated on the fact that eradication of relative poverty depends on a reduction of inequalities in the different societies. Moreover, what is described by O'Donnell (1997) as being common in developing countries like Nigeria but rare and exceptional in developed countries is absolute poverty as against relative poverty. The point here is that the poor in developing countries are more concerned with obtaining the basic necessities of life (which is a concern of absolute poverty) than meeting up with the living standards of the non-poor (a concern of relative poverty).

Furthermore, in Nigeria and many developing countries, attempts by governments to address poverty have focused more on reducing absolute poverty. This is against the background that absolute poverty is more policy sensitive coupled with the fact that it is linked to other socially undesirable conditions (like hunger, disease, low productivity, crime, violence, infant and maternal mortality) which tend to undermine social progress, productivity and growth efforts generally. Absolute poverty is real and not a matter of an individual's perception as it leads to social and economic exclusion. That is, one's limited ability to participate in investment and other societal activities. Thus, absolute poverty described in this study as a situation where an individual or household is faced with limited financial resources and as a result, unable to meet his/her or its basic necessities of life such as food, clothes, shelter and health is the nucleus of our study.

The Foster, Geer and Thorbecke (FGT) index discussed earlier has been used to measure this concept of absolute poverty. The details of these instruments of measurement and justification for choosing them have been discussed in chapter one under methodology.

## **2.3 REVIEW OF THEORIES.**

Just as there is no universally acceptable definition of poverty, so it is with theories of poverty. Attempts have been made to discuss theories of poverty from various dimensions. No matter the dimension, every theory of poverty falls into one of the four identified perspectives. The four perspectives are: the Conservative, the Liberal Reformists, the Radical Structural/Marxists and the Social Exclusion. The conservative theories namely: individualistic and culture of poverty posit that the poor are responsible for their poverty. The liberal reformists' perspective which deals with situational theory of poverty is hinged on the fact that poverty results from experiences that individuals or groups pass through. On their part, the radical structural/Marxist perspective argued that capitalism produces poverty due to its exploitative syndrome. The social exclusion theory is predicated on poverty resulting from people who tend to be excluded from effective participation in a society's activities due to segregation. These poverty theories have been reviewed below.

### **2.3.1 Individualistic Theory.**

This theory is viewed from the angle of the individual's inability to be productive so as to get out of poverty. As argued by O'Donnel (1997), writers of 19<sup>th</sup> century and early 20<sup>th</sup> century in both Britain



and United States attributed poverty to individual pathology or weakness. This is the first theory (Islam, n. d.:2) with emphasis on the fact that:

the poor were poor because they did not work hard, they squandered money on gambling, drinking and unnecessary luxuries and they had disorder of family life. They had no ambitions, no inner call for work, were fatalistic and suffered an 'intractable in-educability'.

This theory is founded on self help and survival in which case those who work hard succeed while, the weak fail to succeed giving rise to the non-poor and the poor respectively. The poor person is poor because his behaviour has made him so. In addition to being lazy, poverty in this case results from such a person's choice to expend his income on unproductive ventures. The individual attribute theory is of the view that the poor are the architects of their misfortune. The attributes exhibited by the poor, argues Uniamikogbo (1997) are sometimes within a structure of possibilities and limits defined by forces outside the scope of the individual. The poor under this condition may remain poor except if the society is able to increase his/her income significantly through deliberate efforts aimed at pulling him out of poverty (Archibong, 1997). Programmes established in Nigeria in line with this theory are: poverty alleviation programme (PAP) and the on-going national poverty eradication programme

(NAPEP). This is because these two programmes have been characterized by payment of stipends (in the case of PAP) and granting of loans to individuals under NAPEP.

### **2.3.2 The Culture of Poverty**

The culture of poverty also known as vicious circle of poverty was developed in late 1950s, by Oscar Lewis from a field study among the urban poor in Mexico and Puerto Rico (Islam, n.d.; Haralambos and Heald, 1980). It is known as culture of poverty theory because it concerns people whose environment and belief exhibit different culture and/or a sub-culture from the rest of the society. The theory has been described by O'Donnell (1997:384) as being popular among conservative thinkers and involves traits such as:

present centeredness, a sense of resignation and fatalism, and a strong disposition to authoritarianism. At its most extreme, this interpretation sees the poor as inadequate and pathological. Here, cultural attitudes tend to undermine imposed reform. In its wider context, the conditions in which culture of poverty flourishes include a low wage, profit oriented economy and inadequate government assistance for the poor.

The emphasis on fatalism and resignation by the theory which explains the situation of the poor in colonial societies or early stages of capitalism suggests that even if the poor as argued in Transition Events in the Dynamics of Poverty (n.d.) have the ample opportunities

for improving their welfare, they lack the initiative and diligence needed to take advantage of such opportunities. They thus, need voluntary or state support to psychologically gear them up to take advantage of the opportunities that may come their way. Since the introduction of this theory, its actual existence has been questioned as, both during the colonial era and early capitalist stages currently evident in many developing countries, there were (are) evidences of voluntary associations like Community Based Organizations (CBOs), Co-operative Societies and Youth Associations (Haralambos and Heald 1980). These groups have been able to put in place self-help projects aimed at alleviating poverty. In Nigeria, government efforts towards averting culture of poverty theory are noticed by awareness creation through the media via the nation's National Orientation Agency (NOA) in addition to allowing the formation of associations by groups and individuals.

### **2.3.3 Situational Theory of Poverty.**

This theory which was a response to the culture of poverty theory views poverty as a reaction to situational constraints rather than an issue of culture. That poverty results from imposed constraints such as low income, unemployment and illness (O'Donnell 1997; Haralambos and Heald 1980). Haralambos and Heald further argued

that the poor share the same culture with that of the society with the difference being their inability to translate opportunities into realities due to imposed constraints.

The theory holds that people are poor due to the fact that they find themselves in a situation of 'no' resource and opportunities for them to advance their welfare. It lays emphasis on the structural conditions that lead to poverty and at the same time focuses on the individual response to the objective situation of poverty (Islam n.d.). Situational poverty differs from the culture of poverty as it does not assume the pre-existence of a subculture that makes the behaviour of the poor to become coherent and solid. It implies that in the absence of this sub-culture, the poor can easily get out of poverty if imposed constraints are tackled. That is, if the situations the poor find themselves alter, they are likely to escape from poverty. This theory underpins the establishment of the National Directorate of Employment where school leavers who are unemployed can be engaged.

### **2.3.4 Structural and/or Marxian Theory of Poverty.**

The Structural/Marxian theory of poverty is hinged on the fact that capitalism brings about fundamental social problems including severe inequality which leads to poverty. Since wealth is concentrated in the hands of a minority who are bent on pursuing profits through exploitation of labour, the redistribution of resources is more within classes than between classes. Those stricken by poverty are often subjugated by the bourgeoisie so as to glean (collect undeserved) profits and capital via exploitation. This means that poverty is a class rather than an individual or group issue (O'Donnell, 1997; Haralambos and Heald, 1980). It is the macro-structure of a capitalist society that produces inequality and consequently poverty argued Islam (n.d.).

In their contributions, Archibong (1997) and Uniamikogbo (1997) argued that institutions and class exploitation account for poverty as people suffer in the hands of the privileged class and institutional arrangements. That the poor in, a society, arise spontaneously with inequality. In a similar vein, Students Media Services (2004) condemned the individualistic, culture and situational theories arguing that their analysis are mere excuses aimed at exonerating the capitalist system which exploits the poor to the advantage of the economic elite. The poor are unable to attain higher

living standards and thus come out of poverty because the capitalist arrangement is biased against them.

This theory is also known as the power theory (Uniamikogbo, 1997 and Tella, 1997) because the structure of political power in a capitalist society determines the extent and distribution of poverty among the population. It sees poverty as a characteristic feature of a situation in which the few that possess and control the political power organize the economic system to suit their own selfish interests. Hence, poverty results from the fact that, office seekers, realizing that no condition is permanent, endeavour to maximize wealth acquisition at the expense of the majority within the shortest possible time. Here, element of greed is highly exhibited as asserted by Tella (1997:77) that:

the longer the individual concerned stays in power or within the corridors of power, the more public property, including funds, he acquires for the uncertain future. In an economy with few resources to be exploited and colonized by the ruling class, political office is rotated among a few individuals, while in a more endowed country; there is the possibility of an extended ruling class. In both cases however, the ruling class is not only in minority, but is relatively few in number. The members of the powerful class control over 50% of the available funds and allow the larger society to share the rest. This ruling class sees the execution of every social and economic project such as: education, health, agriculture and industrialization projects in terms of

private wealth acquisition. They are therefore avaricious. As a result, such projects are not implemented for the interests and benefits of the society. The distribution of wealth and social amenities is constrained by such corrupt behaviour throwing the civil society into abject poverty.

It is important to stress that the degree of success or otherwise of the exploiting class depends on the consciousness of those oppressed to revolt as well as their organizational capacity to resist exploitation and overthrow the mechanisms of the oppressive property system. This theory therefore explains the situation of developing countries where there is co-existence of low political consciousness due largely to high rates of illiteracy on the part of the masses, and a high degree of centralization of resources which the ruling class exploit. This theory forms the basis of Nigeria's anti-corruption crusade which is a direct intervention towards ensuring that corrupt enrichment of public officers is curbed. The success of this action, all things being equal is expected to make more resources available for execution of projects and consequently raise standard of living of Nigerians including the poor.

### **2.3.5 Social Exclusion Theory.**

The social exclusion theory which was officially adopted in a World Summit which took place in Copenhagen in 1995 holds that certain people within the society become more vulnerable to poverty because of discrimination. This approach which has been described as 'people centred' as against 'goods centred' is characterized by three paradigms namely: solidarity, specialization and monopoly (Islam, n. d.; Anyanwu, 1997).

The solidarity paradigm results from moral integration and cultural boundary in which those who do not belong suffer exclusion. It entails the 'coming together' of specific individuals to form groups. Specialization paradigm emphasizes the interdependence of specialized spheres of the society in terms of exchange of goods and services. The conduct of individuals depends on interests and capabilities such that the social structure is based on a specific form of division of labour which determines the extent of individual interaction. This implies that those who do not belong to specialized groups suffer exclusion in terms of market refusal or un-enforceable rights and voluntary conduct. In the monopoly paradigm, different interest groups based on class, status and political power exert control over available resources. By so doing, they create inequality and form monopoly groups who



tend to perpetuate power and privileges through social closure and labour market segregation thereby enforcing exclusion. This means the poor are not the problem but rather, the inaccessibility of realistic opportunities as a result of exclusion that prevents them from getting out of poverty. Nigeria's advocacy and promotion of community based poverty alleviation programmes emphasized by the nation's National Economic Development Strategy (NEEDS) as well as formation of self-help projects by communities and NGOs are aimed at tackling poverty that results from the claim of this theory.

The theories reviewed explain the poverty situation in diverse parts of Nigeria. While the conservative theories explain poverty experienced in rural areas as a result of unproductivity and cultural impediments, the liberal reformists' perspective (situational poverty) which emphasizes that poverty results from socio-economic constraints such as ill-health, low income and unemployment is a reflection of the causes of rising poverty level in Nigerian urban areas. The radical structural/Marxist theory addresses the exploitative syndrome of those in power or those who have access to corridor of power as a cause of absolute poverty, despite availability of abundant resources in the country. In the case of the social exclusion theory, it is related to poverty caused by income differentials due to

occupational ratings in the nation. Since these theories address poverty in various locations and economic interest groups in Nigeria, poverty alleviation programmes will be more effective and thus attain desired objectives, if such diversities (locations and interests), are adequately taken into consideration with the aim of ensuring ownership of programmes by the poor themselves.

#### **2.4 CAUSES OF POVERTY IN DEVELOPING COUNTRIES**

Though poverty is said to result from many causes, Oxfam Community Aid Abroad (1992) was of the view that poverty is primarily a function of entrenched social and economic inequality at both the national and international levels. At the international level, such inequality is manifested in the areas of trading and financial system where developed countries which are in minority in the world economy enjoy affluent lifestyle at the expense of developing countries which constitute the majority. This view is corroborated by that of Central Bank of Nigeria (1998) which said that poverty results from the international economic system's interdependency relationship where a set of countries (developed countries) gains an economic advantage over another set of countries (developing countries) for a given situation. The CBN continued that developing countries'

indebtedness, payment of increasing prices for imported inputs from developed countries as against their relative low export prices perpetuate international inequality which leads to growing number of poor people in developing countries.

At the national level, inequality also exists and causes poverty especially in developing countries as argued by Kwanashie (1998:316) in the case of Nigeria that:

a small segment of society through their control of state power simply expropriate to themselves the major part of the nation's wealth which they squander. A parasitic ruling class which is incapable of investing looted resources consequently undermines the ability of the economy to grow. Through mismanagement, competition and bad government, the country is left in a circle of poverty and deprivation.

Jhingan (2002), Ajakaiye and Adeyeye (2001) World Bank and International Monetary Fund (1999) identified slow economic growth as a major cause of poverty in developing countries especially for countries like India, Bangladesh and much of Africa which are characterized as being in massive poverty. That the slow growth rates witnessed in developing countries result from adverse changes in terms of trade, changes in world demand for exports as well as the effects of changes in global interest rates on developing countries' external debt. In Africa, the continuous spread of poverty according to

Kankwenda, et al (2000) is attributed to virtual stagnation in average annual per capita growth rate of 2.1 percent between 1991 and 1995, and limited prospects for economic growth. The World Bank and IMF also observed that in some African countries where economic growth rates have exceeded population growth rates, poverty has persisted because of uneven distribution of the benefits of growth and poor governance which diminishes growth's potential impact on poverty. In the case of India, Todaro (1997) opined that its rapidly expanding population has in addition to retarding economic progress led to a growing labour force which exceeds the absorptive capacity of the economy thus exacerbating poverty. Hence low productivity which is caused by slow economic growth rate leads to poverty as the consuming unit becomes incapable of earning an adequate income that will enable it maintain decent living standards (Central Bank of Nigeria and World Bank 1999).

In many countries of the world, macro economic disequilibrium caused by balance of payments deficits, poor fiscal management, etc, have made it necessary for them to embark on major policy reforms since these conditions on their own would still produce poverty. These reforms have led to monetary and fiscal policy measures that have negatively impacted on cost and access to credit by the poor,

retrenchment, high cost of domestic production and decline in capacity utilization all of which have worsened poverty situation (Ajakaiye and Adeyeye 2001). Deng (1994) argued that economic reforms such as structural adjustment programmes have contributed to increase in poverty in developing countries as they hurt the urban vulnerable groups of unskilled and semi-skilled workers as well as public sector workers who were marginally living above the poverty line before reforms. On their part, Anyanwu and Nsoro (2002) said that policies like privatization and commercialization have not only led to greater inequality but denied majority of Africans access to basic necessities of life such as health, potable water and sanitation thereby making them poorer.

In addition, adverse impact of certain economic policies have also brought about the increases in developing countries' poverty levels. Rural areas have been neglected and marginalized for decades through economic policies which have continued to favour the urban elites. Development spending in Africa has been biased in favour of state farms as against private holdings and commercial farming as against subsistence farming while development of rural infrastructure as well as agricultural research and extension which could benefit the rural poor are underfunded. In Nigeria, economic management policies

have led to structural shifts that impacted negatively on economic activities embarked upon by the majority thereby causing poverty. Such shift has led to undue concentration on crude oil to the neglect of agriculture which was the main employer of labour. This has brought about untold hardship and swelled the number of poor in Nigeria (Central Bank of Nigeria and World Bank 1999; CBN 1998; Deng 1994; Ferroni and Kanbur 1990).

Economic circumstances forced most developing countries to borrow money from banks and governments of developed countries only to repay far more than the amount borrowed due to high interests charged. For example, Chile borrowed only 3.9 billion dollars in early 1970s but had paid 12.9 billion dollars by 1982 as interest only. The extra 9 billion dollars which could have been used to speed up development in Chile had to be given to richer countries, thus leaving Chile in its state of poverty and obviously poorer.

Commenting on debt burden as a cause of poverty, Ajakaiye and Adeyeye (2001:35) said that:

servicing of debt has encroached on the volume of resources needed for socio-economic development especially in developing countries. The implication is that productive sectors like agriculture and manufacturing are not adequately financed and thus experience low productivity, low capacity utilization, underemployment

and low purchasing power thus leaving the masses in abject poverty.

Imperfections in the free markets of African countries due to liberalization have led to increasing poverty and its attendant feeling of hopelessness. In the areas where ordinary Africans used to earn average income that guaranteed decent living standard, liberalization has made it difficult for even higher education graduates to be gainfully employed. Therefore, liberalization is said to have sunk many developing countries into more problems of debt, poverty, unemployment, exploitation and political upheavals (Anyanwu and Nsoro). According to Ghosh (2000), despite trade liberalization witnessed in many developing countries, market access remains a problem for their exports in addition to the fact that their productive sectors are threatened by imports of subsidized agricultural goods and manufactures of multinationals that possess tremendous market power. The imperfections in the markets thus skew income distribution structure in favour of some classes in the society thereby rendering the less favoured class poor, Central Bank of Nigeria and World Bank (1999).

A country whose population growth rate is faster than its Gross Domestic Product growth rate is likely to witness an increase in its

poverty level especially if it is characterized by subsistence living conditions. This is because whatever is obtained is consumed as current income is lower than current consumption. The result is absence of economic surplus (savings) for investment in capital formation. In the words of Filipov (n.d.), many developing countries are poor because their rapid population growth is associated with manual subsistence farming, infertile land as well as lack of economic resources (credit) and technology to boost productivity.

Many African countries have been affected by civil wars caused by European empire building in the nineteenth century. This resulted to many African tribes being joined in one country while in some cases, half a tribe was left in another country. However, civil wars in countries like Angola, Mozambique and Guatemala have been caused by corruption and political differences. The impact of wars has been destruction of homes, schools, crops, hospitals as well as influx of refugees into neighbouring countries, all of which cause poverty. In other words, many developing countries are characterized by political instability which worsens their poverty situations. According to World Bank (2001), conflicts, wars, economic crisis and natural disasters do not only affect prevailing living conditions of the poor but also their ability to escape from poverty. As a result of increasing number of



countries that have been affected by armed conflicts and social unrests, about half a billion people are experiencing poor living conditions (World Bank and IMF 1999).

Environmental degradation caused by misuse or overuse of land resources also lead to poverty. This is because environmental degradation results to deforestation, desert encroachment, blight and oil spillage all of which are destructive to endowed land resources and this does not only raise the number of those poor but also deepens the incidence of poverty. Such environmental problems have brought about shortages of food, clean water, and raw materials for shelter and thus aggravated poverty in Ethiopia, Sudan and Somalia (Filipov N.D.; Central Bank of Nigeria and World Bank 1999). In their contributions, Ajakaiye and Adeyeye (2001) opined that there is a reverse causality between poverty and environmental degradation in developing countries. In such countries, a number of environmental resources are complementary in production and consumption to other goods and services and also complement income particularly in time of acute economic stress. In this case, 'erosion' of the environmental resource base could make certain categories of the population poor and even destitute. On the other hand, inaccessibility to the poor of credit facilities compels them to employ natural resources such as

forestry, woodlands and rivers in order to survive. The resultant effect on these resources is depletion and consequently environmental degradation.

Inadequate or even absence of social services like good education and good health facilities also cause poverty. Governments of developing countries find it difficult to provide for good public schools especially in rural areas without which most people cannot find any meaningful income-generating work. Even for those who manage to acquire some form of education, the availability of only few employment opportunities in developing countries only exacerbate unemployment and poverty as high unemployment leads to high levels of poverty (Filipov n.d.). In the words of Ajakaiye and Adeyeye (2001), inadequate investment in human resource capital (education) makes people to be faced with limited opportunities, low productivity and stagnant, or a decrease in its, real earning power whose consequence is lower living standard thus perpetuating poverty. They also observed that poor health facilities distorts human capital, reduces returns from education and impedes entrepreneurial activities thereby holding back economic growth and development.

In a nutshell, World Bank (2001:32) has it that:

in many countries, social spending is regressive. Moreover, such investment has been less effective than expected, in part because of serious problems in quality and in responsiveness to poor people's needs.

Central Bank of Nigeria (1998) and Odusola (1997) summarized the causes of poverty to include:

- (a) inadequate access to income earning and productive activities such as land, capital as well as necessities of life such as shelter, health, education and safe water;
- (b) inadequate participation in the political process (even in the design and implementation of programmes that are meant for the poor) and absence of the poor's influence on the potential life of their societies;
- (c) inadequate or near absence of developmental efforts in the areas inhabited by the poor in preference to urban and high potential areas;
- (d) inadequate access to markets for goods and services of the poor in rural areas due to poor road network; and
- (e) the effects of external economic and financial factors over which governments of developing countries such as those in Africa have no control.

## **2.5 EFFECTS OF POVERTY IN DEVELOPING COUNTRIES**

A society is likely to remain largely in subsistence production if most of its members are poverty-stricken as the poor can hardly afford capital for expansion in production. They thus resort to labour intensive production with the margin of productivity remaining low. This situation is worsened by the fact that subsistence production is not fully utilized as it is constrained by poor processing and storage techniques, unfavourable weather conditions as well as damages caused by pests and diseases. Even where some of the poor benefit from credit facilities, instead of using such loans to boost production, they are sometimes misallocated as a result of indebtedness, low educational attainment and low sales proceeds (CBN 1998, and Aku et al, 1997).

Central Bank of Nigeria (1998), Aku et al (1997) further opined that poverty leads to little or no confidence in constituted authorities and this does not only generate disrespect from the poor public but also renders government policies ineffective. This is because their loyalty which is seen as the reciprocal of benefits from government remains daunted as they feel uncatered for.

Some of the effects of poverty are evident in consumption, justice, health and politics argued CBN (1998). In the area of

consumption, the poor obviously pay higher prices for the goods and services they consume. This is because their meagre incomes restrict them to purchases in small pieces thus preventing them from enjoying discounts which are associated with bulk purchases. The poor are not only denied justice but are easily arrested and often given stiffer penalties than the non-poor for same or similar offences. As regards health, the poor who have little or no access to qualitative health facilities also have less nourishing diets, more birth defects, accidents and disease infections than the non-poor. These in turn affect their productivity and quality of life. In politics, the poor are so unorganized that they can hardly influence any political decision or make any meaningful impact in voting for a candidate of their choice into an elective office.

According to World Bank (2001), the poor are not only deprived but also seriously feel their lack of voice, power and independence. In other words, they find themselves in a state of helplessness and powerlessness. Describing the complete powerlessness of the extreme poor, Kwanashie (1998) said that in addition to the fact that most of the time they have absolutely no power to influence their destiny and thus left at the mercy of those considered powerful in the society, their

inability to escape from extreme poverty condemns generations after generations to the same fate.

One of the effects of poverty is that underage children are made to contribute to the family's means of livelihood as they are pulled out of school to earn extra income particularly during an economic crisis (World Bank, 2001). The implication is that such children either become drop-outs or perform poorly in their academic pursuits. The report added that such families are not only quick at selling their land and livestock/farm products at desperately low prices but are tied to the rich land owners in patron-client relationships.

Another effect of poverty is malnutrition as the poor cannot obtain adequate calories needed to develop and maintain the body system. Malnutrition leads to stunted growth, poor malnourishment which if prolonged could lead to death. Also, since the poor are faced with poor housing, poor clothing, poor health and poor sanitary conditions, they are exposed to and are infected with diseases transmitted by other people and animals (and Filipov n.d.; Aber, Benett, Conley and Li, 1997).

According to Kwanashie (1998), poverty limits the process of capital accumulation and the ability to cope with the technological process as it does not only reduce the number of potential investors

but also undermines the zeal for investment. He added that poverty leads to gradual collapse of a society's social order as it gives room for numerous social ills. Commenting on the effects of poverty in Nigeria, Kwanashie (1998: 318) opined that:

the collapse of the family, child abuse, prostitution, which have not really been serious problems for the country are now major concerns. Poverty is destroying the very foundation of the nation. This is resulting in the rapid declining moral basis of the society. Poverty, but in particular the rapid expansion of extreme poverty in Nigeria has translated to powerlessness for the majority of Nigerians.

From what has been reviewed in this section, the effects of poverty are inimical to economic growth and economic development. Thus, every nation or society that has majority of its people in poverty can only attain meaningful economic development if poverty is drastically alleviated.

## **CHAPTER THREE**

### **GOVERNMENT POVERTY ALLEVIATION PROGRAMMES**

#### **3.1 INTRODUCTION**

Poverty in Nigeria is explained by the combined factors of inadequate food supply and limited entitlement to food as the most rudimentary manifestations of poverty is hunger and malnutrition (Atoloye 1997, Agbu, 1997 and Aku, et al, 1997). In dealing with the problem of poverty alleviation, Archibong (1997) opined that two opposing measures (direct measures which tackle poverty issues and indirect measures of promoting welfare through economic growth) exist. The direct approach assumes that economic growth by itself is too slow to provide substantial benefits to the poor in a reasonable period. Thus, it posits that government should provide goods and services directly to the population in order to ensure that the poor receive an equitable share. On the other hand, the indirect approach is of the view that policy makers should reduce government role in the provision of goods and services and rather concentrate on increasing long - term economic growth. Archibong (1997) continued that poverty alleviation programmes adopted so far in Nigeria reflect a mixture of the direct and indirect approaches.



In Nigeria, successive governments have attempted to tackle the problem of poverty through various programmes over the years having identified poverty as the main obstacle to rural development in the country (Egware, 1997 and Ekong, 1997). In a bid to tackle this impediment to rural development, the Nigerian government, responding to World Bank's recommendations and based on its agricultural survey, embarked on the implementation of three pilot integrated agricultural and rural development projects by early 1970s in Funtua, Gusau and Gombe but later spread to other states of the federation. These projects were mainly to stimulate increase in food production and enhance the income of the rural population. Ekong (1997) further argued that apart from the Agricultural Development Projects, an integrated rural development strategy proposed by the United Nations made up of three main components (rural-urban integration, intersectional and/or zonal coordination, and the package approach) was adopted. This development strategy saw the emergence of Operation Feed the Nation (OFN) in 1976 which was renamed Green Revolution by the civilian administration in 1979 and the Agricultural Credit Guarantee Scheme (ACGS) in 1977. He added that this strategy failed to meet the food aspirations of the nation neither did it uplift the poor class. Other programmes specifically

designed to facilitate rural development include: River Basin Development Authorities (RBDA) of 1973, the erstwhile National Agricultural Land Development Authority (NALDA) of 1991 and the Directorate of Food, Roads and Rural Infrastructures (DFRRI) of 1986. While Archibong (1997) and Egware (1997) argued that the anti-poverty effect of these projects remains marginal, Egware (1997) opined that NALDA has encouraged small holder farmers to bring more land under cultivation thereby improving agricultural output which should all things being equal, reduce household expenditure on food, thus reducing poverty.

Egware (1997) continued that in addition to the above programmes, there have been special relief package projects targeted at alleviating poverty during and after the Structural Adjustment Programme (SAP) which was introduced in 1986. Such projects include the National Directorate of Employment (NDE); Family Support Programme which was later replaced by the Better Life Programme and again changed to Family Economic Advancement Programme; the People's Bank; Community Banks; Rural Health Schemes and the Expanded Programme on Immunization as well as National Orientation Agency whose purpose among others is to mobilize and encourage the participation of rural people in their development. Specifically, an

extra-budgetary relief package to the tune of ~~N~~494.9 million was announced in 1989 to provide employment opportunities, health care delivery and reduce difficulties faced in transportation.

According to Agbu (1997), recent efforts by the nation's government to tackle the poverty situation have been addressed within the broader policy objectives of national development as the following targets were set in the 1996 - 1998 rolling plan.

- a. reduction of overall incidence of poverty to 20 per cent by the year 2010;
- b. ensuring adequate availability of infrastructure and access of the poor to land, credit and technology;
- c. ensuring increase in primary school enrolment from the current level of 69 per cent to 100 per cent and adult literacy rate from 52 percent to 76 per cent by the year 2010. Agbu (1997) however lamented that one year after these recommendations were made as part of the 1996-98 rolling plan, very little was done towards achieving these targets.

This notwithstanding, Ekong (1997) noted that the government formed a new approach known as the Community Action Programme for Poverty Alleviation (CAPPA) in 1997 to help alleviate poverty with the following objectives:

- i. improvement of the living conditions of the poor through a targeted cost-effective, demand-driven and promptly delivered programme;
- ii. enhancement of the productivity of the poor through skills improvement;
- iii improvement of the nutritional status of the poor through improved household food-security and health practices.

Ekong (1997) was quick to observe that though the programme had strict and enviable objectives, neither the basis nor the framework for its adoption was clear.

Available records indicate the establishment of several specific interventions by government between 1986 and 2003 to alleviate poverty. These programmes/projects include: the National Directorate of Employment, the People's Bank, the Community Bank Scheme, the National Economic Reconstruction Fund, the Better Life Programme/Family Support Programme, the Family Economic Advancement Programme, the Directorate of Food, Roads and Rural Infrastructure, the Primary Health Care, the Federal Urban Mass Transit Scheme, the National Agricultural Land Development Authority, the Nomadic Education, the Universal Basic Education, the Poverty Alleviation Programme and the National Poverty Eradication

Programme (National Planning Commission 1994; Ogwumike 2001; Obadan 2001; Ali- Akpajiak and Pyke 2003).

There have been claims by some relevant government functionaries in-charge of some of the projects to the effect that they have been quite successful. For example, responses obtained in the course of this study through oral interviews with managers of the National Directorate of Employment and People's Bank indicated that both programmes have made remarkable achievements. Some scholars have equally alluded to and in some cases supporting such claims indirectly. For example, Ogwumike (2001) opined that the National Directorate of Employment has continued to articulate labour-intensive programmes aimed at curbing the nation's unemployment problems, while Aderibigbe (2001) said that between 1990 and 2000, People's Bank advanced a total credit of 349.5 million to the poor. On his part, Addison (1996) said programmes established in the country after 1986 have not only contributed significantly to economic progress but have led to reduction in the nation's poverty incidence. There are opposing views, however. Ali-Akpajiak and Pyke (2003) observed that poverty alleviation programmes between 1986 and 1993 were not of benefit to the poor because in addition to the fact that these programmes were not synchronized with community needs, they were

characterized by absence of policy framework and undue political interference. Commenting on programmes associated with payment of stipends, Anakpej, (2001) observed that the stipends are often hijacked by privileged members of the Nigerian society.

In this review, only poverty alleviation programmes introduced by the government of Nigeria between 1986 and 2003 are analyzed. The poverty alleviation programmes during this period have been treated under some of the nation's key sectors namely agriculture, employment and rural development, health, finance, education, transport and housing. Details of the poverty alleviation programmes in these sectors are examined below.

### **3.2 AGRICULTURE**

The tasks of the agricultural sector (among others) are to ensure internal food security, provide raw materials for domestic industries and also contribute to the diversification of the export base of the economy. The sector has not been able to adequately achieve these tasks as it is faced with problems of storage and preservation, poor rural infrastructures and low level of technology. To tackle these problems, the government had established the Directorate of Food, Roads and Rural Infrastructure (DFRRI), the National Agricultural Land

Development Authority (N.A.L.D.A) and the Strategic Grains Reserve Programme.

### **3.2.1 Directorate of Food, Roads and Rural Infrastructure (DFRRI)**

Ogwumike (1998) argued that in addition to the conventional pursuit of growth objectives, the 1986 budget radically departed from past narrow sectoral pre-occupation with mere generation of food and fibre surpluses to over-all formulation of a national rural development strategy with emphasis on the alleviation of rural poverty and enhancement of the quality of rural life. It was in the light of this that DFRRI was established by Decree No. 4 of 1986. The DFRRI was expected to identify, involve and support viable local communities in the effective mobilization of the rural population for sustained rural development activities recognizing the complementarities of the basic needs of food, shelter, potable water, as well as bearing in mind the need for promoting greater community participation and economic self-reliance of the rural community (NPC 1994, Ogwumike 1998).

The objectives of DFRRI included the following:

- assisting rural dwellers to improve the quality of their lives and enhance their standard of living;

- laying a solid foundation for security, socio-cultural and sociopolitical growth and development of the country, by linking security, growth and development of rural areas to those of urban areas;
- diversifying and improving rural infrastructures;
- creating a deeply rooted and a self-sustaining development process predicated on effectively mobilized mass participation starting from the grassroots to encompassing the entire nation (NPC 1994).

Analysis made by NPC (1994), CBN and World Bank (1999) revealed that the directorate's target was 90, 000 kilometres of feeder roads, and by 1993 a total of 90,857.40 kilometres of roads were completed at the cost of ₦720 million with Akwa Ibom, Imo and Ondo states overshooting their targets while Delta and Cross River states could not meet their targets. The target for its first phase of water and sanitation project was to provide water for 5,000 communities but by the end of the phase, it had provided water for 5,421 communities. Here, Plateau, Bauchi and Kwara states overshoot their targets but Edo, Delta and Cross-River states never met their targets. In its second phase, 9,995 communities were targeted but 9,605 communities were



reached. The first phase of DFRRI's electrification scheme targeted 170 projects to serve 277 communities but 196 projects serving 305 communities were completed. However, in its second phase, out of 244 projects targeted, only 170 projects were executed and by February 1993 only 62 projects were executed as against 162 projects targeted.

In the area of housing, DFRRI focused on promotion of a technology that could use local raw materials for building that is affordable to rural dwellers and yet meet minimum standards. In doing so, it trained 115 technical extension workers on the use of local raw materials to produce burnt bricks, floor tiles, and roofing sheets at inception. The directorate in turn provided funds to states for training more technicians by those trained by it. Despite this programme, building materials such as burnt bricks, floor tiles, roofing sheets (be they local or foreign) continue to be inaccessible to the poor whose housing need has continued to be quite severe.

When the directorate's projects were handed over to states/local government areas/communities, the problems of inadequate funding and other deficiencies of technical capability constrained efforts towards maintaining these projects. Other problems that faced the directorate included the absence of effective mechanism for

coordination among the three tiers of government and between DFRRRI and the tiers of government and rising cost of programme funding (Ogwumike 1998).

Ogwumike (1998) who argued that the impact of DFRRRI on rural areas can be seen from the fact that between 1986 and 1993, it had completed over 278,526 kilometres of roads and electrified 5,000 rural communities, observed that it could not sustain the tempo with which it started as it ended up not living up to expectation and became defunct.

The programme was characterized by non-prioritization of projects to meet the needs of the most vulnerable poor. To worsen matters, the implementation of DFRRRI projects alienated the benefiting communities as it went into contract award to contractors contrary to one of its objectives which emphasized mass-participation starting from the grassroots.

### **3.2.2 National Agricultural Land Development Authority (NALDA)**

The National Agricultural Land Development Authority was inaugurated in 1991 but took off in 1992 with the aim of moderating the problem of low utilization of abundant land resources in the

country. This programme which involved the three tiers of government and the local communities had as its target, the development of 3000-5000 hectares of land in each state between 1992 and 1994. This was to develop at least 7,500 to 12,800 farmers within the area so that they could live within the radius of 3-5 kilometres of their farmlands. Unfortunately, NALDA developed and allocated only 1000 hectares of land as composite divided into 4 hectare plots. The authority was faced with problems ranging from inability of some states to provide the required 1,200 hectares of land in a contiguous location due to shortage of funds for the execution of the authority's activities (NPC 1994).

A major shortcoming of the authority's work was its allocation of developed plots of land to highly placed public officers and urban and rural rich individuals at the expense of the targeted rural population. The end result was that rural dwellers' land were taken from them and handed over to wealthier personalities.

### **3.2.3 Strategic Grains Reserve Programme**

This programme was established in 1987 to help address the problem of food insecurity; minimize intra and inter seasonal variations in agricultural products' supply; offer assistance to deserving neighbouring and friendly nations and curtail the perennial

problem of post-harvest losses (NPC 1994). Though this programme was well-intended, it has not impacted on the rural farmers as they have continued to experience increasing post-harvest losses while the high rates of inflation that affect almost all agricultural products are testimonies to the fact that the issue of food security in Nigeria has remained an illusion.

In summary, these agricultural related programmes aimed at poverty alleviation in Nigeria though well intended, have seemingly failed to impact significantly on the poverty situation. This may be partly blamed on failure to enlist the participation of the rural farmers in the planning and implementation processes in addition to inadequate funding. In the words of Okunribido, Amusan, Araoye and Babalola (1996), in slums and squatter settlements, many families reduce food intake from 3 to 2 meals a day with the situation worsening in rural areas where acute under nutrition is prevalent. This view points to the fact that the agriculture related poverty alleviation programmes discussed in this section have done little or nothing to ensure food security in the country.

### **3.3 EMPLOYMENT AND RURAL DEVELOPMENT**

In this section, we have tried to review the activities of the National Directorate of Employment, the Better Life Programme/Family Support Programme and Family Economic Advancement Programme.

#### **3.3.1 National Directorate of Employment (N.D.E)**

The directorate was established in 1986 with the objectives of designing and implementing programmes to combat mass unemployment, articulating policies to develop work programmes with labour intensive potentials; obtaining and maintaining a data bank on employment and vacancies in the country so as to act as a clearing house to link job seekers with vacancies in collaboration with other government agencies (NPC 1994, Ogwumike, 1998).

The directorate has four (4) main programmes that according to Ogwumike (1998) do not only create jobs but also enhance productivity and income earning potentials of youths and other beneficiaries. These programmes are: vocational skill development (VSD), special public works (SPW), small-scale enterprises (SSE) and agricultural employment.

On the directorate's achievements, NPC (1994) and Ogwumike (1998) observed that over 766,783 individuals were trained in the open apprenticeship scheme between 1987 and 1998; more than 106,854 persons benefited from the resettlement scheme as at 1996; the school on wheels scheme had engaged 15,317 unemployed youths as at 1994; the waste to wealth scheme benefited 6,394 youths as at 1994; and the special public works programme created jobs for more than 154,910 unemployed persons between 1987 and 1994. In addition, the small scale enterprises programme had provided loans to about 2,335 persons as at 1994.

The programme has been constrained by inadequate funding, shortage of staff, inadequate vehicles and equipment for projects' monitoring, loans coordination and recovery activities. Thus, the issue of sustainability has remained uncertain as the directorate is finding it difficult to cope with the needs of the increasing number of applicants in the face of inadequate funding (CBN and World Bank 1999, NPC 1994). However, the fact that many Nigerians have benefited from the directorate cannot be denied though it has not been able to evolve a mechanism for self-sustenance.

### **3.3.2 Better Life Programme (BLP)/Family Support Programme(FSP)**

In the words of Ogwumike (1998), due to limited educational skills and paucity of formal employment opportunities, most women have turned to self employment as a means of supporting themselves and their families. Their activities do not yield enough to raise them out of poverty as they lack the capital, technology and management skills as well as access to credit and markets that could aid in expanding and improving their productivity and income. As a result, the Better Life Programme and the Family Support Programme established in 1987 and 1994 respectively organized cooperative societies for women to increase their access to credit, enhance their productivity and income earning potentials. Both programmes were said to have shown varied levels of success. In this direction, NPC (1994) observed that between 1987 and 1990, 150 women cooperatives were reached by the Better Life Programme in each state and by 1992, the number increased to 9,044. In addition, the BLP trained 1,444 traditional birth attendants between 1990 and 1992.

Though resources were disbursed constantly, BLP and FSP overstretched themselves by engaging in almost every activity in the economy ranging from agriculture through infrastructural provision to

employment generation, day care, nursery schools, mobile clinics as well as granting scholarships. This has tended to cast doubt on their sustainability. In addition, these programmes were faulted for their absence of targeting mechanisms, inadequate monitoring and coordination. Despite the huge funding of the programme, their projects were not only located in urban and semi-urban towns but they were not what the rural poor were yearning for. Thus the poor could not benefit from such projects. Rather, the beneficiaries were an insignificant number of the urban population.

### **3.3.3 Family Economic Advancement Programme (FEAP)**

The Family Economic Advancement Programme which was seen as an off-shoot of FSP was introduced in 1997 as an economic project designed for the poor and the needy. It was meant to empower locally based producers of goods and services as well as potential entrepreneurs in the cottage industries. Thus, it was specifically aimed at facilitating the setting up of productive cottage enterprises by communities/cooperatives that were to use locally fabricated equipment in the rural areas (Okunmadewa, 1998; Central Bank of Nigeria and World Bank 1999). The rural areas were to be reached through electoral wards.



The programme received a grant of ~~₦~~4.1 billion and ~~₦~~3.3 billion in the 1997 and 1998 budgets respectively. Its implementation did not take off until June 1998 with the disbursement of ~~₦~~250 million to successful applicants (Central Bank of Nigeria and World Bank 1999). The programme was merged with the Nigerian Agricultural Cooperative Bank in 1999 barely two years after inception and thus its impact is nothing to mention. However, it would have faced the same problems as BLP/FSP, all things being equal.

### **3.4 HEALTH**

The National Planning Commission (1994) identified two health programmes launched by the government between 1987 and 2000 namely Primary Health Care and the Guinea worm Eradication Programme

#### **3.4.1 Primary Health Care**

The Primary Health Care Programme was launched in 1987 with the aim of achieving a level of health that could enable Nigerians attain a socially and economically productive life by the year 2000. This was to be achieved by making health facilities accessible to individuals and communities through their involvement and at

affordable cost with emphasis on promotive, preventive and protective measures that would be integrated with treatment and rehabilitation (NPC 1994).

Though reports on various components of the programme indicate improvements since its inception, NPC (1994), and CBN (1998) record that the level of infant and children immunization coverage dropped from 33 percent in 1990 to 28 percent in 1995. In addition, Onibokun and Kumuyi (1996) argued that UNICEF has observed that Nigeria had one of the worst child survival rates in the world as at 1996 because an average of 191 children under the age of 5 years died for every 1,000 births in the country.

The poor performance of the programme and the worsening health conditions of the poor in the country are blamed on inadequate funding which has resulted in inadequacy of drugs, inadequate transport network, and inadequate trained manpower. Thus, it is clear that this programme has not been able to adequately provide health facilities to the poor.

#### **3.4.2 Guinea Worm Eradication Programme**

This programme which was launched in 1988 aimed at eradicating guinea worm in Nigeria by the year 2000 by improving

health through promoting changes in attitudes, knowledge and practices relating to use of water, excreta disposal and general hygiene.

According to NPC (1994), as a result of training village health workers, and nation-wide education of endemic villages as well as the supply of endemic villages with filters, potable water, the number of reported cases of guinea worm decreased from 653,620 in 1988 to 221,682 representing 72 percent decline in 1992 while the number of endemic villages reduced from 5,879 in 1988 to 4,576 in 1992.

One fact that remains uncontested is that almost all endemic areas are rural areas whose literacy level is very low. This low level of literacy has hindered creation of effective awareness which can help in eradicating the disease. Also, absence of potable water in these endemic areas has made it almost impossible to eradicate guinea worm.

### **3.5 FINANCE**

#### **3.5.1 People's Bank of Nigeria (PBN)**

The bank was established in 1989 to provide access to credit for the poor who before then could not have access to credit facilities of

conventional banks due to non-availability of collaterals.

Specifically, the bank's objectives included:

- extending credit facilities to the less privileged members of the society;
- providing employment for the vast unutilized and underutilized manpower resources;
- inculcating banking habits at the grassroots level so as to check rural-urban drift;
- cushioning the painful effects of the structural adjustment programme on the depressed sectors of the economy;
- complementing government efforts in improving the productive base of the economy (NPC, 1994 and CBN, 1998).

The bank disbursed ₦1,485 million and ₦300 million in 1990 and 1993 respectively as interest free loans. In addition, the people's loan transport scheme, a component of the bank had 281 buses in its fleet as at 1993. Through its employment drive, the bank resettled some of the 'area boys' (NPC 1994).

Though the bank has been merged with the Nigerian Agricultural Cooperative Bank (NACB), it was constrained by poor staffing; high

cost of training, inadequate transport and infrastructural facilities and high rate of default on loans and other loan recovery problems.

In the words of Onibokun and Kumuyi (1996), although the bank was not designed to benefit only the urban poor, its resources and services were biased towards the urban population. This suggests that majority of the poor who are found in rural areas hardly had access to the bank's credit facilities.

### **3.5.2 Community Banks**

The Community Bank Scheme was established in 1990 to address the peculiar but significant needs of particular communities in terms of catering for the credit and savings needs of the small scale producers who have been neglected by the orthodox banks. Community Banks have been designed to ensure the development of local communities by involving the people in harnessing the economic potentials existing in such communities (NPC 1994, CBN 1998).

The National Planning Commission (1994) has it that by 1992, 288 community banks were fully licensed to practice banking. Also, by 1992, about 2000 clerks, cashiers, managers and credit officers had been trained by the National Board for Community Banks (NBCB).

The Scheme has been faced with the problems of funding, acceptability and understanding of the scheme by the public, the dearth of staff, and clearing of cheques. It is important to note that these problems and misappropriation of funds by unemployed youths who found themselves working in these banks have ruined some of the banks to closure.

### **3.5.3 The National Economic Reconstruction Fund (NERFUND)**

The Fund was established in 1989 to complement the efforts of the Nigerian Industrial Development Bank and the Nigeria Bank for Commerce and Industry by providing long-term loans at concessionary interest rates to industrialists who are interested in promoting small and medium scale projects.

Specifically, the objectives of the fund include:

- correcting inadequacies in the provision of long-term financing to small and medium scale industrial enterprises especially those in the manufacturing and agro-allied enterprises as well as ancillary services;
- providing medium to long-term loans to participating commercial and merchant banks for on-lending to small and medium scale enterprises for promoting and acceleration of productive

- activities of such enterprises;
- facilitating the provision of loans with 5-10 years maturity including a grace period of 1-3 years depending on the nature of the enterprise or project;
  - providing such loans either in naira and/or foreign currencies according to the sources of fund available and the requirement of capable enterprises (NPC 1994).

According to NPC (1994), the fund had, as at 1993 disbursed about ₦1.3 billion to 128 projects mainly for the acquisition of assets, plants and machinery. It had established projects in 26 states as at 1994 which implied that it could be a reliable source of long-term fund for industrial development in Nigeria. In addition to lack of counterpart funding, the country's deplorable situation and heavy devaluation of the naira have adversely affected the level of loan repayment by the fund's beneficiaries.

Commenting on the impact of these institutions on the poor, CBN (1998) opined that they have failed to put more income, wealth and more credit into the hands of those who really need them. Rather, low pay has continued to characterize the economy leading to mass poverty (including the creation of the new poor-the middle class who have been relegated to the lower half of the income ladder). The fact

therefore remains that the fund has not had so much impact. This has been blamed (often) on its operational procedure that entails channeling the funds through commercial and merchant banks.

### **3.6 EDUCATION**

According to CBN and World Bank (1999), education is crucial in providing skills and abilities which could enable households to secure productive and well-paying jobs. Lack of education deprives the households' access to gainful and well paid employment. Education is necessary if other poverty alleviation programmes are to succeed as creation of awareness can only be effective with proper education.

#### **3.6.1 Nomadic Education Programme.**

This programme which started under the National Advisory Committee on Nomadic Education in 1986 culminated into Nomadic Education Programme in 1989 with the aim of integrating the nomads into national life as Nigerians. Thus, the programme has been planned to provide the nomads with relevant education to enable them to be literate and use skills acquired to enhance their standard of living and to contribute to the development of the nation (NPC 1994).

As recorded (NPC 1994), by 1992, 12 nomadic schools were established in six states, 89 nomads were trained on animal health to



provide animal health services, and 7 children of nomadic origin had been given university education.

According to Onibokun and Kumuyi (1996), despite the fact that between 1990 and 1993 school enrollment rates increased from 76.4% to 93.6% and 59.1 % to 74.7% for boys and girls respectively, actual school attendance for the period declined. This is because about 45% of children enrolled in schools did not complete their primary education with majority of them being children of the poor. On functional literacy, Okunribido, et al (1996) observed that less than 60 percent of the country's adult population can read and write in any language.

### **3.6.2 Universal Basic Education (UBE)**

The U.B.E which was launched in 1999 is aimed at providing both intellectual and non-intellectual competencies to all Nigerians for learning or trade, as the case may be. According to Yawe (2000), with its basic components of nine years of schooling (primary and junior secondary), nomadic education as well as out of school literacy and non-formal education for children, youths and adults, it is intended to achieve the following objectives:

- developing in the citizens a strong consciousness for education and commitment to its vigorous promotion;
- providing free universal basic education to every Nigerian child

- of school going age;
- reducing drastically through improved relevance, quality and efficiency the incidence of drop-outs from the formal school system;
  - catering for young drop-outs and other out-of- school children/ adolescents, with the aid of complementary approach to the provision and promotion of basic education;
  - ensuring acquisition of appropriate levels of literacy, numeracy, manipulative, communicative and life skills as well as the ethical moral and civic values needed for laying solid foundation for life long learning. Though these objectives sound quite laudable like those of other programmes, the programme may not be sustained due to problems of inadequate infrastructure, inadequate relevant manpower and inadequate funding which characterize the Nigerian economy.

### **3.7 TRANSPORT**

In a bid to save the nation's transport system from imminent collapse, and reduce the transportation problem faced by the masses especially in the urban areas, the National Urban Mass Transit

Programme (NUMTP) was established in 1988. The programme's objectives included:

- arresting the increasing gaps between the supply and demand for public transport system;
- offering credible basis for modernizing the national urban transit system;
- promoting technology in the transport sector;
- generating employment opportunities (NPC 1 994).

Data from NPC (1994) revealed that between 1988 and 1992, the programme had contributed over 2000 buses into the public transport system. Also, its loan scheme provided 140 buses to the National Union of Road Transport Workers (NURTW), the Association of Senior Staff of Banks, Insurance and Financial Institutions and the Nigeria Labour Congress. With the launching of a special scheme for the private sector in 1992, not less than 1,250 26seater buses were acquired and given to private sector operators as soft loans. Also, in the area of water transport, 18 old ferries were rehabilitated while 4 new ones were constructed for coastal areas.

The impact of NUMTP has been noticeable in the expansion of the scope of public transport services available with relative stability in transport fare in most state capitals as well as intra and inter-state

routes. Moreover, the programme has been able to provide employment opportunities. However since majority of the poor live in rural areas, its positive impact on the life of the poor has been generally insignificant as they are rarely seen on rural roads.

### **3.8 HOUSING**

The National Policy on Housing which was launched in 1986 was meant to achieve housing for every Nigerian by the year 2000. The main objectives of this policy were:

- increasing the supply of land for residential development by all income groups;
- promoting orderly development of human settlements with corresponding essential facilities such as roads, water, electricity, commerce, recreation, health and education;
- establishing models that states, local government councils as well as private individual developers could emulate (NPC 1994).

Though a total of 10,474 plots were said to have been allocated, many former owners of these plots are yet to be compensated. Majority of these former owners are poor people who have not only lost possession of their farmlands but cannot afford the cost of occupying houses built on their plots by the housing scheme. There is

no evidence to show that the low income group has benefited from this policy. Thus, this policy has only favoured the rich at the detriment of the poor.

### **3.9 PETROLEUM (SPECIAL) TRUST FUND (P.T.F)**

The PTF was established by Decree 25 of 1994 to utilize the proceeds from increase in the prices of petroleum products to complete all government abandoned projects as well as rehabilitate the nation's decaying social infrastructure. Prior to its scrapping, the fund had executed projects in the areas of roads and transportation, health, education, water supply, food supply, and security (CBN and World Bank 1999).

Specifically, Aliyu (1998) opined that the fund had embarked on the rehabilitation of 25,000 km roads in the country, a number of sports infrastructural facilities, the venue of the 7<sup>th</sup> African Trade Fair in Kaduna and the closed pharmaceutical production companies. It also supplied drugs and vaccines to many hospitals and assisted every state and the federal government in water supply projects and in the provision of textbooks and educational materials in many schools.

Though the fund impacted considerably on several sectors of the economy, such impact has been felt more in the urban areas than in

rural areas. Hence, the rural poor whose infrastructure need more attention to alleviate their sufferings and ease the transportation of their produce to domestic and international markets never felt the impact of PTF.

### **3.10 THE POVERTY ALLEVIATION PROGRAMME (PAP)**

Convinced that poverty and unemployment had assumed unacceptable dimensions socially, economically and politically, to eradicate poverty, the government earmarked the sum of ₦10 billion for the creation of 200,000 job opportunities in the year 2000 (El-Rufai 2001). The guidelines for the programme outlined the objectives of the programme to include:

- setting in motion effective economic empowerment of the people in urban, sub-urban and rural communities;
- stimulating economic growth through engagement of semi-skilled and unskilled labour in productive activities;
- reduction of social vices and tension in the society by employing idle hands from the streets;
- engaging the unemployed in direct activities so as to reflate the economy;
- improving the environment/arresting environmental

- degradation;
- discouraging rural - urban migration;
- ensuring that participants benefit directly from the fund.

In order to achieve these objectives, direct jobs were to be created through some labour- intensive activities. Areas slated for these activities were highways, environmental sanitation, afforestation, hospitals, schools and other public places, public utilities and facilities as well as construction of low cost houses, and assistance in food production.

Though the programme was an ad-hoc one pending the introduction of a more sustainable one, it provided jobs to 214,367 people with a monthly stipend of ₦3,500 per person. The programme was criticized on the ground that stemming the high level of poverty and rising unemployment requires better action than mere paying of stipends to beneficiaries. Worse still, this stipend approach was hijacked by some privileged members of the society who confiscated the fund and denied the intended beneficiaries access to such fund (Anakpej, 2001).

### **3.11 THE NATIONAL POVERTY ERADICATION PROGRAMME (NAPEP).**

The National Poverty Eradication Programme was established in January, 2001. According to NAPEP's blueprint, its ultimate target is the eradication of absolute poverty in the country by the year 2010. The programme's specific objectives according to EL- Rufai (2001) include:

- provision of enabling empowerment for Nigerian youth to acquire skills and become productively self reliant in the nation's environment;
- provision of functional infrastructural facilities;
- provision of basic necessities of life to all Nigerians so as to bring about a socially organized and economically prosperous society;
- enhancing long-term optimum development of natural resources and that objectionable practices in resource exploitation are reduced to the barest minimum.

In order to ensure that these objectives are achieved, the programme's activities are to be undertaken under four (4) schemes namely: (a) youth empowerment scheme; (b) rural infrastructure development scheme; (c) social welfare services scheme and (d) the



natural resource development and conservation scheme.

To ensure proper coordination and implementation of the programme, the government has established national coordination committee, state coordination committees, the national assessment and evaluation committee and local government monitoring committees under the National Poverty Eradication Council (National Poverty Eradication Programme, 2001). In addition, the government has streamlined and rationalized the functions of core poverty alleviation institutions and agencies. For example, the Nigerian Agricultural and Cooperative Bank (N.A.C.B), the People's Bank of Nigeria (PBN) and the Family Economic Advancement Programme (F.E.A.P) have been merged to form the Nigerian Agricultural Cooperative and Rural Development Bank (NACRDB). Also, the activities of the National Directorate of Employment (N.D.E) have been streamlined to exclude credit delivery (Aliyu, 2001).

Though it is not easy to assess the programme at this early stage, it is important to point out that the period (minimum of 3 months and a maximum of 9 months) slated for skill acquisition is too short to guarantee acquisition of a meaningful skill for sustained economic empowerment. Furthermore, even though millions of naira (ranging from ₦140, 426, 853 to ₦415, 608, 370) (Aliyu, 2001) were

allocated to each state and the FCT as at 2001, in some states where the programme has taken off, its beneficiaries are already suffering from non-payment of allowances.

This review has attempted to offer some insight about the performance of past and ongoing Poverty Alleviation Programmes. It is not by any means exhaustive but surely offers indications as to why despite the series of interventions, the poverty situation does not appear to be significantly changing for the better. In terms of impact assessment of poverty alleviation programmes in Nigeria, not so much has been done, which is the reason why it is difficult to say categorically that a particular Poverty Alleviation Programme has failed or succeeded. For instance, attempts to assess the achievements of People's Bank of Nigeria have not gone beyond the amount disbursed. Similarly, analysis of the activities of the National Directorate of Employment have, merely identified the number of the directorate's beneficiaries. Thus, the issues of impact of programmes and their sustainability are yet to be seriously researched. This study has attempted to further the literature by taking on an impact assessment of three of the Poverty Alleviation Programmes in three states.

Although most of these programmes reviewed might possibly have made modest contributions to the alleviation of poverty in

Nigeria, many are urban-based and as a result, the core poor who are mostly rural dwellers have only minimally (if at all) benefited from the trickle down effects of these programmes. This perhaps explains what appears to be a kind of poverty resistance to the intervention therapy.

Programmes like Directorate for Food, Roads and Rural Infrastructure (DFRRI), National Agricultural Land Development Authority (NALDA), Better Life, Family Support and Petroleum Trust Fund have been scrapped while Family Economic Advancement Programme and People's Bank of Nigeria have been merged with the Nigerian Agricultural Cooperative Bank to give rise to the Nigerian Agricultural Cooperative and Rural Development Bank (NACRDB). In undertaking a study of this nature, it might not be easy to appraise all the programmes. Thus, our focus has been on the National Directorate of Employment (NDE), the People's Bank of Nigeria (PBN) and the Primary Health Care (PHC). The choice of these three programmes is predicated on the fact that they seem to have covered a larger population. In addition, the three have escaped being scrapped since inception.

## **CHAPTER FOUR**

### **DATA PRESENTATION AND ANALYSIS**

#### **4.1 PREAMBLE**

This study has attempted to empirically assess the activities of the National Directorate of Employment, People's Bank and the Primary Health Care in Benue, Nasarawa and Plateau states. In this chapter, data obtained from secondary sources and the household survey questionnaire (see appendix A) have been presented and analysed. For National Directorate of Employment and People's Bank, the data obtained from the questionnaire have been compared with available secondary data presented in table 5. The data in respect of 1985 in table 5 as well as responses obtained from oral interviews form the benchmark for assessing the performances of the two programmes as they were introduced as from 1986. The study assessed the extent to which the poverty alleviation programmes have alleviated poverty in the sampled areas as claimed by Addison, Aderibigbe, Ogwumike and managers of these programmes while analyzing the performance of these programmes at the national level. For the purpose of this assessment, the remainder of the chapter is divided into four sections: model of the study and sampling frame,

data presentation and descriptive analysis, quantitative analysis and discussion of major findings.

#### **4.2 MODEL OF THE STUDY AND SAMPLING FRAME**

In analysing the data, the study adopted a descriptive method supported by the Foster, Geer and Thorbecke (FGT) poverty index as well as the "Z" test distribution at 5% level of significance. It was on the basis of the analysis that conclusions were drawn as to the effectiveness or otherwise of the programmes in each of the local government areas sampled.

The secondary data discussed the trend of poverty level in the three states under consideration as well as the poverty level in the nation at large. In order to obtain primary data, respondents were sampled from two local government areas in each of the three states. In Benue state, Otukpo and Ushongo local government areas were chosen, while the local government areas selected in Nasarawa state were Akwanga and Keana. In the case of Plateau state, Langtang North and Jos East local government areas were selected. Otukpo, Akwanga and Langtang North local government areas have been considered as urban local government areas in this research while Ushongo, Keana and Jos East have been considered as rural local

government areas. For the purpose of this research, urban local government areas have been defined as those in which there is some basic infrastructure such as potable water, motorable roads, telephone services, a general hospital as well as the presence of commercial banks; whereas, those local government areas that do not have these facilities have been considered rural.

A total of 7,200 copies of the questionnaire were administered in the three states, while 5148 copies representing 71.5% were retrieved. Two local government areas were chosen in each state and for each local government area, 1200 copies of the questionnaire were administered. In Benue state, 1887 (1184 in Otukpo and 703 in Ushongo) copies of the questionnaire were retrieved representing 78.63%. In Nasarawa state, 1472 (705 in Akwanga and 767 in Keana) copies of the questionnaire were retrieved representing 61.33%. For Plateau state, 1789 (732 in Langtang North and 1057 in Jos East) copies of the questionnaire were retrieved representing 74.54%.

### **4.3 DATA PRESENTATION AND DESCRIPTIVE ANALYSIS**

#### **4.3.1 Secondary Data.**

Onibokun and Kumuyi (1996) and NPC (1995) opined that government policies and programmes have not only aggravated the

level of mass poverty in Nigeria but that poverty has been continuous and worsening. According to Federal Office of Statistics (1999), of the 19 states in Nigeria in 1980, no state had more than half of its population categorized as poor but by 1985, eight states (namely Bauchi, Edo/Delta, Borno/Yobe, Kaduna/Katsina, Kano/Jigawa, Niger, Ogun and Plateau) had more than half of their population categorized as poor though the number reduced to three states (Bauchi, Kwara/Kogi and Plateau) in 1992. However, by 1996, only one state (Rivers) never had more than half of its population as being poor.

Table 1: Trends in poverty level: 1980 -2004 (in %).

YEAR	POVERTY LEVEL
1980	27.2
1985	46.3
1992	42.7
1996	65.6
1997	69.2
1998	80.0
1999	70.0
2000	60.0
2004	54.0

Source: Compiled from CBN (1998), F.O.S (1999),  
Ogwumike (2001), World Fact Book (2004) and  
Soludo (2005).



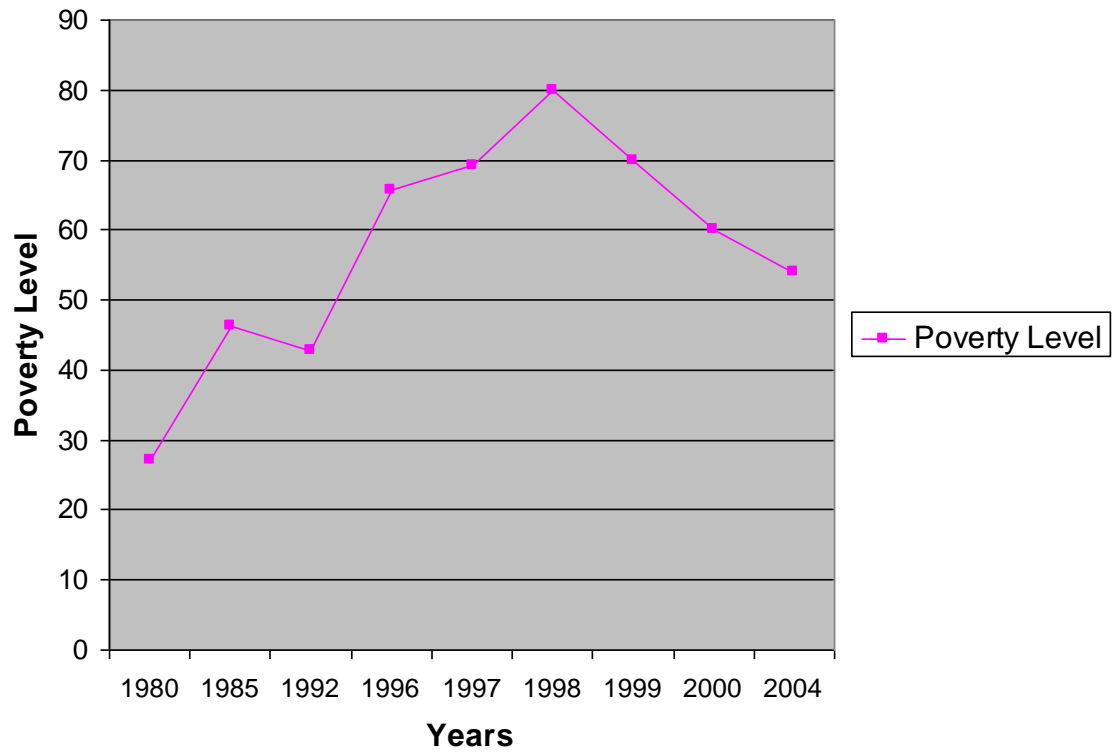


Figure 1: Trends in Poverty Level 1980-2004 (%)

Table I has revealed that in 1980, only 27.2% of the Nigerian population were said to be poor. This however increased to 46.3% in 1985 before decreasing to 42.7% in 1992 only to increase to 65.6%, 69.2% and 80% in 1996, 1997 and 1998 respectively. With the advent of the present civilian regime, the nation's poverty incidence is said to have declined to 70% in 1999, 60% in 2000 and 54% in 2004. As depicted in Figure 1, the general trend in the nation's poverty level was on the increase between 1980 and 1998 but began to witness a decline as from 1999. This decline has been attributed to rapid economic growth as a result of reforms in the nation during the present civilian regime. According to Soludo (2005), Nigeria has been ranked as one of the ten (10) fastest growing economies in the world during the last two years (2003–2004) because between 2000 and 2004, Nigeria's per capita income growth rate became positive, a situation that had eluded the country over the years. Specifically, the growth rate of per capita income which had been negative (-0.6% for 1960-1966, -9.75% for 1980-1983 and -1.7% for 1993) became positive (3.16% for 2000-2004).

By 1996, each of the nation's six zones (North East, North West, Central, South East, South West and South-South) had over half of its population categorized as poor. The poverty level ranged from 53.5%

in the South East to 77.2% in the North West while the Central Zone (which involves the study area) had 65.9% of its population as being poor as revealed by table 2.

Table 2: Incidence of poverty (in %) by Geopolitical zones 1996

GEOPOLITICAL ZONE	POOR	NON POOR
North East	70.1	29.9
North West	77.2	22.8
Central	65.9	34.1
South East	53.5	46.5
South West	60.9	39.1
South South	58.2	41.8

Source: computed from F.O.S., (1999)

Table 3: Poverty (in %) and Occupation of Household Heads (1980-1996)

OCCUPATION OF HOUSEHOLD HEAD	POVERTY HEADCOUNT			
	1980	1985	1992	1996
Agriculture/forestry	31.5	53.5	47.9	71.0
Service industry	21.3	38.0	38.2	71.4
Production/transport	23.2	46.6	40.8	65.8
Manufacture/processing	12.4	31.7	33.2	49.4
Administration	45.0	25.3	22.3	33.5

Source: F.O.S (1999)

Data on occupational distribution as shown in table 3 revealed that households whose heads were engaged in agriculture/forestry had the highest level of poverty in 1985 and 1992 with 53.5% and 47.9% respectively. This was followed by households whose heads were engaged in production and transport with 46.6% and 40.8% respectively of the households categorized as poor during the respective years. The poverty level for all the households engaged in various occupations except administration increased between 1980 and 1996. For instance, households whose heads were engaged in agriculture/forestry, service industry, production/transport and manufacturing/processing had their level of poverty raised from 31.5% to 71%, 21.3% to 71.4%, 23.2% to 65.8% and 12.4% to 49% respectively between 1980 and 1996. However, the level of poverty for households whose heads were engaged in administration declined from 45% in 1980 to 33.5% in 1996. This could be attributed to occupational income differential.

The proportion of the nation's core poor as shown in table 4 moved from 6.2% in 1980 to 12.1%, 13.9% and 29.3% in 1985, 1992 and 1996 respectively. Thus, while only 4.1 million Nigerians were said to be in the core poor group by 1980, the group had 30 million Nigerians by 1996 while the number of those in the moderately poor

group rose from 14 million in 1980 to 37 million by 1996. By this data, the population of the core poor group and the moderately poor increased by 731.7% and 264.3% respectively between 1980 and 1996 (F.O .S. 1999:25).

Table 4: Percentage distribution of the population in poverty (1980 - 1996)

YEAR	MODERATELY POOR	CORE POOR	NON- POOR
1980	21.0	6.2	72.8
1985	34.2	12.1	53.7
1992	28.9	13.9	57.3
1996	36.3	29.3	34.4

Source: F.O.S. (1999)



Table 5: Trends in poverty levels (in %) in the study area (1980 - 1996)

YEAR	STATE	
	Benue	Nasarawa/Plateau
1980	23.6	49.5
1985	42.9	64.2
1992	40.8	50.2
1996	64.2	62.7

Source: Computed from F.O.S (1999).

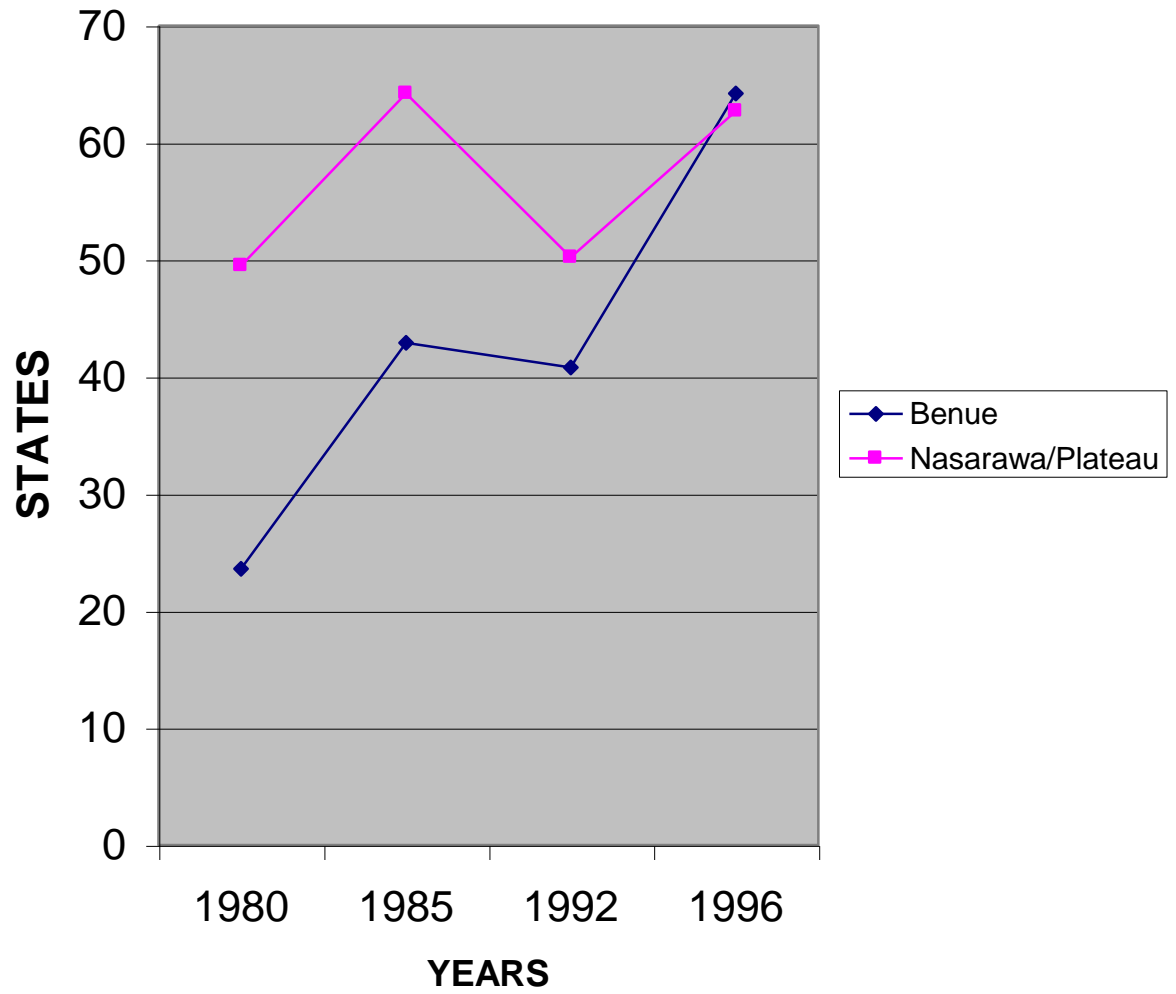


Figure 2: Trends in poverty levels (in%) in the study area(1980-1996)

Data on the study area in table 5 has revealed that 23.6%, 42.9%, 40.8% and 64.2% of Benue state population were categorized as poor in 1980, 1985, 1992 and 1996 respectively. In the case of Plateau/Nasarawa states, the poverty incidence for 1980, 1985, 1992 and 1996 stood at 49.5%, 64.2%, 50.2% and 62.7% respectively. From the data, though there was an increasing trend in the three states, the poverty incidence was higher in Plateau/Nasarawa than Benue for all the years except in 1996 when Benue recorded higher poverty incidence than Plateau/Nasarawa. From Figure 2, the trend noticed with the national poverty level which is that of a general rise between 1980 and 1998 was maintained in the three states under study.

From the foregoing, it can be argued that the poverty incidence continued to rise between 1980 and 1998. As from 1999, the situation reversed because the poverty incidence began to decline. As pointed out earlier, this decline can be said to have resulted from increased economic growth that has characterized the present civilian regime.

Table 6: Percentage distribution of study area's population in poverty (1980 - 1996).

YEAR	STATES			
	MP	Benue CP	MP	Nasarawa/Plateau CP
1980	22.2	1.4	41.8	7.7
1985	28.59	14.3	44.3	19.9
1992	26.0	14.8	35.9	14.3
1996	39.1	25.1	38.9	23.8

Source: F.O.S (1999).

Note: MP = Moderately Poor, CP = Core Poor.

The data in table 6 has indicated that more people were in the core poor group in Plateau/Nasarawa states than in Benue state in 1980 and 1985. However for 1992 and 1996, the situation reversed with more people being in core poor group in Benue state than in Plateau/Nasarawa states. In addition, while Benue state witnessed continuous increase in the percentage of its core poor between 1980 and 1996, Plateau/Nasarawa states experienced a decline of about 5.6% in 1992 compared to what obtained in 1985 though the percentage increase continued in 1996.

Table 5 contains secondary data in the study area between 1980 and 1996. Considering that the poverty alleviation programmes were established as from 1986, the 1985 data has been chosen as the benchmark for measuring the poverty alleviation programmes studied. The choice of 1985 data is based on the fact that this is the immediate year that preceded the introduction of these programmes. In addition, views gathered from oral interviews have been used in assessing the effectiveness of the programmes. Table five (5) shows rising trend in poverty level for the three states from 1980 to 1996 except in the year 1992 which witnessed lower poverty level compared to what was obtained in 1985. This trend corresponds with the national

phenomenon of continuous increase in poverty level between 1980 and 1996 as discussed above.

Though the decline in poverty level recorded in 1992 was, according to World Bank (1996) as a result of significant economic progress witnessed after 1985, the Bank admitted that the welfare of many Nigerians remained below what was obtained in 1980. This is because, since 1992, real incomes and real per capita private consumption have not been near 1980 level while those in the poorest quintile have been worse off. It will thus not be out of place to conclude that the decline was, according to F.O.S (1999) as a result of misreading of the data as only the 1985 data set was readily available while the data collection for 1992 survey was in progress when the analysis of the 1992 data was completed. The fact that the rising trend continued up to 1996 confirmed that 1992 data was not only misread but misleading.

Examination of the national data has revealed that Benue was the 11<sup>th</sup> poorest state and Plateau/Nasarawa the 12<sup>th</sup> poorest states in Nigeria as at 1996.

This study has been focused on three programmes namely: National Directorate of Employment, People's Bank and Primary Health

Centres. The data presented in tables 7 to 19 are thus in respect of these programmes

### 4.3.2 Primary Data.

#### ***Presentation of National Directorate of Employment Data.***

Table 7: Distribution of NDE beneficiaries by Local Government Areas.

States	Local Areas	Govt.	Beneficiaries		Non-Beneficiaries	
			N <sup>o</sup> of Ben.	%of Ben.	N <sup>o</sup> of non-Ben	% of Non-Ben.
BENUE	Otukpo		117	9.88	1067	90.12
	Ushongo		62	8.82	641	91.8
NASARAWA	Akwanga		37	5.25	668	94.75
	Keana		38	4.95	729	95.05
PLATEAU	Langtang		113	15.44	619	84.56
	North					
	Jos East		29	2.74	102.8	97.56

Source: Field Survey: 2003.



Table 8: Occupations of NDE beneficiaries in Benue, Nasarawa and Plateau states (%).

OCCUPATIONS	BENUE		NASARAWA		PLATEAU	
	Otukpo	Ushongo	Akwanga	Keana	L/North	Jos/East
Agric. Employment	8.16	29.17	13.89	22.22	5.68	26.19
Public work	2.04	10.42	5.56	5.56	2.27	-
Small scale Industry	21.77	10.42	11.11	16.67	1.71	16.67
Vocational	2.72	29.16	27.78	16.66	51.14	26.19
Unrelated occupations	64.63	20.83	33.33	38.89	39.2	30.95
Unemployment	0.68	-	8.33	-	-	-
Total	100	100	100	100	100	100

Source: Field Survey: 2003

Responses from the survey revealed that every local government area benefited from the programmes of the directorate. The distribution of households that benefited from the directorate has been presented in table 7. The table has revealed that only between 2.74% and 15.44% of the respondents in the sampled local government areas benefited from the programmes of the National Directorate of Employment. These percentages are quite insignificant compared to 100 percent of the respondents. This depicted a situation of narrow coverage of the directorate's programmes. In all the states, the percentage of beneficiaries in urban local government areas was greater than what obtained in rural local government areas. That is to say, despite the fact that poverty has remained more pronounced in rural areas than in urban areas (Ogwumike, 2001), proportionately, there are more beneficiaries of the National Directorate of Employment's programmes in urban areas than can be found in rural areas. This depicted the extent of deprivation suffered by the poor in rural areas (Awoseyila, 1999) and supported the fact that poverty alleviation programmes, according to Brock and Gaventa (2002) have been bedeviled by corruption, leakages and ethno-political patronage such that 'corruption as trickle down' has been accepted as a way of distributing resources of poverty alleviation programmes. This view of

Brock and Gaventa implied that there was higher patronage by urban dwellers due to easier and quicker access to information concerning such programmes. The result was that urban dwellers benefit more than rural dwellers and this has been partly responsible for rural-urban migration.

As demonstrated in table 8, the proportion of beneficiaries of NDE programmes who were engaged in unrelated occupations as at 2003 ranged from 20.83% in Ushongo local government area to 64.63% in Otukpo local government area. This implied that the programmes of the Directorate were not properly packaged to reflect the needs of beneficiaries. According to U.N.D.P. (2001) NDE programmes have been considered inappropriate and unsuitable as they were not synchronized with community needs. In addition, the analysis in chapter three revealed that the period of training in many NDE programmes was too short for beneficiaries to acquire the desired skills. Also, it was noted that many beneficiaries found themselves being trained in skills by the NDE not as a matter of interest but because they were unemployed. Though they did not train as a matter of interest, the training provided employment for them. However, if alternative opportunities were available, they would have preferred being employed elsewhere. In Benue and Plateau States, the

proportion was higher in urban local government areas than in rural local government areas. Of those engaged in unrelated occupations, 85.45 % of them were in urban local government areas while the remaining 14.55% came from rural local government areas. The variation can be attributed to the fact that labour mobility is higher in urban informal sector than in rural areas which are predominantly agricultural. For instance, it is easier for a carpenter in an urban area to become an 'okada rider' than in a rural area.

**Presentation of People's Bank Data.**

Table 9: Distribution of beneficiaries of Peoples Bank Loans by Local Government Areas.

State	LGAs	No of beneficiaries	% of beneficiaries	No of non beneficiaries	% of non beneficiaries
Benue	Otukpo	398	33.61	786	66.39
	Ushongo	109	15.5	594	84.49
Nasarawa	Akwanga	20	2.84	685	79.16
	Keana	62	8.08	705	91.92
Plateau	L/North	78	10.66	654	89.34
	Jos East	76	9.08	961	90.92

Source: Field Survey: 2003.

Table 10: Uses of loans obtained by Local Government Areas (%).

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STATE	L.G.As	ITEMS					
		Production of goods/Services	Wives	Food	Clothes	Automobiles	Others
BENUE	Otukpo	43.2	10.26	24.9	9.47	6.31	5.92
	Ushongo	58.58	4.6	16.7	9.21	8.79	2.09
NASARAWA	Akwanga	29.03	3.23	58.1	6.45	3.23	--
	Keana	28.39	1.94	62.6	3.23	2.58	1.29
PLATEAU	L/North	57.95	2.27	31.8	2.84	2.27	2.84
	Jos East	36.31	7.59	48.1	3.16	1.27	3.16

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Source: Field Survey: 2003

Table 9 presents the distribution of beneficiaries of the Peoples Bank loans by local government areas. The data in the table were obtained from returned copies of the questionnaire. The data in column 4 indicate that only between 2.84% and 33.61% of the sampled population in each of the six local government areas benefited from the people's bank loans. This meant that the coverage of the loans was very narrow. In Benue and Plateau states, the proportion of beneficiaries was higher in urban local government areas than in rural local government areas. This conforms with Akanji's (2001) assertion that though the programme was aimed at alleviating poverty, its credit system was essentially designed in such a way that it excluded the rural poor. The process entailed completion of complex and highly demanding forms that were not easily understood by uninformed and illiterate poor rural farmers. For Nasarawa State, the proportion was higher in its rural local government area than in the urban one. One unique feature in the state was the fact that in its urban local government area (Akwanga), only 2.84% of the sampled households benefited from the loans despite the presence of the Bank. This situation is surprising considering the fact that in addition to greater proportion of the beneficiaries found in urban local government areas than in rural ones in Benue and Plateau states, it was only in Nasarawa

state that the proportion of beneficiaries in rural local government area was greater than that of the urban local government area. The situation in Nasarawa state seems to lend credence to Nemedi's (2001) view about the irregularity in the administration of the programme. Obviously corruption and lack of accountability could not be ruled out of the process that existed in the Peoples Bank programme (Obadan, 2001)

The essence of the loans was to empower beneficiaries financially to enable them contribute to the nation's economic growth process. The data in table 10 has shown the purposes for which such loans were used. In Akwanga, Keana and Jos East local government areas, the highest proportions of the households that benefited from People's Bank loans represented by 58.1%, 62.6% and 48.1% for the respective local government areas used the loans to increase the quantity of food they consumed. This was followed by increases in production of goods and services as represented by 29.03%, 28.39%, and 36.31% for the respective local government areas. For Langtang North, Otukpo and Ushongo local government areas, 57.95%, 43.20% and 58.58% respectively of the households increased production of goods and services. This was followed by increased food consumption as represented by 31.8%, 24.9% and 16.7% respectively. It is



important to note that two of the three local government areas whose households paid more attention to food consumption are rural. This implied that poverty causes hunger and malnutrition (Okuneye, 2001) with a greater number of the nation's poor living in rural areas (Ali-Akpajiak and Pyke, 2003). Though it could be argued that the diversion of such loans into feeding might have physically empowered beneficiaries, the loans were meant to assist them in improving their productive base for sustainable economic empowerment (Akanji, 2001) and not to enhance consumption. In essence, the loans were disbursed so that beneficiaries could use such to acquire more and improved inputs so as to raise productivity and consequently increase output which could result in provision of employment for Nigeria's unutilized and underutilized manpower resources (N.P.C., 1994). Beneficiaries who produced more goods can be said to have used such loans productively. As demonstrated in table 10, it is only in two local government areas (Ushongo and Langtang North), that over 50% of the beneficiaries used their loans to produce goods and services. The table has shown that 43.20%, 29.03% and 57.95% of the beneficiaries in Otukpo, Akwanga and Langtang-North local government areas respectively used their loans to produce goods and services. Similarly, in Ushongo, Keana and Jos-East local government

areas, 58.58%, 28.39% and 36.31% of the beneficiaries respectively used their loans to produce goods and services. The analysis implied that the loans were more productively used in local government areas where beneficiaries devoted over 50% of the loans to producing more goods and services than in local government areas where less than 50% of the loans went into production of more goods and services. Thus, it can be concluded that many of the beneficiaries of the loans did not productively invest such loans. Rather, they used the loans for consumption purposes and marrying wives as revealed by table 10. This implied that due to inadequate follow-up (pre and post credit), 56.80%, 41.42%, 70.97%, 71.61%, 42.05% and 63.69% of the loans in Otukpo, Ushongo, Akwanga, Keana, Langtang North and Jos East local government areas respectively were misapplied by the recipients.

**Presentation of Primary Health Centre Data**

Table 11: Household Patronage of Health Institutions in Benue, Nasarawa and Plateau states.

	BENUE		NASARAWA		PLATEAU	
	Otukpo	Ushongo	Akwanga	Keana	L/North	J/ East
<b>HEALTH INSTITUTIONS</b>						
Traditional Healers	41	60	9	49	56	95
Primary Health Care	599	254	116	670	382	820
Private Clinic	230	94	55	91	48	109
Cottage Hospital	18	35	17	32	10	29
Dispensary	16	62	34	7	105	68
General Hospital	168	42	228	3	106	9
Specialist Hospital	21	7	31	3	4	16
Teaching Hospital	8	6	-	2	3	5
Pharmacy	11	4	-	1	7	5
Chemist	26	30	11	1	53	3

Source: Field Survey: 2003

Table 12: Affordability of medical services in Benue, Nasarawa and Plateau states (%).

STATES	L. G. As	RESPONSES	
		Affordable	Not Affordable
BENUE	Otukpo	89.11	10.89
	Ushongo	73.08	26.92
NASARAWA	Akwanga	78.78	21.22
	Keana	94.7	5.3
PLATEAU	Langtang North	88.27	11.73
	Jos East	81.74	18.26

Source: Field Survey: 2003

It can be argued that inadequate qualitative and affordable medical services and/or facilities could lead to high morbidity and mortality rates. These in turn could adversely affect productivity and thus result in poverty. It is for this reason that the provision of health services and/or facilities has been regarded as a poverty alleviation strategy.

Primary health care centres have been established to make health facilities accessible to individuals and communities through their involvement and at affordable costs (N.P.C., 1994). Table 11 has shown that these primary health care centres are being highly patronized. As demonstrated in table 11, between 116 and 820 of the respondents in the six local government areas covered admitted that they patronized Primary Health Centres. In the case of General Hospitals, greater patronage of 168, 228 and 106 households were from urban local government areas of Otukpo, Akwanga, and Langtang North respectively as against lower patronage of 42, 3, and 9 households in rural local government areas of Ushongo, Keana and Jos East respectively. For private Clinics, between 48 and 230 households in the local government areas studied patronized them. Though no Specialist Hospital is located in any of the local government areas sampled, it was still being patronised by between 3 and 31

households. Similarly, absence of a teaching hospital has not prevented them from patronizing it as table 11 revealed that it was patronised by between 2 and 8 households. An oral interview with those who patronised these two health institutions (Specialist and Teaching hospitals) despite their absence revealed that such patronage was due to their quest for qualitative medical services, the distance notwithstanding. This conforms with the view of Achime and Afemikhe (1997), that the costs of medication and time travel especially for specialist treatment have become prohibitive for many families particularly the poor or else the patronage of such health institutions would have been higher. The implication is that those afflicted by sicknesses which require specialists' treatment but were unable to have access to such were either bedridden or might have died.

Data from table 11 has revealed that in all the local government areas except Akwanga, households' patronage of primary health care centres ranked first among other health institutions. In Akwanga local government area, general hospital ranked first followed by the primary health care centres. Apart from Langtang North and Akwanga local government areas, the second in the ranking of patronized health institutions in the local government areas was private clinics. The fact that general hospitals are only located in urban areas is glaring as

their patronage ranked first in Akwanga local government area, second in Langtang North local government area and third in Otukpo local government area. Conversely, the patronage of general hospitals has been low in rural areas as they ranked fifth in Ushongo local government area, sixth in Keana local government area and seventh in Jos East local government area. The analysis above has confirmed the view of Ali-Akpajiak and Pyke (2003) that dominant health care facilities patronized by households in Nigeria are clinics with general hospitals being predominantly patronized by urban dwellers. It is important to note that primary health care centres were highly patronized in all the local government areas being considered. This depicted accessibility as well as acceptability of the programme. Mere provision of health institutions is not enough to guarantee good health. What is important is the affordability of health services and/or facilities. Table 12 addressed affordability of health services while table 13 addressed respondents' views on dissatisfaction with medical services.

From table 12, between 73.08% and 94.7% of the respondents in local government areas considered said that medical services have been affordable. This implied that the medical services in the health institutions patronized by the households were highly affordable.

Affordability here meant that households were able to pay for medical services rendered.



Table 13: Reasons for Dissatisfaction with Medical Services provided by Local Government Areas covered.

STATE	L. G. As	REASONS GIVEN			
		Inadequate Treatment	Inadequate facilities	Long Period Waiting	Poor of Workers' Attitude
BENUE	Otukpo	33	108	38	17
	Ushongo	59	145	27	34
NASARAWA	Akwanga	79	144	27	16
	Keana	46	71	6	18
PLATEAU	L/North	64	351	32	57
	Jos East	127	664	24	98

Source: Field Survey: 2003

Table 14: Distribution of deaths (in %) by Local Government Areas.

DEATHS RECORDED (YEARS)	BENUÉ		NASARAWA		PLATEAU	
	Otukpo	Ushongo	Akwanga	Keana	L/North	J/East
Under 5	8.93	15.76	21.28	50.76	32.91	30.66
5-14	8.16	8.61	17.02	13.04	21.15	20.22
15-25	25.14	22.27	20.00	5.78	13.04	9.57
26-35	11.52	17.65	16.17	7.78	8.97	10.64
36-45	11.9	14.29	9.79	4.96	7.69	8.79
46-55	13.43	7.56	11.49	2.29	5.34	7.13
56-64	11.42	10.5	2.98	7.99	3.63	8.01
Above 64	9.5	3.36	1.27	7.4	7.27	4.98

Source: Field Survey: 2003

Despite the fact that medical services rendered were highly affordable, table 13 revealed households' quality rating of such medical services. This table has indicated reasons given by the respondents in all the local government areas as to why they were not satisfied with the medical services rendered in the health institutions especially primary health care centres patronized by them. In the six local government areas under consideration, between 71 and 664 households said they were not satisfied with the medical services because of inadequate facilities. Also, between 33 and 127 households in the local government areas responded that inadequate treatment was responsible for their being unsatisfied with the medical services rendered in the health institutions patronised by them. From the analysis, in all the six local government areas, inadequate facilities ranked first for the households as a reason for their dissatisfaction. Poor medical treatment ranked second in all the local government areas except in Otukpo where it ranked third with long waiting periods ranking second. Out of the four reasons given for dissatisfaction, long periods of waiting ranked third in Akwanga local government area while for Ushongo, Keana, Langtang North and Jos East, it was poor workers' attitudes that ranked third. Similarly, while poor workers attitudes ranked fourth in Otukpo and Akwanga local government

areas, respondents in Ushongo, Keana, Langtang North and Jos East local government areas ranked long periods of waiting fourth.

The feeling of dissatisfaction with the performance of primary health care centres whose patronage has been reported high in table 11 is not only a contradiction but agreed with Ali-Akpajiak and Pyke's (2003) assertion that the deterioration of Nigeria's health care system over the last two decades has led to the provision of poor and unsatisfactory health services to the general population. While the high patronage signaled an increasing demand for public health institutions, respondents' dissatisfaction meant that, all things being equal they would have preferred alternative health institutions especially private health centres which according to Achime and Afemikhe (1997) are better even though their services are more expensive. Nweze and Ojowu's (2002) opinion that due to many years of neglect and decline in government funding for health coupled with financial mismanagement, there has been unprecedented deterioration in public health services further lends credence to the respondents' dissatisfaction.

The data in table 14 reveals the proportion of deaths recorded in the sampled households. Out of the 8 age groups, the adult population which is considered to be the working age or economically active are

those between the ages of 15 and 64 years. This implies that those less than 15 years of age and those above 64 years are excluded from the labour force. It also suggests that the economic growth of a society is largely determined by those between the ages of 15 and 64 years. As shown in table 14, the third, fourth, fifth, sixth and seventh groups fall within those considered economically active. Summation of the proportion of deaths recorded among the five economically active groups revealed that 73.41%, 72.27%, 60.43%, 28.80%, 38.67% and 44.14% of the deaths recorded in Otukpo, Ushongo, Akwanga, Keana, Langtang North and Jos East local government areas respectively involved those economically active. These figures are not only alarming but have contributed to the rising poverty level in these local government areas as death has devastatingly 'robbed' them of their productive labour force. To worsen the matter, 17.09%, 24.37%, 38.30%, 63.80%, 54.06% and 50.88% of the deaths recorded in the respective local government areas were for those between 14 years and below. The implication of this is that without modern technology, the labour force that would be required to raise output of goods and services will be grossly inadequate in no distant future especially in Keana, Langtang North and Jos East local government areas whose figures are not only highest but above 50 percent.

Human beings appreciate facilities provided for them more if they are involved in taking decisions on issues that affect the operation and maintenance of such facilities. It was for this reason that the primary health care scheme recognized the need to effectively involve communities in decision making on health care delivery (N.P.C. 1994).

Table 15: Participation in decision making process.

STATE	L. G. As	Number of Times Respondents were involved(in%)	
		No. of times involved in decision	No. of times not involved in decision
BENUE	Otukpo	46.01	53.99
	Ushongo	65.14	34.86
NASARAWA	Akwanga	18.04	81.96
	Keana	72.66	27.34
PLATEAU	L/ North	40.16	59.84
	Jos East	36.98	63.02

Source: Field Survey: 2003

As indicated in table 15, 65.14%, 72.66% and 36.98% of the respondents in Ushongo, Keana, and Jos East (rural) local government areas respectively were involved in the decision making process. In the case of urban local government areas, 46.01%, 18.04% and 40.16% of the respondents in Otukpo, Akwanga, and Langtang North respectively were involved in the decision making process. From the table, the communities in rural local government areas were relatively more involved in the decision making process than those in urban local government areas. This is because, while the range in rural government areas is from 36.98% to 72.66%, that of urban local government areas is from 18.04 % to 46.01%. An oral interview with some of the respondents revealed that those in rural local government areas participated more in the decision making process as they were needed to complement government efforts in the provision of services and general maintenance of the health institutions in their areas. The oral interview in urban local government areas revealed that the workers in the health institutions had little regard for the users and thus involved only those considered privileged in the decision making process. The foregoing implies that individuals in communities where health centres are sited are only involved in decision making if they are materially/financially endowed. This means that those intellectually



endowed with meaningful ideas that could improve the health institutions but are materially/financially poor were excluded from decision-making process.

#### **4.4 QUANTITATIVE ANALYSIS**

In analyzing the data in this section, poverty incidence was computed and the result statistically examined with respect to generated information on the programmes of the National Directorate of Employment and People's Bank.

##### **4.4.1 Computation of Incidence of Poverty**

The poverty index used in finding out the incidence of poverty is the Foster, Geer and Thorbecke (FGT) index. Symbolically, it can be written as:

$$P_{\alpha} = \frac{1}{N} \sum_{i=1}^q \left( \frac{Z - Y_a}{Z} \right)^{\alpha}$$

Where:

$P_{\alpha}$  = a class of additively decomposable measures

$N$  = total number of households in the reference population

$q$  = the number of households below the poverty line

$Z$  = poverty line

$y_a$  = the average income of poor households

$\alpha$  = FGT index and takes the values of 0, 1 or 2.

Here,  $P_0$ ,  $P_1$ , and  $P_2$  are used for head count (incidence), depth and severity respectively. The connotation of the FGT index is determined by the value assigned to alpha ( $\alpha$ ). As noted in methodology, alpha ( $\alpha$ ) may assume either zero (0), one (1) or two (2) giving rise to three (3) different variants of the FGT index and consequently measuring Head count (Incidence), Depth and Severity respectively.

In this research, we are concerned with the incidence of poverty. Thus, our  $P_\alpha$  is equal to  $P_0$ ; our  $N$ ,  $q$  and  $y_a$  vary from one local government area to another. Our  $Z$  (poverty line) is one dollar per head per day. We assume that the naira equivalent is 120.00. As noted in methodology, ₦120 is the midpoint between two exchange rates (₦110 and ₦130) that prevailed at the time of data collection.

### **National Directorate of Employment**

The FGT index referred to earlier was used to trace the incidence of poverty among the beneficiaries of N.DE. In doing so, the values of  $N$ ,  $q$ ,  $y_a$  derived from appendix B and contained in table 16 were employed. Here,  $P_\alpha = P_0$  and  $Z = ₦120$  per head per day

Table 16: Values of variables used to obtain poverty incidence among NDE beneficiaries in the study area.

STATE	LGAs	N	Q	Y <sub>a</sub>
BENUE	Otukpo	117	73	19444.44
	Ushongo	62	41	20806.45
NASARAWA	Akwanga	37	23	20945.95
	Keana	38	16	13223.68
PLATEAU	Langtang North	113	62	19668.14
	Jos East	29	13	10862.07

Source: Field Survey: 2003

Table 17: Incidence of poverty (in%) among NDE beneficiaries by local government areas.

STATE	LOCAL GOVERNMENT AREA	POOR	NON-POOR
BENUE	Otukpo	62.39	37.61
	Ushongo	66.13	33.87
NASARAWA	Akwanga	62.16	37.84
	Keana	42.11	57.99
PLATEAU	Langtang North	54.87	45.13
	Jos East	44.83	55.17

Source: Computed from table 16

To obtain the poverty incidence for each local government in percentage, the values of the variables in table 16 were substituted into the FGT index and multiplied by 100. This gave rise to the poverty incidence for respective local government areas as presented in table 17. As indicated in table 17, between 42.1% and 66.13% of NDE beneficiaries in the local government areas covered were categorized as poor in 2003. Though the proportion is higher in urban local government areas than rural ones in Nasarawa and Plateau States, it is higher in Benue's rural local government area than in its urban local government area. In every local government area, more than 40% of the beneficiaries were living below the poverty line. It can thus be concluded that the poverty incidence among beneficiaries of NDE as at 2003 when compared to 1985 figures in table 5 indicates that it became higher in Benue state, but lower in both Nasarawa and Plateau States. This is because while the poverty incidence for Benue state in 1985 was 42.9%, it rose to 62.39% and 66.13% for Otukpo and Ushongo local government areas respectively as at 2003. In the case of Nasarawa state, it declined from 64.2% in 1985 to 62.16% and 42.11% for Akwanga and Keana local government areas respectively in 2003. The incidence in Plateau also declined from 64.2% in 1985 to

54.87% and 44.83% for Langtang North and Jos East local government areas respectively.

The apriori expectation of our first hypothesis which is stated in chapter one under methodology has it that if more than 50% of the sample population fall below the poverty line, the null hypothesis is to be accepted while the alternative hypothesis is rejected. If on the other hand less than 50% of the sample population live below the poverty line, the null hypothesis shall be rejected in favour of the alternative hypothesis. Going by the results in table 17, we accept the null hypothesis which states that poverty alleviation programmes have not significantly reduced poverty level among NDE beneficiaries in the three states with respect to Otukpo, Ushongo, Akwanga and Langtang North local government areas. For Keana and Jos East local government areas, we reject the null hypothesis and accept the alternative hypothesis which states that poverty alleviation programmes have significantly reduced poverty in the three states.

### **People's Bank**

Incidence of poverty among People's Bank beneficiaries has been calculated using the FGT index. The values of the variables derived from appendix c and contained in the formula namely  $N$ ,  $q$ , and  $y_a$  are indicated in table 18.

Alpha ( $\alpha$ ) is represented by zero (0), while the poverty line (Z) is ₦120 per head per day.

Table 18: Values of variables used to obtain incidence of poverty among People's Bank beneficiaries.

STATE	LGAs	N	q	Y <sub>a</sub>
BENUE	Otukpo	169	106	18632.08
	Ushongo	86	57	20482.45
NASARAWA	Akwanga	55	34	21338.24
	Keana	52	22	14545.45
PLATEAU	Langtang North	166	90	18750
	Jos East	58	55	8660

Source: Field Survey: 2003



Table 19: Incidence of poverty among beneficiaries of People's Bank loans in Local Government Areas covered.

STATE	LGAs	Poor	Non-Poor
BENUE	Otukpo	59.3	40.7
	Ushongo	66.97	33.03
NASARAWA	Akwanga	70	30
	Keana	79.03	20.97
PLATEAU	Langtang North	73.08	26.92
	Jos East	59.38	40.62

Source: computed from table 18

To obtain the poverty incidence for each local government area in percentage, the values of the variables in table 18 had to be substituted into the FGT index and multiplied by 100. The poverty incidence obtained from such computation for the respective local government areas have been presented in table 19. From table 19, between 59.3% and 79.03% of the households sampled in the local government areas that benefited from people bank's loans were categorized as poor by 2003. In Benue and Nasarawa States, the proportion was higher in rural local government areas than in urban local government areas. The situation was different in Plateau State as the proportion became higher in the urban local government area than in the rural local government area.

Comparing tables 5 and 19, one can conclude that the poverty incidence among beneficiaries of Peoples Bank rose in the three states except in Jos East local government area in 2003. This is because while in 1985 the incidence was 42.9% in Benue and 64.2% in Nasarawa /Plateau, it rose to 59.30% and 66.97% in Otukpo and Ushongo local government areas of Benue State respectively; 70% and 79.03% in Akwanga and Keana local government areas of Nasarawa State respectively; 73.08% in Langtang North local

government area of Plateau State but declined to 59.38% in Jos East local government area of Plateau State.

As indicated by the data in table 19, the poverty level among People's Bank beneficiaries was between 59.3% and 79.03% as at 2003. This means that, more than 50% of the beneficiaries in the sample population lived below the poverty line as at 2003. We therefore accept the null hypothesis which states that poverty alleviation programmes have not significantly reduced poverty level in all the local government areas sampled in the three states and reject the alternative hypothesis.

#### **4.4.2 Examination of Statistical Significance**

In order to conclude that the programmes were effective or not, the two sets of data (1985 and 2003) were subjected to a statistical test. In doing so, the 'Z' test has been chosen. This test is applicable only when the population variance is known or when it is unknown but the sample size is sufficiently large ( $N > 30$ ) (Koutsoyiannis, 1977). If the sample size is small ( $N < 30$ ), the student's 't' test is applied (Koutsoyiannis, 1977). It is important to note that before applying either of the tests, the standard deviation has to be determined. The

formulae for both the 'Z' test and standard deviation have been presented below.

$$S^2 = \frac{\sum(X_i - \bar{X}_i)^2}{N}$$

or

$$S = \sqrt{\frac{\sum(X_i - \bar{X}_i)^2}{N}}$$

Where:

S = Standard deviation

$X_i$  = Individual household's poverty index

$\bar{X}_i$  = Mean poverty index

N = Number of households sampled

To test the level of significance, the Z test distribution at 5% level of significance has been adopted. Symbolically, the Z distribution whose table is in appendix D can be stated as:

$$Z = \left| \frac{X - M}{S} \right|$$

Where:

X = Observed incidence of poverty from the sample

M = Incidence of poverty prior to the programme i.e. the base line poverty level. This is the theoretical poverty incidence which is found in table 5.

S = Value of standard deviation

For the purpose of this section, our hypotheses are stated as follows:

**Hypothesis 2.**

$H_{02}$ :  $M_1 = X_1$ , (meaning the poverty situation has not changed)

$H_{i2}$ :  $M_1 > X_1$ , (meaning the poverty situation has improved)

The null hypothesis ( $H_{02}$ ) states that N.D.E. programmes have not been very effective in alleviating poverty, i.e. the poverty situation has not changed. The alternative hypothesis ( $H_{i2}$ ) states that N.D.E. programmes have been very effective in alleviating poverty, which means that the incidence of poverty has dropped significantly.

**Hypothesis 3.**

$H_{03}$ :  $M_2 = X_2$ , (meaning the poverty situation has not changed)

$H_{i3}$ :  $M_2 > X_2$ , (meaning the poverty situation has improved)

Here, the null hypothesis ( $H_{03}$ ) states that People's Bank loans have not been very effective in alleviating poverty, while its alternative hypothesis ( $H_{i3}$ ) states that People's Bank loans have been very effective in alleviating poverty.

The decision rule is that, the null hypothesis ( $H_0$ ) will be accepted if calculated 'Z' ( $Z^*$ ) value is less than the tabulated 'Z' value and vice versa.

## Test Results for National Directorate of Employment Intervention

Table 20: National Directorate of Employment's Result.

STATES	L.G.As	S	Z	Z*	t*	t
BENUE	Otukpo	30.02	1.96	.649	-	-
	Ushongo	31.85	1.96	.729	-	-
NASARAWA	Akwanga	28.69	1.64	.071	-	-
	Keana	26.09	1.64	.847	-	-
PLATEAU	Langtang North	31.81	1.64	.293	-	-
	Jos East	25.92	-	-	-0.75	1.75

Source: Computed from primary and secondary data.

Note: Computed Z values in column 5 are absolute.

### Key

S = Standard deviation value

Z = Tabulated Z distribution value

Z\* = Calculated Z distribution value (absolute)

t = Tabulated t distribution value

t\* = Calculated t distribution value

Table 20 above presents both the theoretical and sample values of the Z and student's 't' statistics. These values are interpreted in relation to hypothesis 2 as follows.

Generally, poverty alleviation programmes are expected to reduce poverty level within the target population. Therefore our alternate hypothesis ( $H_{i2}: M_1 > X_1$ ) is stated to show the direction of the anticipated change. Given the inequality sign, we are interested in the right hand tail of the normal distribution. The computed z value in the case of Otukpo (0.64) as indicated in table 20 is smaller than the corresponding theoretical value (1.96) at the 5% level of significance. This means that we cannot reject the null hypothesis that the poverty situation has not changed despite the intervention through NDE. The same goes for Ushongo still in Benue State. The computed Z is equally smaller than the table Z, signifying that the intervention through the NDE had not impacted significantly on the poverty situation in the locality.

The tabulated Z test value with respect to Akwanga local government area is 1.64 which is less than the calculated z test value (0.071). Since the calculated Z test value falls within the acceptance region, we accept the null hypothesis, which states that the programme has not significantly alleviated poverty. This means that



the programme has not been very effective in the local government area despite the observed variation between the baseline poverty incidence for the local government, 64.2% and the sample data for the local government of 62.16%. Statistically speaking, what this result means is that the observed difference could be attributable to chance or sampling error, and therefore not a valid bases for concluding that the intervention has actually changed the poverty scenario.

With respect to Keana local government area, the tabulated Z test value (1.64) is greater than the calculated Z test value (0.847). Therefore the null hypothesis cannot be rejected as well. That is, the programme has not been very effective in Keana local government area.

Similarly, in Langtang North local government area, the tabulated Z test value (1.64) is greater than the calculated Z test value (0.293) which falls within the acceptance region. Hence, we accept the null hypothesis which means that the programme has not been very effective in Langtang North local government area either.

For Jos East local government area, 'N' is 29 and less than 30. The 'Z' test was therefore replaced with 't' test whose table is in appendix E . The calculated t test value (0.75) for this local

government area is less than the tabulated t test value (1.701). The null hypothesis has therefore been accepted. This implies that the programme has not been very effective in the local government area.

### **Discussion of Results for National Directorate of Employment.**

The results obtained for the test of statistical significance with respect to Benue State (Otukpo and Ushongo local government areas) have shown that the programmes of the national directorate of employment in the state did not produce the desired results. This conforms with the analysis in table 8 where over 64% of the beneficiaries in Otukpo local government area were found to be engaged in occupations that are unrelated to the programmes of the directorate. In the case of Ushongo local government area, about 20% of the beneficiaries were found to be engaged in unrelated occupations. The fact that many beneficiaries of the Directorate's programmes have abandoned acquired skills for other occupations justifies our statement in chapter three that the periods of training for most of the skills were too short to guarantee acquisition of meaningful and sustainable skills. It also implies that the skills acquired did not meet the aspirations of beneficiaries and were thus, not effectively utilized

For Nasarawa state, the statistical test has revealed that the programmes of the national directorate of employment in the two local government areas (Akwanga and Keana) had not been very effective towards alleviation of poverty in the benefiting households. Despite the fact that the incidence of poverty among benefiting households showed decline, the statistical tests indicate that the programmes had not been able to attain the desired objective of providing the needed skills to beneficiaries. This explains why 33.33% and 38.89% of the directorate's beneficiaries in Akwanga and Keana local government areas respectively were found to be in unrelated occupations as indicated in table 8.

The situation in Plateau is similar to that of Nasarawa State as the statistical test for Plateau has shown that the directorate has not been very effective in alleviating the poverty of its beneficiaries.

The findings with respect to National Directorate of Employment may be summarized as follows.

- a. The programmes of the directorate have not been very effective towards poverty alleviation in the study area. The situation seemed more precarious in Benue State going by the observed

trend. The sample data for the local government areas sampled in Benue show that the incidence of poverty is on the increase.

- b. The programmes of the directorate did not take into consideration the aspirations of their beneficiaries. This explains why many of the beneficiaries had to abandon the skills they were said to have acquired for other jobs.
- c. There were more beneficiaries of the directorate's programmes in urban local government areas than in rural local government areas. Conversely, the incidence of poverty was higher in rural local government areas than in urban local government areas.
- d. The coverage of the directorate's programmes has been narrow. This is because not up to 25% of the sampled population in each of the local government areas benefited from the programmes.
- e. Utilisation of skills acquired by NDE beneficiaries has been very low as between 20.83% and 64.63% of them are today engaged in unrelated occupations due to labour mobility especially in urban areas.

### Test Results for People's Bank Intervention

Table 21: People's Bank Result

STATES	L.G.As	S	Z	Z*	t*	t
BENUE	Otukpo	160.197	1.96	.1024	-	-
	Ushongo	450.603	1.96	0.053	-	-
NASARAWA	Akwanga	156.013	-	-	0.037	2.093
	Keana	252.605	1.96	0.059	-	-
PLATEAU	Langtang North	131.203	1.96	0.068	-	-
	Jos East	322.117	1.64	0.015	-	-

Source: Computed from primary and secondary data.

#### Key

S = Standard deviation value

Z = Tabulated Z distribution value

Z\* = Calculated (absolute) Z distribution value

t = Tabulated t distribution value

t\* = Calculated t distribution value

The result of the statistical test in the case of Otukpo local government area shows that calculated Z test value (0.1024) is less than our tabulated Z test value (1.96). We thus accept the null hypothesis, which means that the programme did not impact significantly on the poverty situation in the local government area.

For Ushongo local government area, the test result shows that, calculated Z test value (0.053) is less than our tabulated Z test value (1.96). This means that we cannot reject the null hypothesis.

In the case of Akwanga local government area, 'N' is 20 and less than 30. The 'Z' test is therefore replaced with 't' test; whose table is in appendix E. Here, the result obtained from the test of our hypothesis revealed that, the calculated t test value is 0.037 and less than the tabulated t test value (2.093). Since the calculated t test value is less than the tabulated value, the null hypothesis has been accepted.

With regard to Keana local government area, the calculated Z test value (0.059) is less than tabulated Z test value (1.96). Therefore, the null hypothesis has been accepted which also supports our earlier preposition that the programme has not significantly changed the poverty outlook in the area.

The examination of statistical significance for Langtang North local government area has revealed that the calculated Z test value (0.068) is less than the tabulated Z test value (1.96). In this case, the null hypothesis has been accepted. The acceptance of the null hypothesis supports the proposition that the programme has not been very effective in reducing poverty in the affected locality.

In the case of Jos East local government area, the calculated Z test value (0.015) is greater than the tabulated Z test value (1.64), but falls within the acceptance region. Thus, we accept the null hypothesis which means that the programme has not significantly changed the poverty situation in the local government area.

### **Discussion of People's Bank Result**

The test of statistical significance with respect to People's Bank indicates that in all the local government areas, except Jos East, the loans were diverted to other uses and not productively invested. Though this analysis contradicts the data on table 10, the statistical test is more scientific and thus upheld. The worsening incidence of poverty, when tables 5 and 19 were compared confirms that such loans were diverted to meet other needs.

The findings revealed the following:

- a. That the coverage of People's Bank was very narrow. That is to say that very few households benefited from the Bank's loans.
- b. Most of the beneficiaries of the loans were urban dwellers. This could be attributed to the fact that the bank was only located in urban local government areas.
- c. The Bank's credit system was structured to meet the needs of the elite as it was characterised by completion of forms which were hardly understood by illiterate poor rural dwellers.
- d. That due to inadequacy or possibly absence of post-credit follow-up by the bank officials, substantial proportions of the loans were diverted into ventures that were not targeted. Some of the ventures like purchase of consumables and marrying more wives are not related to poverty alleviation. Thus, between 41.42% and 71.61% of the Bank's loans in the six local government areas sampled were misapplied.

### **Discussion of Primary Health Care Centres**

The analysis concerning health institutions patronized by the respondents revealed the following:

- a. Primary Health Care Centres were highly patronized in the three states as it ranked first in all the local government areas except



in Akwanga where General Hospital ranked first. This depicts accessibility and acceptability of the programme.

- b. Though respondents indicated the desire to patronize specialist hospitals, the cost of doing so became prohibitive for poor families.
- c. There is a general feeling of discontent among users of PHCs even though their services are easily affordable compared to those of the specialist hospitals. The reason is that users (respondents) view the services of the PHCs as generally poor and unable to cope adequately with their health needs. Findings of other studies such as those of Nweze and Ojowu (2002), Ali-Akpajiak and Pyke (2003) have also indicated this.
- d. The proportion of deaths recorded in the three states indicates that between 28.80% and 73.41% of those who died were economically active. This affects the labour force and is partly responsible for the rising trend in poverty incidence in the three states.
- e. More people were involved in the decision making process in rural areas than in urban areas. This is because public health

institutions in rural areas are often neglected and can only thrive with the aid of individuals in rural communities.

#### **4.5 DISCUSSION OF MAJOR FINDINGS**

The first major finding of this research is that the programmes appraised, National Directorate of Employment, the Peoples Bank and Primary Health Care centres have not been very effective towards poverty alleviation in the area of study. The poverty situation in the sampled local government areas has either not changed or has worsened over the years. Certainly, if these and other poverty alleviation programmes were effective, the poverty incidence would have been declining and not otherwise.

From the study's data, it has been established that out of the three programmes (National Directorate of Employment, Peoples Bank and Primary Health Care), the coverage of two (National Directorate of Employment and Peoples Bank) has been very narrow. That is, only very few people actually benefited from them. This partly explains their limited impact on poverty. In the case of primary health care centres, its coverage has been quite wide as is shown by high patronage by respondents in all the local government areas studied.

Yet, due to their poor services, there is a feeling of discontentment among users, some of whom have tended to prefer and patronize private clinics and General Hospitals despite their limited incomes.

Another finding is the fact that some of the beneficiaries of National Directorate of Employment programmes and People's Bank loans could not put into use productively what they learned. This explains why many of those trained in various NDE programmes have found themselves in unrelated occupations. On the part of people's bank loans, some of the funds were diverted by beneficiaries into uses for which they were not intended. While the diversion of such funds into food consumption could be attributed to the prevailing poverty level, the marrying of wives and buying of clothes and automobiles were ill-motivated.

From the forgoing, it is clear that these programmes have been characterized by inadequate monitoring or even absence of monitoring. This implies that the programmes had no in-built mechanism for sustenance. Beneficiaries therefore view whatever accrues to them financially as funds that would not be accounted for.

The study further revealed that respondents benefited from these poverty alleviation programmes in urban local government areas

more than in rural local government areas. This agrees with the views of Onibokun and Kumuyi (1996) that though People's Bank was not designed for the urban poor only, most of its resources were biased towards them while the rural poor hardly had access to the Bank's credit facilities. This uneven distribution is probably responsible for the higher incidence of poverty in rural local government areas among beneficiaries of both national directorate of employment and people's bank loans.

The study shows that beneficiaries of poverty alleviation programmes did not partake in deciding which programmes they needed. They were thus at the receiving end. This could be largely responsible for the ineffectiveness of such programmes. If such programmes are to be effective, there is the need to integrate beneficiaries into decisions pertaining the planning and implementation processes.

As stated in the methodology of this study, one of the instruments (Foster, Geer and Thorbecke poverty index) of our analysis possesses an additive property which implies that once any group or state is poorer, aggregate poverty level increases. Our findings, based on the three states studied have shown that poverty alleviation programmes have not been able to attain the desired

objective of poverty reduction. Rather, poverty level has worsened even among beneficiaries of such programmes in the study area during the study period. Given that more than one state has been considered in this study, it can be safely generalized that all things being equal, poverty alleviation programmes in Nigeria have not been able to significantly bring about a reduction in the nation's poverty level.

## **CHAPTER FIVE**

### **DISCUSSION AND CONCLUSION**

In this chapter, the findings and conclusions in earlier chapters are summarized after which policy recommendations are provided. The recommendations are aimed at re-invigorating poverty alleviation programmes in Nigeria with particular reference to Benue, Nasarawa and Plateau states for the purpose of reversing the persistent rise in poverty incidence in these three states and the country at large.

#### **5.1 SUMMARY**

The main objective of this research is to investigate and analyse with the aid of primary and secondary data the extent to which poverty alleviation programmes (specifically, National Directorate of Employment, Peoples Bank and Primary Health Care) have affected the level of poverty in Benue, Nasarawa and Plateau States. Findings obtained from the analysis have been discussed in chapters three (3) and four (4).

The relationship between poverty alleviation programmes and poverty reduction has been very weak. This can be attributed to the shortsightedness and half- hearted approach by those entrusted with

the responsibility of tackling this hydra-headed problem (Silas-Manner, 2003:3). This non-challant attitude explains why despite the fact that not less than ten (10) poverty alleviation programmes were established in Nigeria between 1986 and 2003, the nation's poverty level has continued to rise as indicated in table 1.

It is important to note that these poverty alleviation programmes have gulped billions of naira with little or nothing to show for it. In the analysis, income has been considered as the major determinant of poverty. This implies that the large sums of money spent on poverty alleviation programmes should have been translated into enhanced income and a consequent reduction in poverty incidence. Unfortunately, the reverse has been the case as over 50% of the nation's population are currently poor and most disturbingly, apart from National Directorate of Employment's beneficiaries in Keana and Jos East local government areas, more than 50% of the beneficiaries of National Directorate of Employment and People's Bank in all the local government areas sampled lived below the poverty line as at 2003. Even where observed improvements have occurred in the incidence of absolute poverty, such changes were found to be statistically insignificant. That is, compared to what the government had allocated in terms of financial and material resources, the

improvements are nowhere near what could be termed a commensurate outcome.

The statistical test enabled the research to capture explicitly the level of effectiveness of the programmes considered. In addition to the fact that the research has revealed that these programmes have not been very effective, it has also established that contrary to government claim, substantial proportion of beneficiaries of National Directorate of Employment and People's Bank have abandoned the projects they were identified with as beneficiaries.

The study is made up of five chapters. Chapter one described in detail the methodology of the study which is mainly descriptive, but supported by the Foster, Geer and Thorbecke (FGT) index as well as the 'z' test distribution at 5 percent level of significance. The descriptive method enabled us to incorporate opinions that could not be captured by the research instrument while the FGT index was used in tracing the poverty incidence among beneficiaries of National Directorate of Employment and People's Bank. The 'z' test distribution has been used to determine the statistical significance of the impact of interventions through the National Directorate of Employment



programmes and People's Bank loans in the six local government areas sampled.

Chapter two which reviewed related literature focused on: concepts and measurements of poverty, poverty theories, causes of poverty and the effects of poverty. Specifically, the chapter highlighted that:

- a. there exists absolute, relative and subjective dimensions of poverty which are measured differently;
- b. poverty is highly associated with the interdependency relationship which exists in the international economic system as developed countries gain an economic advantage over developing countries;
- c. increasing poverty incidence in developing countries can be attributed to inequality where a small population of their economies appropriate wealth to themselves at the expense of the economic well-being of the majority. Attempts to reduce income inequality through fiscal policy and other measures have not yielded positive results in many developing countries including Nigeria;

- d. adverse impact of certain economic policies, such as structural adjustment programmes and economic management policies have also accentuated poverty;
- e. civil wars, armed conflicts and social unrests have contributed in deepening poverty in many developing countries;
- f. inadequate or even absence of basic social services, like good education, good health care and infrastructural facilities such as electricity, good roads as well as potable water inhibit productivity and has tended to make poverty a vicious circle. In effect, productivity margin remains low due to subsistence production which is characterized by poor processing and poor storage facilities as well as low education;
- g. poverty leads to little or no confidence in constituted authorities which could render government policies ineffective as the poor feel un-catered to. In essence, public demoralization leads to poor tax compliance and sporadic violence, which have tended to weaken governments in developing countries;

- h. malnourishment is common among the poor with children as the most vulnerable group in addition to their being 'abused', performing poorly academically and dropping out of school despite the fact that their parents are often 'tied' to the rich land owners in client- patron relationships; and
- i. high rates of mortality and morbidity are closely associated with poverty due to inaccessibility to quality health facilities.

In chapter three, a descriptive examination of the performance of government poverty alleviation programmes has been presented. The poverty alleviation programmes considered in this chapter are: Directorate of Food, Roads and Rural Infrastructure; National Agricultural Land Development Authority; Strategic Grains Reserve; National Directorate of Employment; Better Life programme/Family Support programme; Family Economic Advancement Programme; Primary Health Care; Guinea Worm Eradication; People's Bank of Nigeria; Community Bank; National Economic Reconstruction Fund; Nomadic Education; Universal Basic Education; National Urban Mass Transit; National Policy on Housing; Petroleum Trust Fund; Poverty

Alleviation Programme and National Poverty Eradication Programme.

The analysis of these programmes revealed that:

- (i) though they were well intended, they failed to adequately target the poor people due to location, processes and/or mismanagement. Corruption has also been blamed widely in the literature as partly responsible for the derailment of several interventions;
- (ii) many of the programmes were inadequately followed-up, inadequately funded and poorly staffed;
- (iii) none of them had an in-built mechanism for sustenance; and
- (iv) in the case of National Directorate of Employment, People's Bank of Nigeria, Poverty Alleviation Programme and National Poverty Eradication Programme in which stipends were paid, intended beneficiaries were denied access to such funds while privileged members of the society and their families became major beneficiaries.

Chapter four presented and analyzed secondary and primary data gathered for the study. A descriptive approach using percentages

and graphs supported by Foster, Geer and Thorbecke (FGT) poverty index as well as the 'Z' text distribution were used in analyzing the data. An examination of the secondary data revealed that despite the existence of poverty alleviation programmes, poverty incidence continued to rise between 1986 and 1998 though it began to decline as from 1999. This supports the null hypothesis that poverty alleviation programmes have not significantly alleviated poverty in Nigeria. Analysis using the FGT poverty index indicated that except for National Directorate of Employment's beneficiaries in Keana, and Jos East local government areas, the poverty incidence among beneficiaries of NDE and People's Bank as at 2003 ranged between 54.87% and 79.03% which, going by hypothesis 1, depicts failure of the two programmes to significantly alleviate poverty. The analysis also revealed narrow coverage by National Directorate of Employment and People's Bank with urban areas benefiting more than rural dwellers which corroborate our descriptive analysis in chapter three. In the six local government areas sampled, the programmes have not been very effective due largely to non-existence of feed back mechanism from beneficiaries as they were rarely (if at all) monitored and encouraged.

Generally, apart from high patronage of unsatisfactory services/facilities offered by Primary Health Care centres, the programmes studied have not been able to meet the aspirations of the poor. This is because they were not only insufficient but have not been properly managed.

## **5.2 CONCLUSIONS**

- a. Poverty incidence in Nigeria should have been declining due to implementation of a number of poverty alleviation programmes between 1986 and 2003. In essence, the number of those categorized as poor should have been falling. This study did not find evidence of this in the analysis of sample data. The nation's poverty incidence and indeed poverty incidence in the three states under study maintained a general upward trend between 1986 and 1998 while the number of poverty alleviation programmes during the same period continued to increase. Though our secondary data has indicated that the nation's poverty incidence began to decline as from 1999, the situation has remained worse than what was obtained prior to 1986.

- b. One observable shortcoming of poverty alleviation programmes in Nigeria is that their approach is top - bottom. Policy decisions on these programmes were taken without due consideration of would be beneficiaries' yearnings and aspirations. Beneficiaries were simply informed of the activities they were to be engaged in, which presupposes that by so doing, they would get out of poverty. This has explained why according to Ali-Akpajiak and Pyke (2003), states and local government areas have been reduced to mere implementing authorities. Many beneficiaries embraced such programmes as a last resort which explains why they abandoned acquired skills for other occupations. The bottom line is that the nation's poverty alleviation programmes have not been synchronized with the needs and aspirations of benefiting individuals and communities.
- c. The persistent rise in poverty incidence in Nigeria since 1980s has indicated that poverty alleviation programmes have not been very effective. This is due to the fact that in addition to inadequate financial, material and human resources, public officers vested with implementing these programmes have performed below expectation as corruption and outright

manipulations characterized most of the programmes. The immediate consequence has been the failure of such programmes to significantly affect the poverty situation in the country. d. In financing public projects in an economy like Nigeria where fiscal indiscipline is high, a lot of public funds are expended with little to show. The existence of numerous poverty alleviation programmes during the period of study implied huge government expenditure with highly insignificant outcomes. The expenditures on these programmes have instead furthered the widening of the gap between the rich and the poor in the society due to their misapplication.

- e. The nation's poverty alleviation programmes which according to Ali-Akpajiak and Pyke (2003), Obaseki and Onwioduoki (1997) were meant to impact positively on the poor did not achieve the desired goals due to faulty implementation and absence of a permanent and comprehensive policy framework as well as undue political interference. The result is that these programmes have been bedeviled by inadequate monitoring and evaluation. Even in situations where stipends and credit facilities were given to beneficiaries, it has been difficult to 'track' them as up-to-date records on such beneficiaries are



scarcely available. Thus, the failure to effectively implement poverty alleviation programmes has not only made it difficult for them to be sustainable but has been largely responsible for the perpetuation of poverty in Nigeria.

- f. Majority of Nigerians are left in a circle of poverty due to mismanagement, corruption and bad governance argued Kwanashie (1998). This view has re-enforced the position of the power theory discussed as part of the literature review which emphasized that those in power amass wealth to the detriment of the masses who are the majority. As a result of this, poverty in Nigeria has remained a stable characteristic of the nation's socio-political structure.
- g. Finally, poverty alleviation has remained a myth more or less due to faulty formulation, implementation and their non-participatory nature. It is tragic that the civil society which normally projects the interest and aspirations of the more vulnerable group-women and children – did not play an active role in the processes of the programmes.

### **5.3 RECOMMENDATIONS.**

- (i). Identifying the poor.** In the first instance, there is the need for policy makers and managers of poverty alleviation programmes to identify the poor at community levels so as to direct poverty programmes and projects towards them. It is not enough to simply find out the proportion of those poor in a particular society. Identifying them and their peculiarities is imperative. Such identification could be done by, after setting required benchmark, allowing community leaders to compile and submit to relevant organs the list of those categorized as poor alongside their needs. This is because an understanding of the diverse nature of the poor and their peculiarities will provide a focus for designing appropriate programmes that will not only help them to tackle their problems but also enable them take advantage of available opportunities in their environment. In addition, the identification will, according to Echebiri (1997) aid in overall economic development planning as geographical, cultural and social differences are considered thus enabling appropriate pathway through which each community can alter economic growth and development. It is

only when this is done that we can recognize the communities that need urgent attention.

- (ii) Participation by beneficiaries.** For any poverty alleviation programme to be successful and effective, poor people themselves should have a say in the formulation and implementation of the programme. This could be achieved through the involvement of civil society and/or Community Based Organisations. It creates a sense of ownership and makes accountability possible and effective. It is necessary to involve the poor in all stages of programme cycle (from conception to inception, implementation, monitoring and evaluation). It is through full participation of the poor from the stage of decision making that their views and opinions could be taken, harmonized and incorporated with the aim of ensuring that only programmes and projects which meet their yearnings and aspirations are put in place. This approach has the potential of mobilizing individuals in the various communities to provide adequate support to priority development programmes and projects that affect their welfare. As observed by Kanbur and Squire (2001), the poor know their situations and needs better and can best contribute to the design of policies and

projects intended to improve their living standard. Once they are involved, they become more committed to the implementation of the projects. Kanbur and Squire (2001) used Indonesia to illustrate that such participatory approach improved project performance between 1979 and 1990. During this period, Indonesian government allowed the key criterion for water supply and sanitation to be controlled by benefiting communities. This did not only result to a drop of cash contribution from the government and an aid organization (CARE) from about 80% to about 30% of project costs, but also enabled successful operation and maintenance of the projects. In a nutshell, the current top-bottom approach should be reversed to bottom-top approach so that the poor will be able to initiate, design, execute and manage their priorities and consequently come out of poverty.

- (iii). Development of human capital.** Efforts should be intensified by the various tiers of government to design relevant policy measures aimed at human capital development through skill acquisition. Once this is done in consonance with individual and societal needs, people including the poor will take advantage of and control of their environment (Obaseki and Onwioduokit,

1997). The result is that individuals will improve themselves as their production and productivity could be raised especially if they are appropriately 'remunerated'. If these happen, it will be possible for the poor to 'grow' out of poverty. Specifically, this will require in the words of Ogwumike (1998) the strengthening of management capabilities of Community Based Organizations (CBOs) and Community Development Associations (CDAs) through workshops and seminars so that they can perform their expected roles in all poverty programmes effectively. According to Aigbokhan (1997), Achime and Afemikhe (1997), any policy based on capacity building through human capital development for full utilization of labour resource is capable of accelerating economic growth, alleviating poverty and protecting the Nigerian economy from further distortions

**(iv). Provision of functional amenities.** In order to raise productivity among the poor so as to alleviate poverty, the government in partnership with the private sector and host communities should endeavour to provide functional qualitative amenities which are considered as complementary factors of production. Such amenities include improved good health care system, motorable roads, potable water and electricity. This

will go a long way to increase productivity and consequently alleviate poverty. Here, priority should be given to implementation of a health care policy for the poor who most of the time, are unable to pay for 'specialized' medical services. This is because according to Central Bank of Nigeria and World Bank (1999), investment in preventive and primary health care is capable of raising life span as well as increasing the productivity of the workforce.

- (v). Reinigorating NACRDB.** To empower the poor economically, the Nigerian Agricultural Cooperative and Rural Development Bank (N.A.C.R.D.B.) must be re-invigorated if it has to meet the needs of the poor in the provision of accessible credit facilities to them. Also, an enabling environment should be created by way of tax exemptions so that wealthy Nigerians can provide credit facilities to the poor. Such exemptions should be restricted to the amount of money set aside for granting credit to the poor. Provision of credit facilities to the poor, will, all things being equal, promote their economic activities, engender employment of resources and raise their level of income if properly controlled and monitored.

**(vi). Instituting good governance.** There is the need to entrench good governance in every sphere of government activity which according to Odusola (1997) is a sine-qua-non for poverty alleviation in every sphere of the Nigerian society. Good governance entails basically, accountability, transparency, fiscal responsibility and respect for the rule of law, where public participation increases with emphasis on stakeholders' ownership of programmes and projects as well as equity by involving the poor and other vulnerable groups in planning and implementation of programmes and projects (Obadan, 1997). Here, emphasis should be on programme evaluation, whereby, the effectiveness of programmes and projects are evaluated monthly during the first one year of implementation and quarterly thereafter. Such evaluation should be done with the aid of performance audit and monitoring to find out whether or not programmes and projects are achieving stated objectives.

**(vii). Overhauling of poverty alleviation programmes.** Overhauling of existing poverty alleviation programmes in line with the principles of National Economic Empowerment and Development Strategy (N.E.E.D.S.), State Economic Empowerment and Development Strategies (S.E.E.D.S.) and

Local Government Economic Empowerment and Development Strategies (L.E.E.D.S.) has become necessary. This implies that the three tiers of government in Nigeria should cooperate and work together in the true spirit of cooperative federalism. Thus, in addition to 'full' local participation, partnership between civil society organizations and the governments should be strengthened so as to ensure effective popular participation in the development process. Poverty has pervaded the Nigerian economy so much that government cannot tackle it alone. In order to alleviate and possibly eradicate poverty in the country, the three tiers of government must work in partnership with the civil society if policy makers are to properly understand the concerns and priorities of the poor (Museveni 2003; Ali-Akpajiak and Pyke 2003). This participation of 'all' (including the poor) according to Ogwumike (2001) and Obadan (2001) will improve access of households to labour markets, create new employment for household members and thus augment households' income. As a consequence, the perception that such programmes serve as conduit pipes for national cake sharing will be discarded while public commitment to the



programmes will increase the scope thereby taking care of the present problem of narrow coverage.

**(viii). Pilot projects.** The failure of poverty alleviation programmes in the country has made it inevitable to embark on pilot projects before implementing any programme or project on a large scale. Such pilot projects should be community based and involve the development of agro-allied industries and other income generating activities. They should be best sited in poor communities and closely monitored to avoid the usual practice of enunciating 'blanket' policies that hardly benefit the poor (Central Bank of Nigeria, 1998; Central Bank of Nigeria and World Bank 1999).

**(ix). International community efforts.** As the world has become a 'global village', whatever affects one part of the 'village' affects the entire 'village'. There is thus the need for the international community to improve upon their efforts towards poverty alleviation in Nigeria. This is because according to Ogwumike (2001), the complementary efforts of United Nations Development Programme (U.N.D.P.), Department for International Development (D.F.I.D.), United Nations International Children's Emergency Fund (U.N.I.C.E.F.), United

Nations Industrial Development Organization (U.N.I.D.O.) and United States Agency for International Development (U.S.A.I.D.) aimed at employment generation, provision of credit facilities, skill acquisition, enhancing income earning opportunities of the vulnerable groups are germane to poverty alleviation and should therefore be properly focused on the poor. The international community according to UNIDO (2001) and DFID (1997) needs to coordinate efforts to support developing countries' initiatives towards poverty alleviation.

#### **5.4 MAJOR CONTRIBUTIONS TO KNOWLEDGE.**

1. This study is different from all other works as it has been statistical tested. Therefore, as a major contribution to knowledge, this study is more scientific and superior to similar studies.
2. The outcome of this study also differs from the outcomes of other studies in the sense that the mere existence or operation of an intervention programme does not automatically confirm poverty reduction, a paradigm that has dominated the thinking of many within official or government circle for a very long time.

3. The study of National Directorate of Employment allowed us to identify a special variable such as the duration for skill acquisition as a factor militating against the success of the programme. The fact is that the duration for skill acquisition is usually not sufficient to enable beneficiaries 'break through' the competitive walls of the Nigerian labour market.
4. The issue of narrow coverage with respect to NDE and People's Bank is a contribution to knowledge. This is because policy makers and managers of these intervention programmes have always justified the continuous existence of such programmes with deceptively impressive figures of beneficiaries. Our study of these two programmes has confirmed to the contrary lower percentages of beneficiaries.
5. The study has made theoretical and empirical contributions to the study of poverty in the study area in particular and Nigeria in general.

### **5.5 SUGGESTIONS ON AREAS OF FURTHER RESEARCH.**

From the results of this study, it is evident that related further researches are necessary.

In the first instance, there is the need for a thorough research on what respective communities need before deciding on programmes to be established. Such an investigation should be able to blend national developmental goals with the needs of individuals and communities.

Second, empirical investigations of macro economic indicators such as poverty level, literacy rate, maternal and infant mortality rates and unemployment rates are necessary. Investigations into these areas will provide the needed background for monitoring progress towards the Millennium Development Goals (MDGs) in the country.

Third, on the spot assessment of all poverty alleviation programmes by independent bodies such as Non-Governmental Organizations (NGOs), human rights activists and the civil society should be encouraged. This will go a long way to reduce the economic waste associated with programmes that do not meet the desires of the people, especially the poor.

## REFERENCES

### **i). Articles in Journals and Related Periodicals**

- Aber, J.I., Benett, N.G., Conley, D.C. and Li, J. (1997). The Effects of Poverty on Child Health and Development. *http://home.nguedu/dc266/pdf/res-annual-review-aber-et al.p/f.463-483*
- Aderibigbe, J.O. (2001). The Role of Financial Sector in Poverty Reduction. *Central Bank of Nigeria Economic and Financial Review*. 39 (4): 135-158
- Akanji, O.O. (2001). Micro Finance as a Strategy for Poverty Alleviation: *Central Bank of Nigeria Economic and Financial Review*. 39 (4): 111-134
- Ajakaiye, O. and Adeyeye S.A. (2001). Concepts, Measurement and Causes of Poverty: *CBN Economic and Financial Review*. 39 (4): 8 – 44.
- Atoloye, A.S.F. (1997). Strategy for Growth - Led Poverty Alleviation in Nigeria. *CBN Economic and Financial Review*. 35 (3): 298 - 314.
- Awoseyila, A.P. (1999). The Dimension of Poverty Nigeria (Spatial, Sectoral, Gender, al) *Central Bank of Nigeria Bullion*. 23(4): 31-39.
- Balogun, D. (1999). Analysing Poverty, Concepts and Methods. *CBN Bullion*. 23 (4): 11 – 16.
- Egwin, C. (1989). The Experience of Developing Countries under S.A. P: Monetary and Financial Aspects. *Central Bank of Nigeria; Bullion* 13 (3-4):15—22.
- Englama, A. and Bamidele, A (1997). Measurement Issues in Poverty. *C.B.N Economic and Financial Review*. 35 (3): 315-331.

- Filipov, N. (n.d.). Causes and Effects of Poverty.  
<http://www.iatp.nd/multimedia/filipovnadea/causeseffect%20of%20poverty.htm> 1 – 30
- Ghosh, J. (2000). The Real Cause of Poverty.  
<http://www.macroskan.com/cur/ju100/print140700ppverty.htm> 1-2
- Islam, S.A. (n.d.) Sociology of Poverty: Quest for a New Horizon.  
<http://www.bangladeshsociology.org/BEJS-2.1.4-Sardar.pdf>. 1 -1 0.
- Kwanashie, M. (2000). Governance and Political Stability for Economic Development: Lessons of Experience in *CBN Economic and Financial Review*. 38 (4): 9 – 23.
- Nemedia, C.E. (2001). Poverty Reduction and Structural Reform. *CBN Economic and Financia Review*. 39 (4): 72-87.
- Obadan, M. (2001). Poverty Reduction in Nigeria: The Way Forward. *CBN Economic and Financial Review*. 39 ( 4): 159- 188
- Ogwumike, F.O. (1991). A Basic Needs - Oriented Approach to the Measurement of Poverty in Nigeria. *The Nigerian Journal of Economic and Social Studies*. 33 (1,2 and 3):105 -120.
- Ogwumike, F.O. (2001). Appraisal of Poverty and Poverty Reduction Strategies in Nigeria. *CBN Economic and Financial Review*. 39 (4): 45 - 71
- Oil Statistics (n.d.). <http://groups.msn.com/AAEA/oil.msnw>. 1-5.

- Okuneye, P.A.(2001). Rising Cost of Food, Prices and Food Insecurity In Nigeria and its Implications for Poverty Reduction. *Central Bank of Nigeria Economic and Financial Review*. 39 (4): 88-110.
- Oladunni, E. B. I. (1999). The Dimensions of Poverty in Nigeria: Spatial, Sectoral, Gender, et al. *CBNBullion*. 23 (4):17 – 20.
- Oxfam Community Aid Abroad. (1992). The Causes of Poverty. <http://www.globalissues.org/TradeRelated/Poverty.asp?Print=True>: 1-2
- Soludo, C. (2005) Political Economy of Sustainable Democracy in Nigeria; being 2005 National Democracy Day Lecture [http://www.nigeriafirst.org/printer\\_4113.shtml](http://www.nigeriafirst.org/printer_4113.shtml): 1-15
- Students Media Services (2004). Sociology of Poverty in Britain. <http://www.coursework.info/i/13057.html>: 1-2
- Transition Events in the Dynamics of Poverty (n.d.): Literature Review. <http://aspc.hhs.gov//hsp/poverty-transition02/ch2.html>: 1-9
- Vaidyanathan, K.E. (2002) Statistics of Poverty Monitoring in Developing Countries. [http://www.statistics.gov.uk/iaoslondon2002/contributed\\_papers/cp\\_vaidyanathan.asp](http://www.statistics.gov.uk/iaoslondon2002/contributed_papers/cp_vaidyanathan.asp):1-6.

## **ii). Articles in Newspapers and Newsmagazines**

- Anakpej, O. Poverty Alleviation: A More Comprehensive Approach. *Business Times (Lagos)*, 25<sup>th</sup> June to 1<sup>st</sup> July, 2001. p. 6.
- Anyanwu, K. and Nsoro, R. The Burden of Poverty – How Liberalization Impoverished Africa. *The African Economy (Freetown)*, October – December, 2002 p. 11-16.
- EL- Rufai, N.A. Poverty Alleviation Through Economic Democratization. *Business Times (Lagos)*, 18<sup>th</sup> to 24<sup>th</sup> June, 2001. p.

20 – 21 and 23.

Museveni, Y. Economic Policy and Poverty Reduction.  
Annual Meetings: Commonwealth Daily (Abuja),  
7<sup>th</sup> December, 2003. p. 27

Silas-Manner, E. The Challenges of Poverty. Annual Meetings:  
Commonwealth Daily (Abuja), 7<sup>th</sup> December, 2003.  
p. 1-3

### **iii). Books, Pamphlets and Reports**

Ali-Akpajiak, S.C.A. and Pyke, T. (2003). Measuring Poverty in Nigeria.  
London: Oxfam, 71p.

Aliyu, A. (2001). National Poverty Eradication Programme: Conception,  
Implementation, Coordination and Monitoring.  
Abuja: NAPEP. 51p

Central Bank of Nigeria (1998). Measuring and Monitoring Poverty in  
Nigeria: Proceedings of the Seventh Annual  
Conference of the Zonal Research Units. Abuja: CBN  
Research Dept., 319p

Central Bank of Nigeria and World Bank (1999). Nigeria Development  
Prospects: Poverty Assessment and Alleviation study.  
Abuja: CBN Research Department, 123p.

Demery, L. and Addison, T. (1988). The Alleviation of Poverty Under  
Structural Adjustment; Washington: World Bank,  
47p.

Deng, L.A. (1994). Poverty Reduction – Lessons and Experiences from  
Sub-Saharan Africa. Washington: World Bank, 45p.

Department for International Development (1997) Eliminating World  
Poverty: A Challenge for the 21<sup>st</sup> Century. London:  
DFID, 70p.

Federal Coordinator of Programme (2001). National Poverty  
Eradication Programme Operational guidelines.



Abuja: NAPEP, 24p.

Federal Office of Statistics (1999). Poverty Profile for Nigeria: A statistical Analysis of 1996/1997 National Consumer Survey with reference to 80,85 and 92 surveys. Abuja: FOS, 96p.

Federal Office of Statistics. (2001). Core Welfare Indicators Questionnaire. Abuja: FOS, 60p.

Ferroni, M. and Kanbur, R. (1990). Social Dimension of Adjustment in Sub-Saharan Africa: Working Paper No. 9. Washington: World Bank 19p.

Haralambos, M. and Heald, R.M. (1980). Sociology: Themes and Perspectives. New York: Oxford University press, 593p

Herzog T. (1996). Research Methods in the Social Sciences. New York: Harper Collins College, 223p.

Hulme, D. and Mosley, P. (1996). Finance Against Poverty. Vol. 1. London: Routledge, 108p.

Jhingan, M. L. (2002). The Economics of Development and Planning. 35<sup>th</sup> Edition. New Delhi: Vrinda Publishers Ltd, 866p.

Kankwenda, M.; Gregoire, L.; Legros, H. and Ouedraogo, H. (2000). Poverty Reduction – Where Stands Africa? France: United Nations Development Programme, 435p.

Koutsoyiannis, A. (1977). Theory of Econometrics. 2<sup>nd</sup> Edition. London: Macmillan, 680p.

Meier, G. M. (1964). Leading Issues in Economic Development. New York: Oxford University Press, 867p.

Miller, H. P. (Ed) (1968). Poverty "American Style". California: Wadsworth, 107p.

Nachmias, C.F. and Nachmias D. (1996). Research Methods in Social Sciences. London: Arnold, 201p.

- National Planning Commission (1994). Government Policies and Programmes to Reach the Poor. Lagos: NPC, 94p.
- National Planning Commission (1995). Nigeria: Community Action Programme for Poverty Alleviation (CAPPA). Lagos: NPC, 39p.
- National Planning Commission (2004) National Economic Empowerment and Development Strategy (NEEDS): Meeting Everyone's Needs. Abuja: NPC, 20p
- National Poverty Eradication Programme: (2001). A Blue Print for the Schemes. Abuja: NAPEP. 45p.
- O' Donnel, M. (1997). Introduction to Sociology. United Kingdom: Thomas Nelson and sons Ltd, 713p.
- Okunribido, B., Amusan, D., Araoye, S. and Babalola, R.O. (comps.,1996). The Role of NGOs in Poverty Alleviation Proceedings of a Seminar Organized by "B" Zone of the Coalition of Nigeria NGOs on Health Population and Development (CONNOH PD); Lagos, WHON, 61p.
- Onibokun, A.G. and Kumuyi, A.J. (1996). Urban Poverty in Nigeria Towards Sustainable Strategies for its Alleviation; Lagos: 83p 'Friedrick Foundations and CASAD', Series No. 10.
- Plotnick, R.D. and Skidmore, F. (1978). Progress Against poverty. New York: Academic Press, 78p.
- Report on the Seventh Nigerian Economic Summit. Abuja: The Nigerian Economic Summit Group, 112p.
- Schiller, B. R . (1976). The Economics of Poverty and Discrimination. New Jersey: Prentice Hill,Inc, 88p.
- Thomas, S and Canagarajah, S. (2002). Poverty in a Wealthy Economy: The Case of Nigeria. I. M. F. Working

Papers. Washington:  
<http://ideas.repec.org/pimfwpa/02114.html>, 36p.

Todaro M.P. (1997). *Economic Development*. New York: Longman, 738p.

United Nations Development Programme (1997). *Human Resources Development Report*, 70p.

United Nations Development Programme (2001). *Human Development Report. Nigeria 2000/2001 Millennium Edition*. Lagos: UNDP. 88p.

United Nations Industrial Development Organization (2001), *Building Productive Capacity for Poverty Alleviation in Least Developed Countries: The Role of Industry*. Vienna: UNIDO, 27p.

Wedderburn, D. (ed., 1974). *Poverty, Inequality and Class Structure*. London: Cambridge University Press, 120p.

World Bank (1993). *Poverty Reduction Handbook*. Washington, D.C: IBRD/World Bank, 317p.

World Bank (1996). *Poverty Assessment Report on Nigeria Poverty in the Midst of Plenty; The Challenge of Growth with Inclusion*. Washington, D.C: Population and Human Resource Division, West Africa, 139p.

World Bank (2001). *World Development Report 2000/2001*.  
[http://www.worldbank.org/poverty/wdrpoverty/draft chapter](http://www.worldbank.org/poverty/wdrpoverty/draft%20chapter), 335p.

World Bank (2004). *World Development Report: Marking Services Work for the Poor*. Washington, D.C: IBRD/World Bank, 306p.

World Bank (n.d). Poverty and Welfare in Nigeria. Washington: American writing corporation, 22p.

World Bank and IMF (1999), Building Poverty Reduction Strategies in Developing Countries Washington, D.C: IBRD/World Bank, 21p.

World Fact Book (2004). Nigeria.  
[www.da.gov/da/puplications/factbook/gws/in.htm/10](http://www.da.gov/da/puplications/factbook/gws/in.htm/10). 90p

#### **iv). Chapters in Books or Monographs**

Achime, N.H. and Afemikhe, O.A.(1997).Health and Education Issues in Poverty Alleviation: Macroeconomic Policies. *In: Nigeria Economic Society (comp.), Poverty Alleviation in Nigeria*. Ibadan: N.E.S. Secretariat, pp. 255 -267

Addison, (1996). Nigeria: Poverty Assessment. *In: CBN/World Bank (comps.), Proceedings of the Workshop on Nigeria: Prospects for Development*. Abuja: CBN, pp. 20-40

Adewoye, G.I. and Nwosu, A.U. (1998). Poverty Measuring and Monitoring. *In: CBN (comp.), Proceedings of the Seventh Annual Conference of the Zonal Research Unit*. Abuja: CBN Research Department, pp. 324-244.

Agbu, O. (1997). Poverty Alleviation in Nigeria. An Examination of the International and Technical Dimensions. *In: NES (comp.), Poverty Alleviation in Nigeria*. Ibadan: NES Secretariat, pp. 347-360.

Aigbokhan,B.E. (1997). Poverty Alleviation in Nigeria. Some Macroeconomic Issues. *In: NES (comp.), Poverty Alleviation in Nigeria*. Ibadan: N.E.S. Secretariat, pp. 181 - 209

- Ajakaiye, O. (1998). Conceptualization of Poverty in Nigeria. *In: CBN (comp.), Proceedings of the Seventh Annual Conference of the Zonal Research Unit. Abuja: CBN Research Department, pp. 11-20.*
- Aku, P.S., Ibrahim, M.J. and Bulus, Y.D. (1997). Perspectives on Poverty and Poverty Alleviation Strategies of Nigeria. *In: NES (comp.), Poverty Alleviation in Nigeria. Ibadan: N.E.S. Secretariat, pp. 41-54.*
- Aliyu, A (1998). Major Development and Poverty Alleviation Schemes of General Abacha. *In: A. Aliyu (ed.), Nigerian Economic Break through: The Abacha Strategies, Abuja. FEAP pp. 170-183.*
- Anyanwu, J.C. (1997). Poverty in Nigeria; Concepts and Measurement and Determinants. *In: NES (comp.), Poverty Alleviation in Nigeria. Ibadan: N.E.S. Secretariat, pp. 93 – 120*
- Archibong, P.E. (1997). Nigeria: Towards a Realistic and Integrated Anti Poverty Strategy. *In: NES (comp.), Poverty Alleviation in Nigeria. Ibadan: N.E.S. Secretariat, pp. 457-474.*
- Dike N. (1997). Understanding the Multi-dimensional Nature of Poverty. *In: NES (comp.), Poverty Alleviation in Nigeria. Ibadan: N.E.S. Secretariat, pp. 157–176.*
- Echibiri, R.N. (1997). The Structure of Income Inequality and Poverty in Rural South-Eastern Nigeria. *In: NES (comp.), Poverty Alleviation in Nigeria. Ibadan: N.E.S. Secretariat, pp. 55 - 72.*
- Egware, L. (1997). Poverty and Poverty Alleviation: Nigeria's Experience. *In: NES (comp.), Poverty Alleviation in Nigeria. Ibadan: N.E.S. Secretariat, pp.487 –504*
- Ekong, C. N. (1997). Framework for Building Sustainable Poverty

Alleviation Strategies in Nigeria. *In: NES (comp.), Poverty Alleviation in Nigeria.* Ibadan: N.E.S. Secretariat, pp. 555 - 568.

Job, S.(1998). Framework for Measuring and Monitoring Poverty in Nigeria. *In: CBN (comp.), Proceedings of the Seventh Annual Conference of the Zonal Research Unit.* Abuja: CBN Research Department, pp. 235 - 256.

Kanbur, R. and Squire L. (2001). The Evolution of Thinking About Poverty: Exploring and Interactions. *In: G.M. Meier and J.E. Stiglitz (eds.), Frontiers of Development Economics: The Future In Perspectives.* New York: Oxford University Press, pp. 214-215.

Kwanashie, M. (1998). Impact of Poverty on Sustainable Growth and Development. *In: CBN (comp.), Proceedings of the Seventh Annual Conference of the Zonal Research Unit.* Abuja: CBN Research Department, pp. 310 - 323.

Ndekwe, E.C (1998). Comparative Analysis of Living Conditions and Poverty in Africa. *In: CBN (comp.), Proceedings of the Seventh Annual Conference of the Zonal Research Unit.* Abuja: CBN Research Department, pp. 257 – 278

Obadan, M. and Odusola, A.F. (2000). Productivity and Unemployment in Nigeria. *In: CBN (comp.), Proceedings of the Ninth Annual Conference of the Zonal Research Units.* Abuja: CBN Research Dept., pp. 186-222

Obaseki, P.J. and Onwioduokit, E.A (1997). Indicators of Poverty:

- Cross Country Analysis. *In: NES (comp.), Poverty Alleviation in Nigeria*. Ibadan: N.E.S. Secretariat, pp. 300 – 326.
- Odejide, A. F. (1997). Breaking the Vicious Circle of Poverty among Women in Developing Countries: The Case for Micro credit. *In: NES (comp.), Poverty Alleviation in Nigeria*. Ibadan: N.E.S. Secretariat, pp. 367 – 382.
- Odusola, A. F. (1997) Poverty in Nigeria: An Eclectic Approach. *In: NES (comp.), Poverty Alleviation in Nigeria*. Ibadan: N.E.S. Secretariat, pp. 121 – 140.
- Okojie, C.E.E. (1997). Human Capital Investment and Intergenerational Transmission of Poverty: Implications for Poverty Alleviation Programmes in Nigeria. *In: NES (comp.), Poverty Alleviation in Nigeria*. Ibadan: N.E.S. Secretariat, pp. 429 - 550.
- Okunmadewa, F. (1997). Poverty Alleviation in Nigeria: The International Dimension. *In: NES (comp.), Poverty Alleviation in Nigeria*. Ibadan: N.E.S. Secretariat, pp. 287 - 300.
- Okunmadewa, F. (1998). Domestic and International Responses to Poverty Alleviation in Nigeria. *In: CBN (comp.), Proceedings of the Seventh Annual Conference of the Zonal Research Unit*. Abuja: CBN Research Department, pp. 296 - 309.
- Olowononi, G.D. (1997). Towards a Sustainable Programme for Poverty Alleviation in Nigeria. *In: NES (comp.), Poverty Alleviation in Nigeria*. Ibadan: N.E.S. Secretariat, pp. 475 - 486.
- Osagie E. (1992). The IMF and the World Bank in Nigeria's Economy Recovery. *In: E. Osagie (ed.), Structural Adjustment Programme in the Nigerian Economy*. Jos: National Institute for Policy and Strategic Studies, pp. 71-104

Tella, S.A. A (1997). Schema for Monitoring Poverty Alleviation. *In: NES (comp.), Poverty Alleviation in Nigeria*. Ibadan: N.E.S. Secretariat, pp. 73 -88.

Uniamikogbo, S.O (1997). Poverty Alleviation under Nigeria's Structural Adjustment Programme: A Policy Framework. *In: NES (comp.), Poverty Alleviation in Nigeria*. Ibadan: N.E.S. Secretariat, pp. 19 - 40.

**v). Unpublished speeches, Seminar papers, etc.**

Best E. Survey of Female Migrants in Major Cities and Towns in Nigeria, *Field Survey Report for Jos* 2002.

Brock, K. and Gaventa, Poverty Knowledge and Policy Processes: A Case Study of Nigeria Federal Poverty Reduction Policy, *Draft for Lagos Workshop*, 2002.

Nweze, N.J. and Ojowu O. Poverty, Well being and Wealth Generation in Benue State, *A Draft Report*, 2002.

Nweze, N.; Ojowu, O. and Francis, P. Poverty in Benue State: A preliminary Assessment Based on Secondary Sources, *A Draft Final Report*, 2002.

Yawe, C. A State of Readiness for the U8E Programme being a paper presented at a *workshop on UBE Programme in Jalingo, Taraba State*, 11<sup>th</sup> - 12<sup>th</sup> May, 2000.

**vi). Articles in Encyclopedia and Similar Works**

Kuper, A. and Kuper, J. Poverty. *In: The Social Science Encyclopedia*; New York, Routledge. Second Edition 1996 655 -657



**APPENDICES****APPENDIX A****QUESTIONNAIRE FOR HOUSEHOLD SURVEY****To Household Heads.**

This questionnaire is designed to elicit information that will be used in assessing the performances of selected poverty alleviation programmes in your area. Please feel free to tick only one bracket where alternatives are provided and in other cases, fill in the spaces available as all information provided will be treated as confidential.

**SECTION A: PERSONAL DATA**

1. Sex (a) male (        )        (b) female        (        )
2. Age (a) 10-20 years (    )        (b) 21-30 years (    )  
       (c) 31-40 years (        )        (d) 41-50 years (        )  
       (e) 51-60 years (        )        (f) above 60 years (        )
3. Marital                    status:  
       (a)        married        (        )        (b)        Single        (        )  
       (c) Divorced (    )        (d) Widowed (    ) (e) separated (    )
4. Number    of    Wives:        .....
5. Number    of    children/dependants .....

6. Occupation .....
7. Location of address
- (a) Street .....
- (b) Village/Town .....
- (c) Local Government Area .....
- (d) State .....

**Section B: EMPLOYMENT**

8. Which of the following is applicable to you?
- (a) paid employment ( ) (b) self-employed ( )
- (c) unemployed ( ) (d) retired ( )
- (e) apprenticeship ( ) (f) others(specify).....
9. If you are self-employed, what is your primary occupation?
- (a) farming ( ) (b) trading ( ) (c) artisan ( )
- (d) businessman/contract work ( ) (e) others (specify)....
10. If question (9) above is applicable, indicate size based on the following.
- (a) Number of workers employed per annum.....
- (b) Amount of capital invested ₦ .....
- (c) Total sales/turnover per annum ₦ .....
- (d) Profits per annum ₦ .....

11. Is your family a beneficiary of the National Directorate of Employment?
- (a) Yes ( ) (b) No ( )
12. How many members of your family have benefited from N.DE.?
- (a) One ( ) (b) Two ( )
- (c) Three ( ) (d) Four and Above ( )
13. In which of the directorate's programmes are they involved?
- (a) Vocational skill development ( )
- (b) Special public works ( )
- (c) Small scale enterprises ( )
- (d) Agricultural Employment ( )
14. What is the beneficiary's present main occupation? .....
15. How much is the monthly average income of the person (s) who benefited from NDE?
- (a) less than ₦10,000 ( ) (b) ₦10,000 – 20,000 ( )
- (c) ₦20,001 – 30,000 ( ) (d) ₦30,001 – 40,000 ( )
- (e) ₦40,001 – 50,000 ( ) (f) Above ₦50,000. ( )
16. How many productive members of your family are:
- (a) employed in the public/private sector? .....
- (b) self – employed? .....
- (c) unpaid family workers?.....

- (d) casual workers? .....
- (e) unemployed? .....

17. What is the monthly average income of your family?

- (a) less than ~~₦~~10,000 ( )      (b) ₦10,000 – 15,000 ( )
- (c) ~~₦~~15,0001 – 20,000 ( )      (d) ₦20,001 – 25,000 ( )
- (e) ~~₦~~25,0001 – 30,000 ( )      (f) ₦30,001 – 35,000 ( )
- (g) ~~₦~~35,001 – 40,000 ( )      (h) ~~₦~~40,001 – 45,000 ( )
- (i) ~~₦~~45,001 – 50,000 ( )      (j) ₦50,001 – 55,000 ( )
- (k) ~~₦~~55,001 – 60,000 ( )      (i) Above ~~₦~~60,000 ( )

18. What is your family's monthly average expenditure?

- (a) less than ~~₦~~10,000 ( )      (b) ₦10,000 – 20,000 ( )
- (c) ~~₦~~20,0001 – 30,000 ( )      (d) ₦30,001 – 40,000 ( )
- (e) ~~₦~~40,0001 – 50,000 ( )      (f) ₦50,001 – 60,000 ( )
- (g) Above ~~₦~~60,000 ( )

### **SECTION C: FINANCE**

19. In which of the following income brackets do you fall?

- (a) Less than ~~₦~~10,000 per month ( )
- (b) ~~₦~~10000-20000 per month ( )
- (c) ~~₦~~20001- 30000 per month ( )
- (d) ~~₦~~30001 - 40000 per month ( )

(e) ~~₦~~40001 -50000 per month ( )

(f) ~~₦~~50001 -60000 per month ( )

(g) ~~₦~~60001-70000 per month ( )

(h) ~~₦~~70001-80000 per month ( )

(I) ~~₦~~80001-90000 per month ( )

(j) ~~₦~~90001-100000 per month ( )

(k) ~~₦~~100001-110,000 per month ( )

(I) Above ~~₦~~110000 per month ( )

20. By how much has your income changed since 1986?

(a) It has not changed ( ) (b) by 0 -10% ( )

(c) by 11 - 20% ( ) (d) by 21 -30% ( )

(e) by 31 - 40% ( ) (f) by 41 -50% ( )

(g) by 51-60% ( ) (h) by 61-70% ( )

(I) by 71-80% ( ) (j) above 80% ( )

21. Which of the following sources of credit exist in your area?

(a) commercial bank ( ) (b) merchant bank ( )

(c) People's bank ( ) (d) community bank ( )

(e) Cooperative societies( ) (f) individual money lenders ( )

(g) Relations ( ) (h) Esusu/Adashi ( )

22. Do you have access to credit facilities?

(a) Yes ( ) (b) No ( )

23. If your answer to question 22 above is yes, from which of the institutions do you obtain your credit facilities?

24. How much of your financial requirement do you source from the following institutions? State the amount and percentage of total financial requirements.

<b>Institutions</b>	<b>Amount (₦)</b>	<b>% of total financial requirement</b>
a. Commercial Bank		
B Merchant bank		
c. people bank		
d. community bank		
e. cooperative societies		
f. individual money lenders		
g. Esusu/Adashi		
h. Relations		

25. What is the average interest rate (in %) -----

-

26. By how much has your income positively changed as a result of the credit facility in the past five years?

- (a) Less than 10% ( ) (b) 10—20% ( )  
 (c) 21—30% ( ) (d) 31 -40% ( )  
 (e) 41—50% ( ) (f) above 50% ( )  
 )

27. Have you in the past five (5) years been able to cater for your family feeding needs and other social responsibilities within the limit of your income? (a) Yes ( ) (b) No ( )

28. Has your income declined in the past five (5) years despite the credit facilities obtained? (a) Yes ( ) (b) No ( )

29. If your answer to question 28 is yes, which of the following factors is mainly responsible?

- (a) high product prices (inflation) ( ) (b) seasonal nature of the job ( )  
 (c) underemployment ( ) (d) retirement ( ) (e) increase in dependants ( )  
 (f) others (natural disaster, civil unrest, and sicknesses)

30 How many members of your family are beneficiaries of People's

Bank loans?

- (a) one ( )                      (b) two ( )  
 (c) three ( )                      (d) four ( )  
 (e) more than four ( )              (f) none ( )

31. What is the percentage increase in your monthly family income as a result of loans received by your family members?

- (a) less than 10% ( )              (b) 10—20% ( )  
 (c) 21 —30% ( )                      (d) 31-40% ( )  
 (e) 41—50% ( )                      (f) above50% ( )

32. With the loans ..... in your house has increased.

- (a) production level ( )              (b) number of wives ( )  
 (C) food consumption level ( )      (d) purchase of clothes ( )  
 (e) number of cars ( )              (f) others (specify) .....

#### **SECTION D: HEALTH**

33. Do you have health services within this neighbourhood?

- (a) Yes ( )      (b) No ( )

34. How far is the health centre from your house?.....

- (a) less that 1km ( )              (b) 1-5km ( )



- (c) 6 – 10km ( ) (d) 11 – 15km ( )  
 (e) 16 – 20km ( ) (f) above 20km ( )
35. Which of the following do you patronize more?  
 (a) traditional healers ( ) (b) primary health care ( )  
 (c) small private clinic ( ) (d) cottage hospital ( )  
 (e) dispensary ( ) (f) general hospital ( )  
 (g) Specialist Hospital ( ) (h) teaching hospital ( )  
 (i) pharmacy ( ) (j) Chemist ( )
36. The facility in question 35 above is provided by:  
 (a) government ( ) (b) private organization ( )  
 (c) community ( )
37. If 36 (a), is it adequately stocked with drugs and other facilities?  
 (a) Yes ( ) (b) No ( )
38. Do you pay for health services received? (a) Yes ( ) (b) No ( )
39. If your answer in 38 is yes, which of the following do you pay for  
 (tick as many as applicable)?  
 (a) Consultation ( ) (b) Drugs ( )  
 (c) Surgical Operation ( ) (d) medical treatment ( )  
 (e) bed in the health centre ( ).
40. Are the medical services affordable? (a) Yes ( ) (b) No ( )

41. Which of the following is the highest qualified medical personnel in the health institution nearest to you?
- (a) doctor ( ) (b) nurse/midwife ( )
- (c) pharmacist ( ) (d) community health officer ( )
- (f) others (specify) .....
42. Are you satisfied with the health services provided by the medical institution? (a) Yes ( ) (b) No ( )
43. If (42) is no, which of the following is responsible?
- (a) inadequate treatment ( )
- (b) inadequate facilities ( )
- (c) long periods of waiting (1 hour and above) ( )
- (d) non-challant attitude to work by its workers ( )
44. Most of the deaths recorded in you house are
- (a) less that five years old ( ) (b) 5 -14 years ( )
- (c) 15-25 years ( ) (d) 26 - 35 years ( )
- (e) 36 - 45 years ( ) (f) 46-55 years ( )
- (g) 56 - 64 years ( ) (h) Above 64 years ( )
45. During the past 16 years, how many women died in your house?
- (a) one ( ) (b) two ( ) (c) three ( )
- (d) above three ( ) (e) none ( ).
46. Within the last 16 years, how many children died in your house under the age of 5 years?

- (a) one (    )                      (b) two (    )
- (c) three (    )                    (d) four (    )
- (e) five (    )                      (f) 6 and above (    )
- (g) none (    )

47. Which of the following is applicable in your house?
- (a) good drainage system (    ) (b) flush to sewage toilet (    )
  - (c) protected pit latrine (    ) (d) uncovered poor pit latrine (    )
  - (e) none of the above (    )
48. Are you aware of any family planning lessons in your health institution? (a) Yes (    ) (b) No (    )
49. If (48) is yes, does your family participate in it?
- (a) Yes (    )                      (b) No (    )
50. How often are you contacted in the decision making process to improve the functionality of the health institution in your area?
- (a) weekly (    )                      (b) once a month (    )
  - (c) once in three months (    ) (d) twice a year (    )
  - (e) once a year (    )                      (f) none of the above (    )

Interviewed by:

**Name:**.....

Signature:..... Date:.....

**APPENDIX B**  
**Tables used to compute NDE Standard Deviation**

Local Govt.: OTUKPO

Xi	INCOME NDE	FAMILY INCOME	Xi - Mean Xi	(Xi - Mean Xi) ^ 2
12.645	5000.00	384.62	-48.72	2374.08
12.645	5000.00	384.62	-48.72	2374.08
12.645	5000.00	384.62	-48.72	2374.08
14.944	5000.00	454.55	-46.43	2155.32
14.944	5000.00	454.55	-46.43	2155.32
14.944	5000.00	454.55	-46.43	2155.32
14.944	5000.00	454.55	-46.43	2155.32
18.265	5000.00	555.56	-43.10	1858.01
20.548	5000.00	625.00	-40.82	1666.39
23.483	5000.00	714.29	-37.89	1435.35
23.483	5000.00	714.29	-37.89	1435.35
23.483	5000.00	714.29	-37.89	1435.35
32.877	5000.00	1000.00	-28.49	811.84
32.877	5000.00	1000.00	-28.49	811.84
32.877	5000.00	1000.00	-28.49	811.84
41.096	5000.00	1250.00	-20.27	411.02
41.096	5000.00	1250.00	-20.27	411.02
41.096	5000.00	1250.00	-20.27	411.02
41.096	5000.00	1250.00	-20.27	411.02
41.096	5000.00	1250.00	-20.27	411.02
41.096	5000.00	1250.00	-20.27	411.02
54.795	5000.00	1666.67	-6.57	43.23
21.629	12500.00	657.89	-39.74	1579.27
21.629	12500.00	657.89	-39.74	1579.27
27.397	12500.00	833.33	-33.97	1154.11
37.360	12500.00	1136.36	-24.01	576.46
37.360	12500.00	1136.36	-24.01	576.46
45.662	12500.00	1388.89	-15.71	246.72
51.370	12500.00	1562.50	-10.00	99.99
51.370	12500.00	1562.50	-10.00	99.99
58.708	12500.00	1785.71	-2.66	7.08
68.493	12500.00	2083.33	7.12	50.75
68.493	12500.00	2083.33	7.12	50.75
68.493	12500.00	2083.33	7.12	50.75
68.493	12500.00	2083.33	7.12	50.75
68.493	12500.00	2083.33	7.12	50.75
68.493	12500.00	2083.33	7.12	50.75
68.493	12500.00	2083.33	7.12	50.75
82.192	12500.00	2500.00	20.82	433.57
82.192	12500.00	2500.00	20.82	433.57
82.192	12500.00	2500.00	20.82	433.57
102.740	12500.00	3125.00	41.37	1711.50
102.740	12500.00	3125.00	41.37	1711.50
102.740	12500.00	3125.00	41.37	1711.50
20.548	17500.00	625.00	-40.82	1666.39
23.014	17500.00	700.00	-38.36	1471.16
26.152	17500.00	795.45	-35.22	1240.27

Local Govt.: OTUKPO

Xi	INCOME NDE	FAMILY INCOME	Xi - Mean Xi	(Xi - Mean Xi) ^ 2
30.281	17500.00	921.05	-31.09	966.48
30.281	17500.00	921.05	-31.09	966.48
38.356	17500.00	1166.67	-23.01	529.61
38.356	17500.00	1166.67	-23.01	529.61
38.356	17500.00	1166.67	-23.01	529.61
44.257	17500.00	1346.15	-17.11	292.83
47.945	17500.00	1458.33	-13.42	180.21
47.945	17500.00	1458.33	-13.42	180.21
47.945	17500.00	1458.33	-13.42	180.21
57.534	17500.00	1750.00	-3.84	14.71
57.534	17500.00	1750.00	-3.84	14.71
63.927	17500.00	1944.44	2.56	6.54
63.927	17500.00	1944.44	2.56	6.54
63.927	17500.00	1944.44	2.56	6.54
63.927	17500.00	1944.44	2.56	6.54
71.918	17500.00	2187.50	10.55	111.27
82.192	17500.00	2500.00	20.82	433.57
82.192	17500.00	2500.00	20.82	433.57
82.192	17500.00	2500.00	20.82	433.57
95.890	17500.00	2916.67	34.52	1191.70
95.890	17500.00	2916.67	34.52	1191.70
95.890	17500.00	2916.67	34.52	1191.70
95.890	17500.00	2916.67	34.52	1191.70
95.890	17500.00	2916.67	34.52	1191.70
115.068	17500.00	3500.00	53.70	2883.59
115.068	17500.00	3500.00	53.70	2883.59
115.068	17500.00	3500.00	53.70	2883.59
115.068	17500.00	3500.00	53.70	2883.59
115.068	17500.00	3500.00	53.70	2883.59
29.589	22500.00	900.00	-31.78	1009.99
29.589	22500.00	900.00	-31.78	1009.99
41.096	22500.00	1250.00	-20.27	411.02
73.973	22500.00	2250.00	12.60	158.84
73.973	22500.00	2250.00	12.60	158.84
32.290	27500.00	982.14	-29.08	845.64
33.486	27500.00	1018.52	-27.88	777.51
34.773	27500.00	1057.69	-26.60	707.35
50.228	27500.00	1527.78	-11.14	124.12
53.183	27500.00	1617.65	-8.19	67.02
64.579	27500.00	1964.29	3.21	10.30
64.579	27500.00	1964.29	3.21	10.30
69.547	27500.00	2115.38	8.18	66.87
69.547	27500.00	2115.38	8.18	66.87
75.342	27500.00	2291.67	13.97	195.25
75.342	27500.00	2291.67	13.97	195.25
75.342	27500.00	2291.67	13.97	195.25

Local Govt.: OTUKPO

Xi	INCOME NDE	FAMILY INCOME	Xi - Mean Xi	(Xi - Mean Xi) ^ 2
100.457	27500.00	3055.56	39.09	1527.81
100.457	27500.00	3055.56	39.09	1527.81
100.457	27500.00	3055.56	39.09	1527.81
100.457	27500.00	3055.56	39.09	1527.81
113.014	27500.00	3437.50	51.64	2667.13
113.014	27500.00	3437.50	51.64	2667.13
113.014	27500.00	3437.50	51.64	2667.13
113.014	27500.00	3437.50	51.64	2667.13
118.721	32500.00	3611.11	57.35	3289.26
45.662	37500.00	1388.89	-15.71	246.72
56.040	37500.00	1704.55	-5.33	28.40
56.040	37500.00	1704.55	-5.33	28.40
64.888	37500.00	1973.68	3.52	12.38
64.888	37500.00	1973.68	3.52	12.38
77.055	37500.00	2343.75	15.69	246.03
77.055	37500.00	2343.75	15.69	246.03
94.837	37500.00	2884.62	33.47	1120.06
94.837	37500.00	2884.62	33.47	1120.06
102.740	37500.00	3125.00	41.37	1711.50
102.740	37500.00	3125.00	41.37	1711.50
102.740	37500.00	3125.00	41.37	1711.50
42.341	42500.00	1287.88	-19.03	362.07
55.890	42500.00	1700.00	-5.48	30.02
46.649	52500.00	1418.92	-14.72	216.68
46.649	52500.00	1418.92	-14.72	216.68
Sum			.00	106494.52

Count = 117 Mean Xi = 61.37

Mean Income NDE	Income Family
19444.44	1866.65

Local Govt.: USHONGO

Xi	INCOME NDE	FAMILY INCOME	Xi - Mean Xi	(Xi - Mean Xi) ^ 2
5.303	5000.00	161.29	-36.11	1303.69
6.575	5000.00	200.00	-34.83	1213.40
8.652	5000.00	263.16	-32.76	1073.05
9.670	5000.00	294.12	-31.74	1007.41
10.959	5000.00	333.33	-30.45	927.23
12.645	5000.00	384.62	-28.76	827.39
14.944	5000.00	454.55	-26.47	700.41
16.438	5000.00	500.00	-24.97	623.55
18.265	5000.00	555.56	-23.14	535.67
20.548	5000.00	625.00	-20.86	435.20
20.548	5000.00	625.00	-20.86	435.20
23.483	5000.00	714.29	-17.93	321.34
23.483	5000.00	714.29	-17.93	321.34
23.483	5000.00	714.29	-17.93	321.34
9.557	12500.00	290.70	-31.85	1014.56
11.416	12500.00	347.22	-29.99	899.63
12.453	12500.00	378.79	-28.96	838.45
19.569	12500.00	595.24	-21.84	476.98
24.174	12500.00	735.29	-17.24	297.05
24.174	12500.00	735.29	-17.24	297.05
25.685	12500.00	781.25	-15.72	247.26
25.685	12500.00	781.25	-15.72	247.26
27.397	12500.00	833.33	-14.01	196.34
27.397	12500.00	833.33	-14.01	196.34
29.354	12500.00	892.86	-12.06	145.32
31.612	12500.00	961.54	-9.80	95.98
37.360	12500.00	1136.36	-4.05	16.40
45.662	12500.00	1388.89	4.25	18.09
51.370	12500.00	1562.50	9.96	99.21
82.192	12500.00	2500.00	40.78	1663.21
102.740	12500.00	3125.00	61.33	3761.42
14.033	17500.00	426.83	-27.38	749.47
19.839	17500.00	603.45	-21.57	465.26
23.014	17500.00	700.00	-18.40	338.40
27.397	17500.00	833.33	-14.01	196.34
41.096	17500.00	1250.00	-.31	.10
44.257	17500.00	1346.15	2.85	8.11
57.534	17500.00	1750.00	16.12	260.01
82.192	17500.00	2500.00	40.78	1663.21
18.967	22500.00	576.92	-22.44	503.64
25.508	22500.00	775.86	-15.90	252.86
41.096	22500.00	1250.00	-.31	.10
49.315	22500.00	1500.00	7.91	62.50
92.466	22500.00	2812.50	51.06	2606.76
15.862	27500.00	482.46	-25.55	652.69
33.486	27500.00	1018.52	-7.92	62.79

Local Govt.: USHONGO

Xi	INCOME NDE	FAMILY INCOME	Xi - Mean Xi	(Xi - Mean Xi) ^ 2
45.205	27500.00	1375.00	3.80	14.41
56.507	27500.00	1718.75	15.10	227.94
113.014	27500.00	3437.50	71.60	5127.19
42.740	32500.00	1300.00	1.33	1.77
56.236	32500.00	1710.53	14.83	219.85
76.321	32500.00	2321.43	34.91	1218.82
106.849	32500.00	3250.00	65.44	4282.40
13.435	42500.00	408.65	-27.97	782.55
39.922	42500.00	1214.29	-1.49	2.21
49.315	52500.00	1500.00	7.91	62.50
105.023	57500.00	3194.44	63.61	4046.68
111.201	57500.00	3382.35	69.79	4870.83
111.201	57500.00	3382.35	69.79	4870.83
111.201	57500.00	3382.35	69.79	4870.83
36.530	60000.00	1111.11	-4.88	23.81
103.821	60000.00	3157.89	62.41	3895.25
		Sum	-.00	62896.86

Count = 62 Mean Xi = 41.41

Mean Income NDE	Income Family
20806.45	1259.53



Local Govt.: AKWANGA

Xi	INCOME NDE	FAMILY INCOME	Xi - Mean Xi	(Xi - Mean Xi) ^ 2
20.548	5000.00	625.00	-52.33	2738.82
27.397	5000.00	833.33	-45.48	2068.84
27.397	5000.00	833.33	-45.48	2068.84
25.685	12500.00	781.25	-47.20	2227.54
29.354	12500.00	892.86	-43.53	1894.64
41.096	12500.00	1250.00	-31.79	1010.34
51.370	12500.00	1562.50	-21.51	462.76
68.493	12500.00	2083.33	-4.39	19.26
68.493	12500.00	2083.33	-4.39	19.26
82.192	12500.00	2500.00	9.31	86.68
82.192	12500.00	2500.00	9.31	86.68
41.096	17500.00	1250.00	-31.79	1010.34
63.927	17500.00	1944.44	-8.95	80.19
115.068	17500.00	3500.00	42.19	1779.72
115.068	17500.00	3500.00	42.19	1779.72
32.162	22500.00	978.26	-40.72	1658.09
46.233	22500.00	1406.25	-26.65	710.16
49.315	22500.00	1500.00	-23.57	555.39
61.644	22500.00	1875.00	-11.24	126.29
67.248	22500.00	2045.45	-5.63	31.74
73.973	22500.00	2250.00	1.09	1.19
73.973	22500.00	2250.00	1.09	1.19
82.192	22500.00	2500.00	9.31	86.68
82.192	22500.00	2500.00	9.31	86.68
82.192	22500.00	2500.00	9.31	86.68
82.192	22500.00	2500.00	9.31	86.68
82.192	22500.00	2500.00	9.31	86.68
105.675	22500.00	3214.29	32.79	1075.41
90.411	27500.00	2750.00	17.53	307.27
100.457	27500.00	3055.56	27.57	760.38
113.014	27500.00	3437.50	40.13	1610.58
82.192	32500.00	2500.00	9.31	86.68
97.136	32500.00	2954.55	24.25	588.26
106.849	32500.00	3250.00	33.97	1153.80
118.721	32500.00	3611.11	45.84	2101.28
99.804	42500.00	3035.71	26.92	724.83
107.482	42500.00	3269.23	34.60	1197.15
		Sum	.00	30456.69

Count = 37 Mean Xi = 72.88

Mean Income NDE	Income Family
20945.95	2216.82

Local Govt.: KEANA

Xi	INCOME NDE	FAMILY INCOME	Xi - Mean Xi	(Xi - Mean Xi) ^ 2
7.828	5000.00	238.10	-37.53	1408.56
8.219	5000.00	250.00	-37.14	1379.34
8.652	5000.00	263.16	-36.71	1347.39
9.132	5000.00	277.78	-36.23	1312.34
14.944	5000.00	454.55	-30.41	925.05
18.265	5000.00	555.56	-27.09	734.07
32.877	5000.00	1000.00	-12.48	155.80
32.877	5000.00	1000.00	-12.48	155.80
32.877	5000.00	1000.00	-12.48	155.80
41.096	5000.00	1250.00	-4.26	18.17
41.096	5000.00	1250.00	-4.26	18.17
54.795	5000.00	1666.67	9.44	89.04
19.569	12500.00	595.24	-25.79	665.08
21.629	12500.00	657.89	-23.73	563.07
34.247	12500.00	1041.67	-11.11	123.48
37.360	12500.00	1136.36	-8.00	63.98
37.360	12500.00	1136.36	-8.00	63.98
41.096	12500.00	1250.00	-4.26	18.17
51.370	12500.00	1562.50	6.01	36.14
58.708	12500.00	1785.71	13.35	178.22
68.493	12500.00	2083.33	23.13	535.21
68.493	12500.00	2083.33	23.13	535.21
68.493	12500.00	2083.33	23.13	535.21
68.493	12500.00	2083.33	23.13	535.21
102.740	12500.00	3125.00	57.38	3292.59
102.740	12500.00	3125.00	57.38	3292.59
102.740	12500.00	3125.00	57.38	3292.59
23.973	17500.00	729.17	-21.39	457.36
35.959	17500.00	1093.75	-9.40	88.35
38.356	17500.00	1166.67	-7.00	49.03
44.257	17500.00	1346.15	-1.10	1.21
47.945	17500.00	1458.33	2.59	6.69
52.304	17500.00	1590.91	6.95	48.24
95.890	17500.00	2916.67	50.53	2553.46
29.589	22500.00	900.00	-15.77	248.68
67.248	22500.00	2045.45	21.89	479.14
36.164	27500.00	1100.00	-9.19	84.53
65.753	60000.00	2000.00	20.39	415.95
		Sum	.00	25862.89

Count = 38 Mean Xi = 45.36

Mean Income NDE	Income Family
13223.68	1379.66



Local Govt.: LANGTANG

Xi	INCOME NDE	FAMILY INCOME	Xi - Mean Xi	(Xi - Mean Xi) ^ 2
14.384	17500.00	437.50	-52.31	2736.30
30.281	17500.00	921.05	-36.41	1325.84
41.096	17500.00	1250.00	-25.60	655.23
47.945	17500.00	1458.33	-18.75	351.49
52.304	17500.00	1590.91	-14.39	207.05
57.534	17500.00	1750.00	-9.16	83.89
63.927	17500.00	1944.44	-2.77	7.65
71.918	17500.00	2187.50	5.22	27.30
71.918	17500.00	2187.50	5.22	27.30
71.918	17500.00	2187.50	5.22	27.30
71.918	17500.00	2187.50	5.22	27.30
82.192	17500.00	2500.00	15.50	240.20
82.192	17500.00	2500.00	15.50	240.20
82.192	17500.00	2500.00	15.50	240.20
95.890	17500.00	2916.67	29.20	852.47
95.890	17500.00	2916.67	29.20	852.47
95.890	17500.00	2916.67	29.20	852.47
95.890	17500.00	2916.67	29.20	852.47
95.890	17500.00	2916.67	29.20	852.47
115.068	17500.00	3500.00	48.38	2340.16
33.624	22500.00	1022.73	-33.07	1093.58
33.624	22500.00	1022.73	-33.07	1093.58
49.315	22500.00	1500.00	-17.38	302.00
56.902	22500.00	1730.77	-9.79	95.87
73.973	22500.00	2250.00	7.28	52.99
82.192	22500.00	2500.00	15.50	240.20
82.192	22500.00	2500.00	15.50	240.20
82.192	22500.00	2500.00	15.50	240.20
82.192	22500.00	2500.00	15.50	240.20
92.466	22500.00	2812.50	25.77	664.22
92.466	22500.00	2812.50	25.77	664.22
105.675	22500.00	3214.29	38.98	1519.59
105.675	22500.00	3214.29	38.98	1519.59
105.675	22500.00	3214.29	38.98	1519.59
105.675	22500.00	3214.29	38.98	1519.59
50.228	27500.00	1527.78	-16.46	271.09
53.183	27500.00	1617.65	-13.51	182.53
75.342	27500.00	2291.67	8.65	74.81
82.192	27500.00	2500.00	15.50	240.20
82.192	27500.00	2500.00	15.50	240.20
90.411	27500.00	2750.00	23.72	562.53
100.457	27500.00	3055.56	33.76	1139.96
113.014	27500.00	3437.50	46.32	2145.58
113.014	27500.00	3437.50	46.32	2145.58
113.014	27500.00	3437.50	46.32	2145.58
50.881	32500.00	1547.62	-15.81	250.04

Local Govt.: LANGTANG

Xi	INCOME NDE	FAMILY INCOME	Xi - Mean Xi	(Xi - Mean Xi) ^ 2
66.781	32500.00	2031.25	.09	.01
82.192	32500.00	2500.00	15.50	240.20
118.721	32500.00	3611.11	52.03	2706.93
118.721	32500.00	3611.11	52.03	2706.93
61.644	37500.00	1875.00	-5.05	25.50
68.493	37500.00	2083.33	1.80	3.24
77.055	37500.00	2343.75	10.36	107.36
82.192	37500.00	2500.00	15.50	240.20
82.192	37500.00	2500.00	15.50	240.20
88.063	37500.00	2678.57	21.37	456.65
94.837	37500.00	2884.62	28.14	792.05
94.837	37500.00	2884.62	28.14	792.05
102.740	37500.00	3125.00	36.05	1299.35
73.540	42500.00	2236.84	6.85	46.88
93.151	42500.00	2833.33	26.46	700.00
107.482	42500.00	3269.23	40.79	1663.69
107.482	42500.00	3269.23	40.79	1663.69
116.438	42500.00	3541.67	49.75	2474.57
74.364	47500.00	2261.90	7.67	58.84
98.630	60000.00	3000.00	31.94	1019.96
116.035	60000.00	3529.41	49.34	2434.65
		Sum	.00	114360.26

Count = 113 Mean Xi = 66.69

Mean Income NDE	Income Family
19668.14	2028.59

Local Govt.: JOS EAST

Xi	INCOME NDE	FAMILY INCOME	Xi - Mean Xi	(Xi - Mean Xi) ^ 2
6.849	5000.00	208.33	-27.32	746.30
7.828	5000.00	238.10	-26.34	693.79
8.652	5000.00	263.16	-25.52	651.07
10.959	5000.00	333.33	-23.21	538.65
11.742	5000.00	357.14	-22.43	502.93
13.699	5000.00	416.67	-20.47	418.98
16.438	5000.00	500.00	-17.73	314.33
20.548	5000.00	625.00	-13.62	185.50
23.483	5000.00	714.29	-10.68	114.16
27.397	5000.00	833.33	-6.77	45.84
27.397	5000.00	833.33	-6.77	45.84
41.096	5000.00	1250.00	6.93	48.00
41.096	5000.00	1250.00	6.93	48.00
14.677	12500.00	446.43	-19.49	379.89
15.806	12500.00	480.77	-18.36	337.15
17.123	12500.00	520.83	-17.04	290.51
24.174	12500.00	735.29	-9.99	99.87
27.397	12500.00	833.33	-6.77	45.84
37.360	12500.00	1136.36	3.19	10.19
37.360	12500.00	1136.36	3.19	10.19
45.662	12500.00	1388.89	11.49	132.12
45.662	12500.00	1388.89	11.49	132.12
58.708	12500.00	1785.71	24.54	602.24
82.192	12500.00	2500.00	48.02	2306.31
82.192	12500.00	2500.00	48.02	2306.31
26.152	17500.00	795.45	-8.02	64.25
44.257	17500.00	1346.15	10.09	101.80
56.236	32500.00	1710.53	22.07	487.03
118.721	32500.00	3611.11	84.55	7149.33

Sum	.00	18808.53
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Count = 29 Mean Xi = 34.17

Mean Income NDE	Income Family
10862.07	1039.27



5000.00	20.55	-110.29	12164.922
5000.00	20.55	-110.29	12164.922







Local Government: OTUKPO

Family Income	Xi	Xi - Mean Xi	Xi - Mean Xi Sq
-----	-----	-----	-----
17500.00	63.93	-66.92	4477.712
17500.00	63.93	-66.92	4477.712
17500.00	63.93	-66.92	4477.712
17500.00	71.92	-58.92	3472.137
17500.00	71.92	-58.92	3472.137
17500.00	82.19	-48.65	2366.907
17500.00	82.19	-48.65	2366.907
17500.00	82.19	-48.65	2366.907
17500.00	82.19	-48.65	2366.907
17500.00	82.19	-48.65	2366.907
17500.00	82.19	-48.65	2366.907
17500.00	95.89	-34.95	1221.659
17500.00	95.89	-34.95	1221.659
17500.00	95.89	-34.95	1221.659
17500.00	95.89	-34.95	1221.659
17500.00	115.07	-15.77	248.824
17500.00	115.07	-15.77	248.824
17500.00	115.07	-15.77	248.824
17500.00	115.07	-15.77	248.824
17500.00	115.07	-15.77	248.824
17500.00	143.84	12.99	168.817
17500.00	143.84	12.99	168.817
17500.00	143.84	12.99	168.817
17500.00	143.84	12.99	168.817
17500.00	143.84	12.99	168.817
17500.00	143.84	12.99	168.817
17500.00	143.84	12.99	168.817
17500.00	191.78	60.94	3713.461
17500.00	191.78	60.94	3713.461
17500.00	191.78	60.94	3713.461
17500.00	191.78	60.94	3713.461
17500.00	191.78	60.94	3713.461
17500.00	287.67	156.83	24595.204
17500.00	575.34	444.50	197580.085
22500.00	29.59	-101.25	10252.294
22500.00	29.59	-101.25	10252.294
22500.00	38.93	-91.91	8447.393
22500.00	41.10	-89.75	8054.481
22500.00	46.23	-84.61	7158.814
22500.00	49.32	-81.53	6646.747
22500.00	56.90	-73.94	5467.220
22500.00	56.90	-73.94	5467.220
22500.00	73.97	-56.87	3234.202
22500.00	82.19	-48.65	2366.907
22500.00	92.47	-38.38	1472.786
22500.00	147.95	17.10	292.497
22500.00	147.95	17.10	292.497
22500.00	184.93	54.09	2925.604
22500.00	246.58	115.73	13394.056
22500.00	246.58	115.73	13394.056
22500.00	739.73	608.88	370738.966

Local Government: OTUKPO

Family Income	Xi	Xi - Mean Xi	Xi - Mean Xi Sq
-----	-----	-----	-----
22500.00	739.73	608.88	370738.966
22500.00	739.73	608.88	370738.966
27500.00	27.40	-103.45	10700.949
27500.00	32.29	-98.55	9712.698
27500.00	34.77	-96.07	9229.292
27500.00	64.58	-66.26	4390.838
27500.00	64.58	-66.26	4390.838
27500.00	69.55	-61.30	3757.170
27500.00	69.55	-61.30	3757.170
27500.00	75.34	-55.50	3080.271
27500.00	75.34	-55.50	3080.271
27500.00	75.34	-55.50	3080.271
27500.00	82.19	-48.65	2366.907
27500.00	90.41	-40.43	1634.722
27500.00	90.41	-40.43	1634.722
27500.00	100.46	-30.39	923.311
27500.00	100.46	-30.39	923.311
27500.00	100.46	-30.39	923.311
27500.00	100.46	-30.39	923.311
27500.00	113.01	-17.83	317.872
27500.00	113.01	-17.83	317.872
27500.00	113.01	-17.83	317.872
27500.00	129.16	-1.68	2.836
27500.00	129.16	-1.68	2.836
27500.00	129.16	-1.68	2.836
27500.00	129.16	-1.68	2.836
27500.00	129.16	-1.68	2.836
27500.00	129.16	-1.68	2.836
27500.00	129.16	-1.68	2.836
27500.00	150.68	19.84	393.716
27500.00	150.68	19.84	393.716
27500.00	150.68	19.84	393.716
27500.00	150.68	19.84	393.716
27500.00	150.68	19.84	393.716
27500.00	150.68	19.84	393.716
27500.00	150.68	19.84	393.716
27500.00	150.68	19.84	393.716
27500.00	150.68	19.84	393.716
27500.00	150.68	19.84	393.716
27500.00	180.82	49.98	2497.927
27500.00	180.82	49.98	2497.927
27500.00	180.82	49.98	2497.927
27500.00	226.03	95.18	9060.136
27500.00	226.03	95.18	9060.136
27500.00	226.03	95.18	9060.136
27500.00	226.03	95.18	9060.136
27500.00	226.03	95.18	9060.136
27500.00	226.03	95.18	9060.136
27500.00	226.03	95.18	9060.136
27500.00	226.03	95.18	9060.136
27500.00	301.37	170.53	29079.530
27500.00	452.05	321.21	103177.241

Local Government: OTUKPO

Family Income	Xi	Xi - Mean Xi	Xi - Mean Xi Sq
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27500.00	452.05	321.21	103177.241
27500.00	452.05	321.21	103177.241
27500.00	452.05	321.21	103177.241
27500.00	452.05	321.21	103177.241
27500.00	452.05	321.21	103177.241
27500.00	904.11	773.27	597941.757
27500.00	904.11	773.27	597941.757
32500.00	41.10	-89.75	8054.481
32500.00	89.04	-41.80	1747.370
32500.00	89.04	-41.80	1747.370
32500.00	97.14	-33.71	1136.156
32500.00	118.72	-12.12	146.923
32500.00	133.56	2.72	7.393
32500.00	133.56	2.72	7.393
32500.00	152.64	21.80	475.206
32500.00	152.64	21.80	475.206
32500.00	152.64	21.80	475.206
32500.00	152.64	21.80	475.206
32500.00	213.70	82.86	6865.113
32500.00	213.70	82.86	6865.113
32500.00	213.70	82.86	6865.113
32500.00	267.12	136.28	18572.412
32500.00	267.12	136.28	18572.412
37500.00	44.03	-86.81	7536.209
37500.00	45.66	-85.18	7255.726
37500.00	49.32	-81.53	6646.747
37500.00	56.04	-74.80	5595.459
37500.00	56.04	-74.80	5595.459
37500.00	58.71	-72.13	5203.348
37500.00	64.89	-65.95	4349.983
37500.00	64.89	-65.95	4349.983
37500.00	77.05	-53.79	2893.134
37500.00	77.05	-53.79	2893.134
37500.00	94.84	-36.01	1296.431
37500.00	94.84	-36.01	1296.431
37500.00	136.99	6.14	37.744
37500.00	136.99	6.14	37.744
37500.00	176.13	45.28	2050.513
37500.00	176.13	45.28	2050.513
37500.00	176.13	45.28	2050.513
37500.00	205.48	74.64	5570.652
37500.00	205.48	74.64	5570.652
37500.00	246.58	115.73	13394.056
37500.00	308.22	177.38	31462.432
37500.00	308.22	177.38	31462.432
37500.00	308.22	177.38	31462.432
37500.00	308.22	177.38	31462.432
37500.00	308.22	177.38	31462.432
37500.00	308.22	177.38	31462.432
37500.00	410.96	280.12	78465.115
37500.00	410.96	280.12	78465.115
37500.00	410.96	280.12	78465.115

## Local Government: OTUKPO

Family Income	Xi	Xi - Mean Xi	Xi - Mean Xi Sq
-----	-----	-----	-----
37500.00	410.96	280.12	78465.115
42500.00	55.89	-74.95	5617.838
42500.00	93.15	-37.69	1420.684
42500.00	99.80	-31.04	963.379
42500.00	107.48	-23.36	545.741
42500.00	107.48	-23.36	545.741
42500.00	116.44	-14.40	207.484
42500.00	116.44	-14.40	207.484
42500.00	116.44	-14.40	207.484
42500.00	127.02	-3.82	14.585
42500.00	127.02	-3.82	14.585
42500.00	127.02	-3.82	14.585
42500.00	127.02	-3.82	14.585
42500.00	127.02	-3.82	14.585
42500.00	127.02	-3.82	14.585
42500.00	139.73	8.88	78.914
42500.00	139.73	8.88	78.914
42500.00	139.73	8.88	78.914
42500.00	155.25	24.41	595.774
42500.00	155.25	24.41	595.774
42500.00	155.25	24.41	595.774
42500.00	155.25	24.41	595.774
42500.00	155.25	24.41	595.774
42500.00	155.25	24.41	595.774
42500.00	155.25	24.41	595.774
42500.00	155.25	24.41	595.774
42500.00	155.25	24.41	595.774
42500.00	155.25	24.41	595.774
42500.00	155.25	24.41	595.774
42500.00	174.66	43.81	1919.744
42500.00	174.66	43.81	1919.744
42500.00	174.66	43.81	1919.744
42500.00	174.66	43.81	1919.744
42500.00	174.66	43.81	1919.744
42500.00	199.61	68.77	4728.757
42500.00	199.61	68.77	4728.757
42500.00	232.88	102.03	10410.950
42500.00	232.88	102.03	10410.950
42500.00	232.88	102.03	10410.950
42500.00	232.88	102.03	10410.950
42500.00	232.88	102.03	10410.950
42500.00	232.88	102.03	10410.950
42500.00	232.88	102.03	10410.950
42500.00	232.88	102.03	10410.950
42500.00	279.45	148.61	22084.755
42500.00	279.45	148.61	22084.755
42500.00	349.32	218.47	47730.197
47500.00	86.76	-44.08	1943.457
47500.00	130.14	-.71	.498
47500.00	141.97	11.12	123.765
47500.00	173.52	42.67	1821.013
47500.00	260.27	129.43	16752.467
47500.00	260.27	129.43	16752.467

Local Government: OTUKPO

Family Income	Xi	Xi - Mean Xi	Xi - Mean Xi Sq
-----	-----	-----	-----
47500.00	260.27	129.43	16752.467
47500.00	260.27	129.43	16752.467
47500.00	260.27	129.43	16752.467
47500.00	312.33	181.49	32937.210
47500.00	390.41	259.57	67375.706
52500.00	46.65	-84.19	7088.505
52500.00	46.65	-84.19	7088.505
52500.00	90.84	-40.00	1599.928
52500.00	115.07	-15.77	248.824
52500.00	132.77	1.93	3.720
52500.00	143.84	12.99	168.817
52500.00	156.91	26.07	679.589
52500.00	156.91	26.07	679.589
52500.00	156.91	26.07	679.589
52500.00	172.60	41.76	1743.905
52500.00	172.60	41.76	1743.905
52500.00	172.60	41.76	1743.905
52500.00	172.60	41.76	1743.905
52500.00	191.78	60.94	3713.461
52500.00	215.75	84.91	7209.839
52500.00	246.58	115.73	13394.056
52500.00	246.58	115.73	13394.056
52500.00	345.21	214.36	45951.422
52500.00	431.51	300.66	90398.960
57500.00	157.53	26.69	712.441
57500.00	171.86	41.01	1682.057
57500.00	270.06	139.22	19381.111
57500.00	270.06	139.22	19381.111
57500.00	945.21	814.36	663186.816
57500.00	1890.41	1759.57	3096080.629
60000.00	151.74	20.90	436.644
60000.00	281.80	150.96	22788.239
60000.00	328.77	197.92	39174.097
60000.00	328.77	197.92	39174.097
		-----	-----
Ave Fam. Inc.:	23718.59	-.00	10213897.863
Count (N) =	398	Mean Xi =	130.84

Local Government: USHONGO

Family Income	Xi	Xi - Mean Xi	Xi - Mean Xi Sq
-----	-----	-----	-----
5000.00	5.67	-248.37	61690.078
5000.00	7.15	-246.90	60957.714
5000.00	9.67	-244.37	59718.481
5000.00	10.27	-243.77	59423.471
5000.00	10.96	-243.08	59090.010
5000.00	16.44	-237.60	56456.096
5000.00	16.44	-237.60	56456.096
5000.00	18.26	-235.78	55591.469
5000.00	18.26	-235.78	55591.469
5000.00	20.55	-233.50	54520.068
5000.00	20.55	-233.50	54520.068
5000.00	20.55	-233.50	54520.068
5000.00	20.55	-233.50	54520.068
5000.00	20.55	-233.50	54520.068
5000.00	20.55	-233.50	54520.068
5000.00	20.55	-233.50	54520.068
5000.00	20.55	-233.50	54520.068
5000.00	23.48	-230.56	53157.870
5000.00	23.48	-230.56	53157.870
5000.00	27.40	-226.65	51368.415
5000.00	27.40	-226.65	51368.415
5000.00	164.38	-89.66	8038.864
5000.00	164.38	-89.66	8038.864
5000.00	164.38	-89.66	8038.864
5000.00	164.38	-89.66	8038.864
12500.00	15.81	-238.24	56756.945
12500.00	16.44	-237.60	56456.096
12500.00	17.12	-236.92	56131.079
12500.00	27.40	-226.65	51368.415
12500.00	37.36	-216.68	46951.684
12500.00	45.66	-208.38	43422.713
12500.00	68.49	-185.55	34428.848
12500.00	68.49	-185.55	34428.848
12500.00	82.19	-171.85	29532.935
12500.00	102.74	-151.30	22892.763
12500.00	102.74	-151.30	22892.763
12500.00	410.96	156.92	24622.516
12500.00	410.96	156.92	24622.516
17500.00	14.03	-240.01	57605.054
17500.00	19.18	-234.87	55161.657
17500.00	41.10	-212.95	45346.587
17500.00	82.19	-171.85	29532.935
17500.00	115.07	-138.97	19313.989
17500.00	115.07	-138.97	19313.989
17500.00	575.34	321.30	103233.172
22500.00	35.23	-218.82	47881.415
22500.00	92.47	-161.58	26107.294
22500.00	92.47	-161.58	26107.294
22500.00	147.95	-106.10	11256.800
22500.00	184.93	-69.11	4776.436
22500.00	739.73	485.68	235887.739
27500.00	15.86	-238.18	56730.522
27500.00	22.05	-231.99	53820.204



Local Government: USHONGO

Family Income	Xi	Xi - Mean Xi	Xi - Mean Xi Sq
-----	-----	-----	-----
27500.00	26.59	-227.45	51734.327
27500.00	31.18	-222.87	49669.735
27500.00	37.67	-216.37	46816.859
27500.00	53.18	-200.86	40344.882
27500.00	56.51	-197.54	39020.638
27500.00	56.51	-197.54	39020.638
27500.00	90.41	-163.63	26775.534
27500.00	113.01	-141.03	19889.341
27500.00	113.01	-141.03	19889.341
27500.00	113.01	-141.03	19889.341
27500.00	129.16	-124.88	15596.203
27500.00	180.82	-73.22	5361.367
27500.00	226.03	-28.02	784.889
27500.00	904.11	650.07	422586.217
32500.00	53.42	-200.62	40247.828
32500.00	56.24	-197.81	39127.526
32500.00	62.85	-191.19	36553.897
32500.00	82.19	-171.85	29532.935
32500.00	106.85	-147.19	21666.061
37500.00	47.42	-206.62	42693.865
37500.00	88.06	-165.98	27549.576
37500.00	94.84	-159.21	25346.742
37500.00	136.99	-117.06	13702.334
37500.00	154.11	-99.93	9986.741
37500.00	246.58	-7.47	55.770
37500.00	1232.88	978.83	958114.904
37500.00	1232.88	978.83	958114.904
37500.00	1232.88	978.83	958114.904
37500.00	1232.88	978.83	958114.904
37500.00	1232.88	978.83	958114.904
37500.00	1232.88	978.83	958114.904
42500.00	13.44	-240.61	57892.247
42500.00	39.92	-214.12	45848.038
42500.00	174.66	-79.39	6302.095
42500.00	1397.26	1143.22	1306945.114
42500.00	1397.26	1143.22	1306945.114
47500.00	47.32	-206.72	42733.461
47500.00	67.90	-186.15	34650.227
47500.00	1561.64	1307.60	1709819.234
52500.00	49.32	-204.73	41913.637
52500.00	115.07	-138.97	19313.989
52500.00	156.91	-97.13	9434.565
52500.00	246.58	-7.47	55.770
52500.00	1726.03	1471.98	2166737.265
57500.00	105.02	-149.02	22207.092
57500.00	111.20	-142.84	20404.016
57500.00	111.20	-142.84	20404.016
57500.00	111.20	-142.84	20404.016
57500.00	145.42	-108.63	11799.835
60000.00	36.53	-217.51	47312.163
60000.00	103.82	-150.22	22566.672
60000.00	131.51	-122.54	15015.175

Local Government: USHONGO

Family Income	Xi	Xi - Mean Xi	Xi - Mean Xi Sq
-----	-----	-----	-----
60000.00	164.38	-89.66	8038.864
60000.00	179.33	-74.72	5582.443
60000.00	179.33	-74.72	5582.443
60000.00	1972.60	1718.56	2953446.644
60000.00	1972.60	1718.56	2953446.644
Ave Fam. Inc.: 27316.51		.00	22131739.378
Count (N) = 109 Mean Xi = 254.04			

Local Government: AKWANGA

Family Income	Xi	Xi - Mean Xi	Xi - Mean Xi Sq
-----	-----	-----	-----
5000.00	13.70	-125.33	15708.444
5000.00	27.40	-111.63	12462.307
5000.00	27.40	-111.63	12462.307
5000.00	54.79	-84.24	7095.947
12500.00	29.35	-109.68	12029.210
12500.00	45.66	-93.37	8717.931
12500.00	45.66	-93.37	8717.931
12500.00	68.49	-70.54	4975.724
12500.00	82.19	-56.84	3230.806
12500.00	410.96	271.93	73944.261
12500.00	410.96	271.93	73944.261
17500.00	95.89	-43.14	1861.194
17500.00	115.07	-23.96	574.248
17500.00	115.07	-23.96	574.248
17500.00	575.34	436.31	190366.854
22500.00	73.97	-65.06	4232.720
27500.00	129.16	-9.87	97.485
27500.00	129.16	-9.87	97.485
32500.00	42.74	-96.29	9272.195
52500.00	287.67	148.64	22093.632
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Ave Fam. Inc.:	17000.00	.00	462459.192
Count (N) =	20	Mean Xi =	139.03

Local Government: KEANA

Family Income	Xi	Xi - Mean Xi	Xi - Mean Xi Sq
-----	-----	-----	-----
5000.00	6.58	-113.22	12818.474
5000.00	8.65	-111.14	12352.605
5000.00	16.44	-103.36	10682.398
5000.00	16.44	-103.36	10682.398
5000.00	27.40	-92.40	8537.165
5000.00	27.40	-92.40	8537.165
5000.00	27.40	-92.40	8537.165
5000.00	32.88	-86.92	7554.622
5000.00	32.88	-86.92	7554.622
5000.00	32.88	-86.92	7554.622
5000.00	41.10	-78.70	6193.399
5000.00	54.79	-65.00	4224.938
5000.00	164.38	44.59	1988.225
12500.00	7.34	-112.46	12646.237
12500.00	16.44	-103.36	10682.398
12500.00	17.87	-101.93	10388.963
12500.00	19.57	-100.22	10044.964
12500.00	21.63	-98.16	9636.294
12500.00	21.63	-98.16	9636.294
12500.00	25.68	-94.11	8856.525
12500.00	31.61	-88.18	7776.033
12500.00	31.61	-88.18	7776.033
12500.00	31.61	-88.18	7776.033
12500.00	31.61	-88.18	7776.033
12500.00	31.61	-88.18	7776.033
12500.00	34.25	-85.55	7318.369
12500.00	37.36	-82.43	6795.388
12500.00	51.37	-68.42	4681.868
12500.00	51.37	-68.42	4681.868
12500.00	51.37	-68.42	4681.868
12500.00	51.37	-68.42	4681.868
12500.00	58.71	-61.09	3731.454
12500.00	68.49	-51.30	2631.781
12500.00	82.19	-37.60	1413.930
12500.00	82.19	-37.60	1413.930
12500.00	102.74	-17.05	290.850
12500.00	102.74	-17.05	290.850
12500.00	102.74	-17.05	290.850
12500.00	136.99	17.19	295.574
12500.00	410.96	291.16	84776.977
17500.00	35.96	-83.84	7028.330
17500.00	44.26	-75.54	5705.828
17500.00	47.95	-71.85	5162.255
17500.00	47.95	-71.85	5162.255
17500.00	52.30	-67.49	4554.925
17500.00	71.92	-47.88	2292.134
17500.00	287.67	167.88	28182.751
22500.00	41.10	-78.70	6193.399
22500.00	147.95	28.15	792.488
22500.00	184.93	65.14	4242.889
27500.00	36.16	-83.63	6993.920
27500.00	47.58	-72.21	5214.187
27500.00	180.82	61.03	3724.402

Local Government: KEANA

Family Income	Xi	Xi - Mean Xi	Xi - Mean Xi Sq
-----	-----	-----	-----
32500.00	89.04	-30.75	945.744
32500.00	118.72	-1.07	1.150
32500.00	1068.49	948.70	900030.000
42500.00	232.88	113.08	12787.690
42500.00	279.45	159.66	25490.681
47500.00	173.52	53.72	2886.047
52500.00	1726.03	1606.23	2579985.593
60000.00	65.75	-54.04	2920.388
60000.00	78.90	-40.89	1671.987
60000.00	197.26	77.47	6001.017
		-----	-----
Ave Fam. Inc.:	18145.16	- .00	3956161.090
Count (N) =	62 Mean Xi =		119.79

Local Government: LANGTANG

Family Income	Xi	Xi - Mean Xi	Xi - Mean Xi Sq
-----	-----	-----	-----
5000.00	10.27	-91.75	8418.688
5000.00	14.94	-87.08	7583.522
5000.00	14.94	-87.08	7583.522
5000.00	16.44	-85.59	7325.481
5000.00	18.26	-83.76	7016.163
5000.00	20.55	-81.48	6638.898
5000.00	23.48	-78.54	6169.162
5000.00	23.48	-78.54	6169.162
5000.00	27.40	-74.63	5569.655
5000.00	27.40	-74.63	5569.655
5000.00	27.40	-74.63	5569.655
5000.00	32.88	-69.15	4781.815
5000.00	32.88	-69.15	4781.815
5000.00	41.10	-60.93	3712.646
5000.00	82.19	-19.84	393.451
5000.00	82.19	-19.84	393.451
5000.00	164.38	62.36	3888.293
5000.00	164.38	62.36	3888.293
5000.00	164.38	62.36	3888.293
12500.00	18.68	-83.35	6946.794
12500.00	34.25	-67.78	4594.237
12500.00	41.10	-60.93	3712.646
12500.00	41.10	-60.93	3712.646
12500.00	41.10	-60.93	3712.646
12500.00	45.66	-56.37	3177.045
12500.00	45.66	-56.37	3177.045
12500.00	45.66	-56.37	3177.045
12500.00	51.37	-50.66	2566.184
12500.00	68.49	-33.53	1124.545
12500.00	82.19	-19.84	393.451
12500.00	82.19	-19.84	393.451
12500.00	102.74	.71	.507
12500.00	102.74	.71	.507
12500.00	102.74	.71	.507
12500.00	136.99	34.96	1222.126
12500.00	410.96	308.93	95438.687
17500.00	11.28	-90.75	8234.865
17500.00	14.38	-87.64	7681.439
17500.00	30.28	-71.75	5147.517
17500.00	41.10	-60.93	3712.646
17500.00	71.92	-30.11	906.586
17500.00	82.19	-19.84	393.451
17500.00	82.19	-19.84	393.451
17500.00	95.89	-6.14	37.662
17500.00	95.89	-6.14	37.662
17500.00	95.89	-6.14	37.662
22500.00	33.62	-68.40	4679.035
22500.00	56.90	-45.13	2036.300
22500.00	56.90	-45.13	2036.300
22500.00	82.19	-19.84	393.451
22500.00	82.19	-19.84	393.451
22500.00	105.68	3.65	13.306

Local Government: LANGTANG

Family Income	Xi	Xi - Mean Xi	Xi - Mean Xi Sq
-----	-----	-----	-----
22500.00	147.95	45.92	2108.447
27500.00	50.23	-51.80	2683.144
27500.00	69.55	-32.48	1054.982
27500.00	129.16	27.13	736.098
27500.00	129.16	27.13	736.098
27500.00	226.03	124.00	15376.004
32500.00	71.23	-30.79	948.301
32500.00	97.14	-4.89	23.928
32500.00	97.14	-4.89	23.928
32500.00	118.72	16.69	278.692
32500.00	133.56	31.53	994.410
32500.00	152.64	50.61	2561.828
32500.00	213.70	111.67	12470.468
32500.00	1068.49	966.47	934056.087
37500.00	24.17	-77.85	6061.140
37500.00	28.67	-73.36	5381.078
37500.00	154.11	52.08	2712.557
42500.00	77.63	-24.40	595.448
42500.00	174.66	72.63	5275.139
42500.00	174.66	72.63	5275.139
42500.00	279.45	177.42	31479.515
47500.00	120.13	18.10	327.576
47500.00	223.09	121.06	14656.637
47500.00	260.27	158.25	25041.984
52500.00	156.91	54.88	3012.276
60000.00	98.63	-3.40	11.541
		-----	-----
Ave Fam. Inc.:	20192.31	- .00	1342708.922
Count (N) =	78	Mean Xi =	102.03

## Local Government: JOS EAST

Family Income	Xi	Xi - Mean Xi	Xi - Mean Xi Sq
-----	-----	-----	-----
5000.00	8.65	-201.94	40781.217
5000.00	9.13	-201.46	40587.319
5000.00	9.67	-200.93	40371.155
5000.00	9.67	-200.93	40371.155
5000.00	11.74	-198.85	39542.787
5000.00	11.74	-198.85	39542.787
5000.00	12.64	-197.95	39184.391
5000.00	12.64	-197.95	39184.391
5000.00	13.70	-196.90	38768.325
5000.00	14.94	-195.65	38279.473
5000.00	14.94	-195.65	38279.473
5000.00	14.94	-195.65	38279.473
5000.00	14.94	-195.65	38279.473
5000.00	16.44	-194.16	37696.944
5000.00	16.44	-194.16	37696.944
5000.00	18.26	-192.33	36991.031
5000.00	18.26	-192.33	36991.031
5000.00	18.26	-192.33	36991.031
5000.00	18.26	-192.33	36991.031
5000.00	20.55	-190.05	36118.022
5000.00	20.55	-190.05	36118.022
5000.00	20.55	-190.05	36118.022
5000.00	20.55	-190.05	36118.022
5000.00	23.48	-187.11	35010.901
5000.00	27.40	-183.20	33561.546
5000.00	27.40	-183.20	33561.546
5000.00	32.88	-177.72	31583.920
5000.00	41.10	-169.50	28730.072
5000.00	82.19	-128.40	16487.481
5000.00	164.38	-46.21	2135.531
5000.00	164.38	-46.21	2135.531
5000.00	164.38	-46.21	2135.531
5000.00	164.38	-46.21	2135.531
12500.00	12.84	-197.75	39106.210
12500.00	13.26	-197.34	38942.534
12500.00	14.68	-195.92	38383.965
12500.00	15.81	-194.79	37942.854
12500.00	17.87	-192.73	37143.923
12500.00	20.55	-190.05	36118.022
12500.00	24.17	-186.42	34752.906
12500.00	24.17	-186.42	34752.906
12500.00	25.68	-184.91	34191.869
12500.00	27.40	-183.20	33561.546
12500.00	31.61	-178.98	32034.965
12500.00	37.36	-173.24	30010.527
12500.00	45.66	-164.93	27202.982
12500.00	45.66	-164.93	27202.982
12500.00	45.66	-164.93	27202.982
12500.00	51.37	-159.23	25352.761
12500.00	51.37	-159.23	25352.761
12500.00	58.71	-151.89	23069.646
12500.00	68.49	-142.10	20193.040
12500.00	82.19	-128.40	16487.481

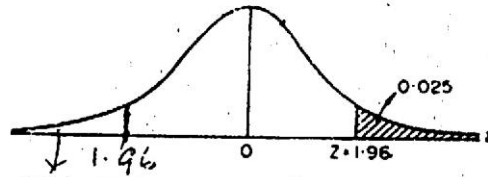


Local Government: JOS EAST

Family Income	Xi	Xi - Mean Xi	Xi - Mean Xi Sq
-----	-----	-----	-----
12500.00	102.74	-107.86	11632.839
12500.00	136.99	-73.61	5418.294
12500.00	136.99	-73.61	5418.294
12500.00	410.96	200.36	40145.547
12500.00	410.96	200.36	40145.547
12500.00	410.96	200.36	40145.547
12500.00	410.96	200.36	40145.547
12500.00	410.96	200.36	40145.547
12500.00	410.96	200.36	40145.547
12500.00	410.96	200.36	40145.547
12500.00	410.96	200.36	40145.547
17500.00	191.78	-18.81	353.987
17500.00	191.78	-18.81	353.987
17500.00	575.34	364.75	133040.447
22500.00	67.25	-143.35	20548.519
22500.00	147.95	-62.65	3925.043
22500.00	147.95	-62.65	3925.043
22500.00	184.93	-25.66	658.634
22500.00	184.93	-25.66	658.634
22500.00	739.73	529.13	279979.257
22500.00	739.73	529.13	279979.257
22500.00	739.73	529.13	279979.257
27500.00	36.16	-174.43	30426.168
27500.00	100.46	-110.14	12130.543
27500.00	226.03	15.43	238.148
27500.00	226.03	15.43	238.148
27500.00	904.11	693.51	480961.978
27500.00	904.11	693.51	480961.978
27500.00	904.11	693.51	480961.978
27500.00	904.11	693.51	480961.978
27500.00	904.11	693.51	480961.978
32500.00	24.85	-185.75	34501.832
32500.00	59.36	-151.23	22871.915
32500.00	118.72	-91.87	8440.814
32500.00	1068.49	857.90	735988.609
37500.00	176.13	-34.47	1188.189
37500.00	176.13	-34.47	1188.189
37500.00	205.48	-5.12	26.173
37500.00	246.58	35.98	1294.559
37500.00	410.96	200.36	40145.547
42500.00	116.44	-94.16	8865.542
47500.00	78.08	-132.51	17559.741
57500.00	945.21	734.61	539652.019
60000.00	1972.60	1762.01	3104669.985
		-----	-----
Ave Fam. Inc.:	16171.88	0.00	9960919.825
Count (N) =	96	Mean Xi =	210.60

### Appendix D

Areas under the Normal Curve



Example

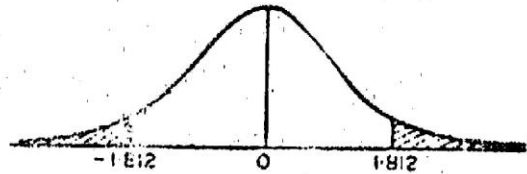
$$Z = \frac{X - \mu}{\sigma}$$

$$P(Z > 1.96) = 0.025$$

z	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
0.0	.5000	.4960	.4920	.4880	.4840	.4801	.4761	.4721	.4681	.4641
0.1	.4602	.4562	.4522	.4483	.4443	.4404	.4364	.4325	.4286	.4247
0.2	.4207	.4168	.4129	.4090	.4052	.4013	.3974	.3936	.3897	.3859
0.3	.3821	.3783	.3745	.3707	.3669	.3632	.3594	.3557	.3520	.3483
0.4	.3446	.3409	.3372	.3336	.3300	.3264	.3228	.3192	.3156	.3121
0.5	.3085	.3050	.3015	.2981	.2946	.2912	.2877	.2843	.2810	.2776
0.6	.2743	.2709	.2676	.2643	.2611	.2578	.2546	.2514	.2483	.2451
0.7	.2420	.2389	.2358	.2327	.2296	.2266	.2236	.2206	.2177	.2148
0.8	.2119	.2090	.2061	.2033	.2005	.1977	.1949	.1922	.1894	.1867
0.9	.1841	.1814	.1788	.1762	.1736	.1711	.1685	.1660	.1635	.1611
1.0	.1587	.1562	.1539	.1515	.1492	.1469	.1446	.1423	.1401	.1379
1.1	.1357	.1335	.1314	.1292	.1271	.1251	.1230	.1210	.1190	.1170
1.2	.1151	.1131	.1112	.1093	.1075	.1056	.1038	.1020	.1003	.0985
1.3	.0968	.0951	.0934	.0918	.0901	.0885	.0869	.0853	.0838	.0823
1.4	.0808	.0793	.0778	.0764	.0749	.0735	.0721	.0708	.0694	.0681
1.5	.0668	.0655	.0643	.0630	.0618	.0606	.0594	.0582	.0571	.0559
1.6	.0548	.0537	.0526	.0516	.0505	.0495	.0485	.0475	.0465	.0455
1.7	.0446	.0436	.0427	.0418	.0409	.0401	.0392	.0384	.0375	.0367
1.8	.0359	.0351	.0344	.0336	.0329	.0322	.0314	.0307	.0301	.0294
1.9	.0287	.0281	.0274	.0268	.0262	.0256	.0250	.0244	.0239	.0233
2.0	.0228	.0222	.0217	.0212	.0207	.0202	.0197	.0192	.0188	.0183
2.1	.0179	.0174	.0170	.0166	.0162	.0158	.0154	.0150	.0146	.0143
2.2	.0139	.0136	.0132	.0129	.0125	.0122	.0119	.0116	.0113	.0110
2.3	.0107	.0104	.0102	.0099	.0096	.0094	.0091	.0089	.0087	.0084
2.4	.0082	.0080	.0078	.0075	.0073	.0071	.0069	.0067	.0066	.0064
2.5	.0062	.0060	.0059	.0057	.0055	.0054	.0052	.0051	.0049	.0048
2.6	.0047	.0045	.0044	.0043	.0041	.0040	.0039	.0038	.0037	.0036
2.7	.0035	.0034	.0033	.0032	.0031	.0030	.0029	.0028	.0027	.0026
2.8	.0026	.0025	.0024	.0023	.0023	.0022	.0022	.0021	.0020	.0019
2.9	.0019	.0018	.0018	.0017	.0016	.0016	.0015	.0015	.0014	.0014
3.0	.0013	.0013	.0013	.0012	.0012	.0011	.0011	.0011	.0010	.0010

### Appendix E

Percentage Points of the *t* Distribution



Example  
 For  $\nu = 10$  degrees of freedom:  
 $P(t > 1.812) = 0.05$   
 $P(t < -1.812) = 0.05$

$\alpha$	.25	.20	.15	.10	.05	.025	.01	.005	.0005
1	1.000	1.376	1.963	3.078	6.314	12.706	31.821	63.657	636.619
2	.816	1.061	1.386	1.886	2.920	4.303	6.965	9.925	31.598
3	.765	.978	1.250	1.638	2.353	3.182	4.541	5.841	12.941
4	.741	.941	1.190	1.533	2.132	2.776	3.747	4.604	8.610
5	.727	.920	1.156	1.476	2.015	2.571	3.365	4.032	6.859
6	.718	.906	1.134	1.440	1.943	2.447	3.143	3.707	5.959
7	.711	.896	1.119	1.415	1.895	2.365	2.998	3.499	5.408
8	.706	.889	1.108	1.397	1.860	2.306	2.896	3.355	5.041
9	.703	.883	1.100	1.383	1.833	2.262	2.821	3.250	4.781
10	.700	.879	1.093	1.372	1.812	2.228	2.764	3.169	4.587
11	.697	.876	1.088	1.363	1.796	2.201	2.718	3.106	4.437
12	.695	.873	1.083	1.356	1.782	2.179	2.683	3.055	4.316
13	.694	.870	1.079	1.350	1.771	2.160	2.658	3.012	4.221
14	.692	.868	1.076	1.345	1.761	2.145	2.634	2.977	4.140
15	.691	.866	1.074	1.341	1.753	2.131	2.602	2.947	4.073
16	.690	.865	1.071	1.337	1.746	2.120	2.583	2.921	4.015
17	.689	.863	1.069	1.333	1.740	2.110	2.567	2.898	3.965
18	.688	.862	1.067	1.330	1.734	2.101	2.552	2.878	3.922
19	.688	.861	1.066	1.328	1.729	2.093	2.539	2.861	3.883
20	.687	.860	1.064	1.325	1.725	2.086	2.528	2.845	3.850
21	.686	.859	1.063	1.323	1.721	2.080	2.518	2.831	3.819
22	.686	.858	1.061	1.321	1.717	2.074	2.508	2.819	3.792
23	.685	.858	1.060	1.319	1.714	2.069	2.500	2.807	3.767
24	.685	.857	1.059	1.318	1.711	2.064	2.492	2.797	3.745
25	.684	.856	1.058	1.316	1.708	2.060	2.485	2.787	3.725
26	.684	.856	1.058	1.315	1.706	2.056	2.477	2.779	3.707
27	.684	.855	1.057	1.314	1.703	2.052	2.470	2.771	3.690
28	.683	.855	1.056	1.313	1.701	2.048	2.463	2.763	3.674
29	.683	.854	1.055	1.311	1.699	2.045	2.456	2.756	3.659
30	.683	.854	1.055	1.310	1.697	2.042	2.447	2.750	3.646
40	.681	.851	1.050	1.303	1.684	2.021	2.423	2.704	3.551
60	.679	.848	1.046	1.296	1.671	2.000	2.390	2.660	3.460
120	.677	.845	1.041	1.289	1.658	1.980	2.358	2.617	3.373
$\infty$	.674	.842	1.036	1.282	1.645	1.960	2.326	2.576	3.291

Source: This table is abridged from Table III of Fisher & Yates: *Statistical Tables for Biological, Agricultural and Medical Research* published by Oliver & Boyd Ltd., Edinburgh, and by permission of the authors and publishers.