

**Crossing the Poverty Line:
The Density of Sudanese Middle Class Public
Sector Employees**

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1 Introduction

1.1 Background

As is known from the growing body of literature on development, one of the most challenging and pressing issues facing the development community at a global level is how to reduce poverty. Indeed, reducing poverty is seen by many as a fundamental objective of development. Yet, achieving this objective requires greater and deeper knowledge about the poor: their number, characteristics, economic conditions, locations, the way they live, in addition to the way they respond to their changing environment and socio-economic situation.

Possessing this knowledge is the key to a selective attack on poverty. A selective attack on poverty is defined in terms of the elimination of the symptoms of poverty, such as - *inter alia* - a progressive reduction and eventual elimination of malnutrition, disease, illiteracy, squalor, unemployment and inequalities (Mahbub Ul Hag 1976). In addition, it also means alleviating the suffering of those who have fallen victims to economic crisis, and man-made as well as natural calamities. Thus, governments and voluntary agencies are expected to respond quickly by finding strategic options to relieve those victims, who are generally the masses of the urban poor, the displaced, and refugees.

It is common knowledge that, since independence, many developing countries, including Sudan, have been adopting different policies to reduce poverty. Although some of them have recorded a remarkable rate of increase in economic growth, most of them have failed to reduce the rates of poverty or sustain a process of that reduction, and some have even maintained the status quo of the colonial era (Mohamed 1992). Accordingly, social development and poverty alleviation have not yet been realised. Consequently, the issue of poverty has been a controversy and a challenge both to the students of poverty and governments alike.

Although there have been development efforts for many decades, it is debated that there have been no tangible improvements in people lives. Instead, living standards were impoverished rather than enhanced. This is because the prevailing policies and strategies, especially the stabilisation and adjustment policies adopted with or without the assistance of the IMF and the World Bank, were aimed at the realisation of economic efficiency regardless of their negative socio-economic impact, say for instance, on the employment and living standards of different vulnerable groups (UNICEF 1987).

The policies and strategies of stabilisation and adjustment have enlarged the poverty cycle in which a large segment of the local population was trapped. In particular, it is observed that those who were previously classified as being above an acceptable minimum level of subsistence, such as the middle-class, are now continuously falling below that level and becoming the "new poor".

Some of the development economists have also argued that most of the development planners aim at attaining a high growth rate in the Gross National Product (GNP) regardless of the real goal of development, which is economic growth with justice. Economic growth is not an end in itself; it has human, social and economic magnitudes. This supports the view that development is a many-sided dynamic process which should benefit the most needy segment of the local

population. In many developing countries, however, the masses are complaining that development has not reached them. Instead, growth has been attended by high rates of unemployment and absolute and relative deprivation. This calls for putting the needs of the poor as a top priority; economic growth and efficiency should come later.

Ul-Haq has put this aptly when he said "We are taught to take care of our GNP as this will take care of poverty. Let us reverse this and take care of poverty, as this will take care of GNP. In other words, let us worry about the content of GNP rather than its rate of increase" (Ul-Haq 1976). Ul-Haq adds: what is needed is a direct attack on mass poverty and new development strategies built on the gratification of basic needs.

This statement reflects the changing emphasis of development from macro economic to more micro-economic measures. This conception of development entails a participatory approach in which people share in taking the initiative, decision-making and control of resources. This implies that development should rotate around people rather than people adhering to what is seen as a development requirement. Accordingly, the idea of aggregate economic growth, as an acknowledged objective of development, has been reconsidered because of the drawbacks of the Gross National Product (Fields 1980). Therefore, other micro-economic aspects of development, with special emphasis on poverty, have replaced the outmoded ones.

This study is an attempt to highlight the living conditions of the Sudanese middle-class. The middle-class is defined by characteristics other than income. Our definition of the word *class* is synonymous with what is known as stratum. According to Abdel Ghaffar (1984), the uneven and unequal development between regions and ethnic groups has brought about a striking emergence of a variety of new socio-economic strata in the Sudanese society. These strata, in turn, can be "referred to as more or less, as classes in the very general sense of the term" (Abdel Ghaffar 1984). By this it is meant that the term *class* is not to be politically and socially loaded. This is simply because our purpose is to specifically determine the poor middle-class and, then, to investigate the poverty situation within this class. The target groups of this study are the fixed income groups (the salaried) of the urban public sector in Greater Khartoum. These groups were taken as representatives of the middle-class.

On the basis of the above, the middle-class in Sudan consists of many strata. The terms *middle class*, *middle strata* and *intermediate strata* will be used interchangeably with the same weight.

Due to the persistent economic crisis, this class has witnessed dramatic changes. Faced with these changes, the members of this class have adopted many coping strategies to close the gap between their fixed income and the increasing cost of living. Consequently, many people who were previously classified as being above the poverty line, such as the intermediate strata, have now fallen below that level. Their economic and social status has, therefore, deteriorated accordingly.

In this paper, Chapter One introduces the research problem, objectives, hypotheses, sources of data and the methods of its collection and analysis.

Chapter Two mainly provides the literature review, with emphasis on the definitions of poverty and poverty-related concepts. This chapter also covers the theoretical orientation, working definitions as well as the method of estimating the poverty line for Sudan.

Chapter Three describes the data collected from the field and other relevant secondary sources. Poverty line estimates, poverty measures and behaviour are also treated here.

Chapter Four presents a qualitative description of the coping practices applied by the middle-class to bridge the gap between income and expenditure. Chapter Five provides the concluding remarks and observations.

1.2 The Problem

Since independence in 1956, the Sudan has been adopting different policies that failed to achieve concrete development until the late 1960's. In the early 1970's, the government had very ambitious policies, with special emphasis on agricultural development as the Sudan was then planned to become the breadbasket of the Arab World. Those policies failed to realise their objectives and the State turned to the International Monetary Fund (IMF) in the late 1970's. The economic crisis was accelerated by war in the South and by environmental hazards such as droughts and desertification since the early 1980's. There is no doubt that the persistent state of crisis pertaining in the present day Sudan is deeply related to the population dynamics represented by the inter-country migration and the brain drain.

The result was a growing economic crisis and an accelerating poverty. Thus, the then prevailing strata, which has been evolving since the colonial era, has been undergoing major changes due to the rising poverty line which came to cover many groups that were in the high and the middle-level of the Sudanese society.

Monitoring the poverty situation in the Sudan has revealed that "poverty in the Sudan as measured by all poverty ratios has increased rather substantially between 1978 and 1986. In absolute sense, the results show that the number of poor households increased from 1.6 million in 1978 to 2.6 million in 1986, thus recording an annual rate of increase of 6.2%" (Ali 1992). According to Ali, the absolute poverty lines for the years 1978 and 1986 were Ls. 777 and 6,384 respectively. This means that the poverty line has also been increasing at an annual rate of 30.1%.

Given this increase, it can be concluded that the poverty line, in an absolute sense, has been shifting upwards to incorporate a wider segment of the middle class which has vanished or is at least in the process of disappearing.

1.3 Rationale for the Study

Most studies on poverty, both at the local level and world wide, are devoted to the poor, i.e., to those who have already fallen below the poverty threshold. It is perceived in these studies that economic development is a dynamic process which requires, among other things, an increase in real per capita for a long duration of time (Meier 1976). This implies that attention should be

paid not only to those classified as poor but also to other groups, the fixed income groups in our case, who are affected by any upward move in the poverty line.

Unfortunately, the changing socio-economic conditions in the Sudan, have had negative consequences on the different socio-economic groups. Economically and socially, the middle class in the Sudan has originally constituted an important category. Due to economic crisis and the aggravation of the state of poverty, members of this class are continuously falling below the poverty line and can now be classified as the "new poor." Therefore, their conditions, constraints, and needs should be identified as a basis for policy-making.

1.4 Objectives

This study has been undertaken with the following objectives:

- To analyse the poverty situation in urban Sudan
- To identify the impact of the poverty situation on the class structure
- To evaluate the State policies towards the poor and to show how the economic policy-making can be given a social dimension
- To review the relationship between the evolution of the economic structure in Sudan during the last decades and the emerging class structure
- To show how the middle-income households try to close the gap between their fixed incomes and the increasing poverty line, i.e., to identify the coping strategies of this group under conditions of increasing of poverty.

1.5 Hypotheses

The study is based on the following hypotheses:

- The causes of poverty are of a national and international nature as they are generally related to the trends of privatisation within the context of implementing economic liberalisation policies.
- Economic difficulties lead to inflation, decrease real income, and continuously lower the living standards of most income groups, especially the poor.
- Urban poverty is generally a reflection of rural poverty.
- In the course of economic deterioration, the commercial sector tends to grow at the expense of the middle class, and, thus, merchants move towards the upper level of the class structure while the salaried groups move below the minimum standard of living.

- The middle class is in the process of disappearing as most of its members are joining the lower income groups.
- The evolution of the class structure in Sudan is reversible.

However, this does not imply that we will definitely be able to prove all of these hypotheses. Those, which we will not be able to prove will be recommended for further investigation.

1.6 Methodology

This study uses both quantitative and qualitative modes of analysis in its attempt to show the impact of the poverty on the middle class. The qualitative analysis of poverty is the investigation of the repercussions of policy changes on the living conditions of the middle-class population whereas quantitative poverty analysis measures the extent of the poverty.

This stems from the view that there is a strong link between measurement and policy issues (Ravallion 1992). It is our conviction that "measurement" and "policy issues" are inseparable and should be treated as twins with equal weight.

1.6.1 Data Sources and Collection Methods

To show the incidence and severity of poverty among the middle-class, both primary and secondary data were used. Unfortunately, there is a lack of secondary-documented data related to the middle class. To fill this gap, we had to rely on the primary data collected from the field using a core questionnaire. Our questionnaire was designed to provide statistical information on the middle class households' demographic composition, income and expenditure, consumption, socio-economic changes and how they responded to their environment and the state's economic policies. For this, our reference person was the head of the household who is the breadwinner and bondsman of the family as is customary in the Sudanese society.

1.6.2 Scope and Sample Frame of the Study

The target group of the study was the intermediate strata which are one of the vulnerable groups that need to be protected. Also within these strata, a great attention was given in this study to the salaried groups. The fieldwork was conducted in Greater Khartoum because of the concentration of the public sector institutions, which are the largest employers of these strata.

Because the target population is very large, the multi-stage stratified sampling technique was used. Selection of the final sampling units passed through three main stages as follows:

- (a) listing different institutions in the public sector, many of which were randomly selected;

- (b) listing randomly selected departments within the sample institutions;
- (c) categorising the structure of employees in each department according to occupation, as a stratification factor, from which the final sampling units were randomly selected proportionately.

The selected final sampling units were 250 cases of those who fell above [sic] Grade-9. Only 130 of the selected samples had actually responded, which in turn reflects their poverty.

2 Poverty: Concepts and Definitions

Poverty as an endemic problem in LDC's has its negative impact on and implications for a large segment of the population of these countries. Thus, identification of the poverty-affected population counts top priority in designing any consistent poverty combating policy. This, for instance, requires the definition of concepts, the selection of a methodology, and the identification of measurements to be used in order to determine the existence and magnitude of poverty. In this way, the determination of who should be the focus of our concern is the starting point and first requirement towards a proper conceptualisation of poverty (Sen 1981). This addresses the identification problem - a question that is governed by subjective appraisals and value judgements and cannot, in most cases, be answered objectively (Hauff and Kruse 1994).

Conceptualising poverty objectively requires determining a minimal level of needs considered as basic at a given place and time. Deficiency in one's resources to meet these needs is regarded as the test of his/her poverty. The consideration of place and time is important because some needs may be basic only at certain times and/or places and considered luxuries at others. Consequently, those who are unable to satisfy these needs may be described as poor in the former case and non-poor in the latter.

The issue of the manifestation of poverty has recently started to receive a great deal of attention. Poverty has increasingly been studied by academics and international organisations such as the World Bank and some of the UN specialised agencies. Concepts, definitions, measurements and different policies and strategies for alleviating poverty have been recommended and abundantly cited in the literature.

The World Bank, for example, has exerted a great endeavour in the area of development by allocating massive resources to provide data and statistics on poverty-stricken areas. For instance, the 1990 World Development Report of the World Bank has been devoted entirely to the question of poverty. This report raises the foremost question of "who the poor are". Accordingly, knowledge about the poor becomes the most critical one if governments are to be able to reduce poverty and/or evaluate the failure or success of their economic policies to alleviate it.

In spite of the growing concern about the issue of poverty among economists, there is no consensus on a precise definition of poverty. A simple formulation which has almost universally been quoted is that of "the inability to lead a decent life" (Schubert 1994). Indeed what constitutes and is meant by a "decent life" could elicit different answers as it is a subjective issue.

This is evident from the fact that the perception of poverty has evolved historically and varies tremendously from one culture to another (WB 1990a). It also implies not having enough to eat, a low standard of living, a high mortality rate, low life expectancy, high rates of unemployment, squalor, illiteracy, social exclusion, marginalisation, persecution as well as psychological and physical losses.

Most of the literature on poverty treats it as an absolute and a relative notion. On the one hand, poverty can be regarded as relative when the "poor" are seen in relation to others, or what is known as relative deprivation, i.e., relative to an appropriate comparative group. On the other, absolute poverty exists when the poor are seen as a fixed category regardless of the others. Nonetheless, most of the literature discussing development and policy show that absolute poverty conditions are more dominant in developing countries while relative poverty prevails more in the developed world (Ravallion 1992).

However, a fairly new development is the subjective definition of poverty, which is based on the idea that the opinion of people concerning their living condition is ultimately the decisive factor when defining poverty (de Vos and Gerner 1991).

2.1 The Concept of Absolute Poverty

The absolute poverty approach defines the minimum level of income needed to maintain life. In the context of Sen's 'biological approach', poverty can be defined as insufficiency of income to meet basic food needs, i.e., it is a situation in which a person is below an objectively delineated absolute minimum. Having defined poverty in such a way, one can calculate minimum energy requirements and how these can be most cheaply satisfied. This can be done by translating the minimum nutritional requirements into food items and then determining the cost based on the prevailing prices to find out the minimum income required for survival.

Nevertheless, measuring poverty on this basis poses many problems. First, there is a predicament in determining 'minimum nutritional requirements' since these depend on physical features, environmental conditions and work habits. Second, the conversion of minimum nutritional requirements into food catalogues is also dependent on the subject's consumption habits. Finally, a real difficulty also arises in determining the minimum criteria for the necessary non-food items to be calculated in determining whether an individual is poor or otherwise (Sen 1981).

The definition of poverty on the basis of minimum needs has itself been criticised for its restriction to the minimum requirements for material efficiency, since other intangible needs are also necessary for existence. Hence, some scholars believe that poverty should be defined in terms of a set of 'basic needs' rather than 'minimum needs' (Culter 1984). However, poverty needs to be defined to include more than a set of physical needs and hence be expanded to include other basic needs, namely access to clean water and sanitation, clothing and housing, good health, education as well as productive employment and income (House 1986).

Absolute poverty, consequently, can be viewed as "the inability to secure the minimum basic needs for human survival" (Seragedin 1989). This means that there is no minimal provision of food to keep oneself alive and to be able to earn one's livelihood. Those affected, therefore, are

unable to satisfy their primary needs and can no longer lead a life of decency. Furthermore, when people are classified as poor, there will, certainly, be a boundary between them and the remainder of the community. Hence, poverty in both its forms, absolute and relative, can be defined as discrimination applying to many dimensions of economic, social and political spheres of life (Hemmer 1994).

This definition has a close link with the so-called 'basic needs' approach. For instance, to determine what constitutes 'basic needs', the starting point is the common three necessities for survival, namely food, clothing and housing. The poor, according to this definition, are those who lack one or more of these necessities, or who are unable to secure that income required to fulfil these necessities. However, this definition seems to be restricted in the sense that it excludes many people who are branded as poor (*The Courier* 1994). This is because many people may be able to fulfil these needs today, but they may ultimately be pushed into homelessness and/or famine tomorrow. Therefore, sustainability in meeting basic needs is required whether by virtue of, for instance, access to releasable assets, social security benefits or any other means of private insurance (Ahmed 1991). Accordingly, the competence of a person to meet basic needs depends on his/her earning capacity as well as his/her degree of vulnerability to socio-economic changes as well as to man-made or natural catastrophes. In order to strengthen his earning capacity, an individual must be capable of coping with, for example, illnesses and emerging forms of knowledge. This means that human needs are not restricted to the three 'essentials' mentioned earlier. Rather, education and health care, for example, are also indispensable for subsistence. This is because with knowledge one can cope with technological changes and hence stimulate his earning ability (*The Courier* 1994).

Furthermore, people's needs can be broadly broken into hard material (physical) and non-material (socio-cultural) needs. Thus, with deficiency in the provision of minimum physical needs, poverty is referred to as *primary* absolute poverty while it is referred to as *secondary* absolute poverty in the case of socio-cultural deficiency. In this way, people are regarded as absolutely poor if their minimum material or non-material needs are inadequately satisfied (Schubert 1994).

Poverty is that state when various economic, social and political needs of certain social groups are insufficiently met. But, the poor are not homogeneous. On the contrary, there are many poverty groups reflecting different needs, interests and levels of being disadvantaged (Hemmer 1994). Among such groups, for example, are found women (especially lactating and pregnant mothers), children, youth, the disabled, the rural and urban poor as well as ethnic and religious minorities. Therefore, what is considered as a minimum for subsistence for each of them and the ability to secure this minimum is variable and subject to inevitable arbitrariness.

According to Sen, the identification exercise is common and is done by specifying a set of basic/minimum needs where failure to fulfil them could be regarded as the test of poverty. However, the basic question he raises centres around whether to specify relevant basic/minimum needs in terms of commodities or on the basis of the characteristics of these commodities, i.e., calories, vitamins, proteins, etc. It is obvious that characteristics of the commodities required are more important than the type of commodities. Therefore, the conversion process is impossible except under special circumstances. This is because certain characteristics may be obtained from

different commodities and that the components of some basic needs are specified in terms of commodities while others are designated in terms of pure characteristics (Sen 1981). Despite this, we can distinguish the poor from the non-poor according to their ability to secure these minimum/basic needs.

In a World Bank Development Report, poverty is defined as "the inability to attain a minimal standard of living" (WB 1990a). This means that the failure to meet a minimal standard of living may either be expressed as inability to produce sufficient food or to have a compensated work for the purchase of enough food (House 1986). According to this report, "Poverty is not the same as inequality.... Whereas poverty is concerned with the absolute standard of living of a part of society, inequality refers to relative standard across the whole society" (World Bank 1990a). So, this is one way by which one can differentiate between absolute and relative poverty. This is due to the fact that absolute poverty represents the rawest and worst form of the problem of poverty (Bibangambah 1985), and that there is nothing as sad as being unable to attain the subsistence minimum, let alone the sufficient level. Furthermore, since relative poverty is affected by income disparities, programmes to confront such patterns of poverty should focus on reducing these disparities. But, to eliminate absolute poverty, programmes should be directed towards the removal of the challenge of being beneath adequate standards to preserve human dignity.

The World Bank's definition of poverty addresses three principal questions about the measurement of the standard of living, the meaning of a minimal standard of living and the expression of the overall severity of poverty in a single measure (World Bank 1990a). The first and the second questions are concerned with the identification problem, i.e., the identity of the poor and the extent of their poverty. The third question is about what is known as 'aggregation' problem, i.e., the way to use individual poverty measures to construct an aggregate poverty index.

2.1.1 Measuring the Standard of Living

The fundamental approach towards a pertinent identification of the poor assumes that there exists a predetermined and well-defined level of welfare below which an individual is to be identified as poor. The more this level becomes depressed, the poorer the person is considered to be.

From experience and in most development literature, the prevalent measure of an individual's well-being has been known to be the 'standard of living'. Furthermore, the standard of living is also used in developing countries to reflect specific forms of commodity deprivation, particularly food insecurity (Ravallion 1992). Consequently, it is the approach that has implicitly been adopted by the World Bank (1990a) with special emphasis on consumption as an approximation of welfare. This suggests that either of the two variables (consumption or income) can be used in order to evaluate an individual's level of welfare.

Consumption, particularly that attributable to marketable goods, can be divided into two broad categories: food and non-food consumption. Hence, in measuring the standard of living, special considerations are attached to the individual's

consumption behaviour. Thus, it becomes important to determine a certain level of consumption to be reached if an individual is not to be deemed as poor.

According to welfare economics, economic welfare is measured by the utility function as it asserts that increased consumption of goods and services boosts welfare, and that utility function is equal for all consumers (Glewwe and van der Gaag 1988).

It is obvious that individuals' aspiration is the maximisation of their utility functions by increasing their consumption of goods and services. This is the approach that is used by the welfare economists in measuring the standard of living by emphasising "aggregate expenditure on goods and services consumed, valued at appropriate prices, and including consumption from own production" (Ravallion 1992).

One basic question in using consumption as an index for the standard of living is: How can we determine a minimal standard of living? This is fundamental when trying to quantify poverty. According to Sen, the specification of certain 'consumption norms' or of a 'poverty line' may do part of the job. Accordingly, those whose consumption standards fall below the norms or whose incomes lie below that line are regarded as poor (1981).

In trying to measure the standard of living, the World Bank (1990a) adopts the household income and expenditure per capita as adequate criteria. The measure is assumed to include household's own consumption and production, which are not recorded in any official statistics. Thus, to distinguish between the poor and the non-poor, it is important to define "a standard of consumption which must be reached if a person is not to be deemed poor. This standard is called the poverty line (Ali 1992).

2.1.2 Defining Poverty Lines

Establishing the extent of poverty requires the delimitation of a minimum income level that would guarantee life. Therefore, as long as the standard of living is the issue, the most straightforward way to determine the poverty line is through the specification of a certain basket of goods which are purchasable at a specific price level to represent the subsistent minimal standard of living (Atkinson 1991). This level of income is referred to as the poverty line. Poverty line, therefore, represents the minimal sum of money needed to keep oneself out of the poverty trap. In fact, the determination of a poverty line is the first step towards the quantification of poverty. But, the determination of this poverty line in numerical terms is basically a function of the way poverty is defined (qualitative terms).

The debate about the appropriateness of absolute or relative poverty is simply about the most fitting poverty line (World Bank 1990b). It is true that poverty lines exist, but there is, nevertheless, disagreement over where, when and how

they can be pinpointed. In fact, many groups of poverty lines have been defined depending on poverty conceptions, e.g. absolute, relative and subjective poverty lines (Ravallion 1992). Experience and applied research have indicated that "the most relevant, and widely used, definition for the less developing countries is the absolute poverty line" (Ali 1992).

The most commonly used technique to define an absolute poverty line is "to estimate the cost of a bundle of goods deemed assure [sic] that basic needs are met... For developing countries, the most important component of basic needs poverty line is generally food expenditure necessary to attain some recommended food energy intake. This is then augmented by a modest allowance for non-food goods" (Ravallion 1992). This means that in estimating poverty levels, both food and non-food items are to be accounted for in the costing exercise. Needs other than food which enable an individual to participate in the daily social life are not less important.

The poor, according to such a poverty line, are those who are unable to earn that income which is enough to cover their basic needs, i.e., cannot meet the minimum nutritional requirements which are defined as a basic food basket (Sen 1976).

According to the *World Development Report* (World Bank 1990), a consumption-based poverty line "can be thought of as comprising of two elements: the expenditure necessary to buy a minimum standard of nutrition and other basic necessities, and a further amount that varies from country to country, reflecting the cost of participating in the every day life of society. The cost of minimum adequate calorie-intakes and other necessities can be calculated by looking at the prices of the foods that make up the diet of the poor."

2.1.3 Measuring Poverty

One of the very first axiomatic poverty measures in the literature was initiated by Sen (1976a). According to this, it is presumed that a poverty measure can be divided into two main steps: identification and aggregation. By identification is meant distinguishing the poor from the non-poor. The aggregation stage addresses the question of how we can bring together the individual measures of poverty into an amalgamated or composite index that gives a symptomatic characterisation of the poverty group.

Like the identification problem, the aggregation problem is also critical for answering the question of 'who are the poor?'. This is because it is senseless to distinguish the poor from the non-poor without determining the extent, depth as well as severity of their poverty. The question that arises then is one about requirements to be satisfied by the selected class of measures.

Usually, a measurement of poverty is launched when the poverty threshold is decided on. When defining a poverty threshold, one can investigate how sensitive

it is to any shifting of that threshold. In addition, the number of those who fall below that poverty line could also be considered. Hence, poverty can be measured in terms of incidence, depth and severity.

The incidence of poverty is generally taken to be the percentage of that segment of the population living below the poverty level. This is reflected by what is known as the head-count ratio, **H**, which can then mathematically be expressed as follows:

$$H = q/n \quad (1)$$

where **q** is the number of income earners below the poverty level, and **n** is the total population.

This index, **H**, only reflects the incidence of poverty, i.e., it estimates the percentage of the population that fall below a minimum level of income deemed necessary to fulfil a predetermined minimum level of basic needs. However, it fails to express the extent to which the poor units are below the poverty threshold (i.e., the severity of poverty). Moreover, it also fails to show the distribution of income even among the poor units.

Nevertheless, the index that is to be used in order to contemplate the existence and magnitude of poverty should, however, reflect and be sensitive to three basic factors. These are:

- (a) the incidence of poverty, i.e., the ratio of the poor living below the poverty line;
- (b) the intensity of poverty, i.e., the extent to which the incomes of the poor lie below the poverty line; and
- (c) the distribution of income among the poor, i.e., the degree of inequality (WB 1990b).

One useful measure that satisfies these three dimensions is what was suggested by Foster-Geneer-Thorbecke, hereafter FGT (1984). The FGT poverty index could be expressed in the following equation:

$$Pv_{\alpha} = (1/n) \sum [(Y_p - Y_i) / Y_p]^{\alpha} \quad (2)$$

Where **Y_p**, **Y_i** and **q** denotes the poverty line, average income of the poor, and the number of income earners below the poverty line respectively. This index takes the poverty gap of each poor unit as a fraction of the poverty line $(Y_p - Y_i) / Y_p$, raises it to the power α , sums it over the poor units and divides it by the total population. This measure takes into consideration the incidence of poverty as well as the degree of inequality among the poor, which is governed by the value of α .

which, in turn, determines how sensitive the measure is to income transfer among the poor (World Bank 1990b).

Many poverty measures can be derived as a special case of FGT. If we take the parameter $\alpha = 0$, then the FGT simply becomes the head-count ratio, **H**, and can, therefore, be expressed as follows:

$$PV_{\alpha=0} = q/n = H \quad (3)$$

Where **H** is the head-count ratio reflecting the incidence of poverty, i.e., the proportion of the income-receiving units below the poverty line. Alternatively, when $\alpha = 1$, the index becomes:

$$PV_{\alpha=1} = (1/n) \sum [(Y_p - Y_i) / Y_p] = HI \quad (4) \text{ where } I = (1/q) \sum (Y_p - Y_i) / :$$

which is simply the average of the poverty gaps expressed as a fraction of the poverty line. **PV_{α=1}**, or **HI** reflects both the incidence of poverty (as reflected by **H**), and its intensity (as indicated by **I**).

The FGT index also has another advantage attributed to its sensitivity to income distribution among the poor population, i.e., the severity of poverty. This shows how income can be transferred from a poor unit to a poorer one. This is the case when ($\alpha = 2$).

2.2 The Concept of Relative Poverty

As has been mentioned above, current theories on poverty distinguish between the absolute and relative notions of poverty. Relative poverty is said to exist if the satisfaction of the basic needs is insufficient or at an inadequate level than that of others (Schubert 1994). This does not necessarily mean that those who are involved live below a minimum level of life worthy of human dignity, but that their provision with goods and services is relatively worse and that they are disadvantaged to an unacceptable extent because of the distribution structures prevailing within their society (Hemmer 1994). Thus, while one may have more than enough income to sustain his life, he is regarded as being in poverty if this income is low compared to the rest of the community. For example, taking the lower 30 or 40 percent of the income distribution as a comparative group, the relatively poor may have almost secured the minimum basic needs, but they are effectively marginalised from adequate participation in the mainstream social activities (Seragedin 1989). This reflects the fact that relative poverty is characterised by multidimensionality.

Relative poverty, therefore, means that some people are poorer than the rest of the community, i.e., there exists a gap not only between the poorest and the richest sections of the population but also among the poor. This becomes a real problem when "the difference between the richest and the poorest is intolerable in the sense that the poor are deprived of many of the goods and services which others take for granted" (Bibangmah 1985). The relatively poor, therefore, are those whose incomes are lower compared to that of the rest of the community even if they are in

a position to secure an adequate level for survival. In other words, they live outside the border which the community regards as an acceptable or adequate level of subsistence.

Depending on the perception of the poor, what is considered as adequate for survival remains an open question. This is because of the variation in consumption habits, work conditions, environmental and climatic conditions.

2.3 Theoretical Orientation

Poverty is one of the manifestations of underdevelopment and a characteristic of the poor countries to a greater extent. Either of the two is a reflection of the other. There is, therefore, a causative relationship between the penetration of poverty and underdevelopment. Poverty, in fact, has its negative impact on the unfortunate segment of the population classified as poverty-affected. But the extent and degree of these effects are mainly related to the prevailing poverty conditions. Consequently, this prevalence is dependent on the way poverty is conceived. This, for instance, requires delineating the working concepts such as the poverty line and the measurement to be used.

2.3.1 Working Concept of Poverty

As has already been discussed in the previous sections, poverty can either be labelled as an absolute or relative concept. For most developing countries, including Sudan, the most suitable and widely recognised concept of poverty is the absolute notion of poverty.

Accordingly, the working concept of poverty applied in this study is the absolute notion, which is defined by the World Bank as the inability to reach a minimal standard of living (1990a). This definition, in turn, requires demarcating the standard of living. In this respect, the World Bank (1990a) uses household income and expenditure as adequate criteria for the standard of living as long as they include the household's own production and consumption. Thus, to distinguish between the poor and non-poor, it is important to draw a specific standard of consumption which must be achieved if an individual is not to be classified as poor. This standard of consumption is then referred to as the poverty line as a close approximation for the standard of living.

Specifying both concepts of poverty and poverty line is the first step towards a proper identification of the poor population. The poverty line therefore, represents the minimum cash needed to purchase basic food, i.e., a basic food list or basket. However, to reach this minimum income, there are some technical steps to be followed within the framework of Sen's biological approach. Therefore, it is first important to determine the minimum nutritional requirements needed by a person per day, then to translate these into food items, and cost them at the prevailing prices. This is, of course, subject to the arbitrariness involved in selecting the basic food items and a difficulty in defining minimum nutritional intake requirements. This is because what is considered as a minimum for survival is

governed by consumption habits, climatic and work conditions, and the cultural and social value system of each society.

To avoid this difficulty, this study would apply the outstanding technical methodology suggested by Anand and Nur (1988) in estimating the absolute poverty line for the Sudan.

2.3.2 The Poverty Line for Sudan

Two approaches have been used in estimating absolute poverty line for the Sudan. These are the approach suggested by Anand and Nur (1988) and the approach used by the Sudanese Trade Unions Congress (STUC). Both of these methods have a common aim, which is to determine the minimum level to be achieved by a non-poor.

The methodology developed by Anand and Nur (1988) for estimating the absolute poverty line for the Sudan is assumed to pass through many steps. Ali (1992) provides a summary of these steps, which are listed here as follows:

- (a) computing the average minimum calories needed by a person per day according to age and sex groups;
- (b) obtaining the overall average calorie requirements per person by using the groupings in a reference census or survey (in this case, 1973 census age-sex groups were used);
- (c) constructing alternative food baskets composed of items common in poor people's diets, such that each basket would yield the minimum required calorie content per person;
- (d) costing the resulting baskets at the relevant prices and calculating their average to obtain the minimum cash requirements for survival (Anand and Nur; 12 food baskets were constructed and priced at the prevailing March/April 1984 prices);
- (e) taking the computed minimum cost as the poverty line and using an expenditure multiplier, non-food items could be accounted for.

This is a poverty line clearly reflecting the minimum food items needed per person. It is important that other non-food items are also included in the calculation. Therefore, the food-poverty line should be augmented to make a modest allowance and adjustment for other needs. This can be done using either the expenditure multiplier, or the assumption that one-third of the income is spent on food items. In this way, our consumption-based poverty line will allow for both food and non-food items.

The framework which has been provided in Anand and Nur (1988) can be "conveniently applied to compute Poverty Line for the whole of Sudan, and also for any of its regions, provinces, and sectors at any given time on the basis of the 'relevant' food prices that prevail there at the time". In computing the poverty line, the prevailing relevant prices will be used. It is worth mentioning that some studies drew on Anand and Nur's methodology, most important of which were by Ali (1990, 1992, 1993, 1994). The absolute poverty lines obtained on the basis of this method were Ls. 777 and 6384 per household per annum for the years 1978 and 1986 respectively (Ali 1993). However, from these figures, it is clear that the poverty line is sensitive to price fluctuations over time. These fluctuations will definitely aggravate the problem of poverty. To study the impact of the increasing poverty on the middle class, it is nonetheless important to specify the working concept of this class within the framework of this study.

2.3.3 Concept of "Middle Class" Defined

It is "fallacious to say that Sudanese society is still a classless society" (Abdel Ghaffar 1984). There are upper, middle and lower classes in the Sudan. In this study, the middle class is defined by characteristics other than income. Our fundamental assumption is that the poverty line is the border which separates the middle from the lower level of the class structure. Once the poverty line is drawn, the middle class will comprise what lies immediately above that margin up to a certain point where the upper level of the class structure is also assumed to start. Thus, we rely mainly on the poverty margin to represent the boundary dividing the lower and the middle level of the class structure.

The middle class is assumed to have certain characteristics and attributes. The members are characterised by certain mental abilities and technical know-how¹ exhibited in their day-to-day endeavour to satisfy their needs, i.e., to escape the inevitable poverty cycle. They have certain levels of education and/or training as well as skills required by both public and private institutions. The economic and social status they enjoy as well as their living standards exceed those of the urban workers.

Niblock (1987) gave the middle class the name "intermediate strata", where members "hold economic role - whether by virtue of having a training needed by the government and private sector, or whether by virtue of having access (by ownership, control or family position) to a sphere of economic activity that enables them to escape from the cycle of inevitable poverty in which the urban and the rural poor were trapped. This definition, however, exempts this class from being poor. Therefore, our definition will be based on the characteristics rather than on income as this enables us to monitor the changing position of this class with persisting poverty.

According to the above criteria, the middle class in Sudan is assumed to comprise the salaried middle-level and junior employees, the petty merchants, tenant and

peasant farmers, and pastoralists who depend on employed labour to carry out their activities. Senior personnel and professionals were classified, according to Niblock (1987), as being at the upper level of the class - the incipient bourgeoisie. But, with the now changing socio-economic conditions, most of them will not be able to satisfy such classification, and we will consider them to be at the middle level of the class structure. We will narrow the scope of our middle class to the salaried personnel, both in the private and public institutions. More specifically, our conception of the word class is synonymous with what is known as stratum. This is because the uneven and unequal development between regions and ethnic groups has brought about a striking emergence of a variety of new socio-economic strata in the Sudanese society. These strata, in turn, can be "referred to as more or less, as classes in the very general sense of the term" (Abdel Ghaffar 1984), i.e., the term class is not to be politically and socially loaded. This is mainly so as to avoid controversy about the word class, for our purpose is simply to determine the poor middle class and, then, to investigate the poverty situations within this class.

On the basis of the above, the middle class in the Sudan is constructed of many strata, and hence our use of the terms middle class, middle strata and intermediate strata will be used interchangeably with the same weight.

3 Poverty Profile: the middle-class Scenario

3.1 Welfare Distribution

The appropriate starting point to identify the poor from the non-poor is the choice of both welfare and poverty indicators. The chosen indicators of welfare should satisfy the properties of being observable, measurable, computable, comparable and distributable. The indicators that can satisfy these properties are income and consumption expenditure.

To deal with issues of the identification of the poor as well as welfare distribution, consideration must be given to the choice of the unit of analysis, i.e., whether to use individual or household units. In most cases, it is more appropriate to study poverty in terms of individuals rather than households. Since it is too difficult to obtain data on individual's consumption as explicit from household consumption, data is generated at the household level and from this poverty is, then, scrutinised in terms of individuals.

Another technical problem that relates to and should be tackled in the process of measuring welfare distribution is to design an appropriate way of reflecting the actual welfare levels among households. In this case, to move from households to individuals as well as to determine a realistic welfare distribution map, considering age and sex in the demographic composition of households is of a great importance. This is because the welfare of any two households with the same size and income/expenditure levels may differ greatly in terms of age and sex. This, in turn, is due to the fact that nutritional needs of individuals are highly influenced by age and sex. Hence, to calculate an exact household welfare level, its distribution should be adjusted for

differences in age and sex. This requires the conversion of the household size from head-count into its male adult-equivalent, i.e., standardising the family size. The process of conversion can be undertaken using Nur's (1996) index according to the following equation:

$$A(C^h) = \sum a_i m_i^h \quad (1)$$

where c^h is a vector for household characteristics; $A(c^h)$ denotes the male adult-equivalent of household size that is equal to the weighted sum of head-count members of the household; and a_i represents a male adult-equivalent index; I is an adjustment factor to convert child and females into their adult male-equivalent; A_i conditional to the characteristics C_i of age and sex. To obtain vector c^h , six characteristics were identified as shown in Table 1.

Table 1. Categorisation of Age and Sex Characteristics

Category	Characteristics (Age and Sex)
C1	= adults male (20-over)
C2	= adults female (20-over)
C3	= adolescents male (10-19)
C4	= adolescents female (10-19)
C5	= child male (00-09)
C6	= child female (00-09)

Source: Adopted from Nur (1996).

Based on the above classification, the conversion factor a_i ($i=1...6$) of households members into their adult male-equivalent is computed on the basis of the daily average energy and protein requirements for the six age-sex groups. The results obtained by Nur (1996) for the Sudan is stated in Table 2.

Table 2: The Adult-Equivalent Indices for the Sudan

Age Group	Sex	
	Males	Females
Children (0 - 9)	0.55	0.48
Adolescents (10 - 19)	0.95	0.79
Adults (20 - Over)	1.00	0.75

Source: Nur (1996).

Having converted the family size from head-count into adult male-equivalent, we then work out a welfare distribution for the middle class on the basis of our data. This is done by dividing the

household income/expenditure by its standard converted size to arrive at the income/expenditure per adult-equivalent capita. The results of the computation are shown in Table 3 below.

Table 3. Welfare Distribution for the Middle Class: Income and Expenditure (000) per Month/Adult-Equivalent (%).

Welfare Level	Income Indicator		Expenditure Indicator	
	Adult Equivalent	Cumulative	Adult-Equivalent	Cumulative
(Ls. 000)	%	%	%	%
Less than 9	13.8	13.8	00.8	00.8
09 - 18	27.7	41.5	15.4	16.2
18 - 27	19.2	60.8	25.4	41.5
27 - 36	08.5	69.2	24.6	66.2
36 - 45	13.8	83.1	17.7	83.8
45 - 54	04.6	87.7	07.7	91.5
54 - 63	04.6	92.3	06.2	97.7
63 - 72	00.0	92.3	00.8	98.5
72 - 81	01.5	93.8	00.0	00.0
81 - Over	06.2	01.0	01.5	100.0
Total	100.0	100.0	100.0	100.0

Source: Own calculations; survey data February 1996.

It is clear from Table 3 that, on the one hand, there is a tendency for the middle class to concentrate mainly in the lower brackets in terms of the income indicator, and on the other, a lower degree of concentration for the same level when considering the expenditure criterion. This indicates that people's fortunes decrease with greater rates in terms of income and at smaller rates in terms of expenditure. This suggests that, for the same distribution level, expenditure exceeds income, i.e., there exists a gap between income and expenditure. This is evident from the results as they indicate that the expenditure of both the poor and non-poor exceeds their incomes by 2.7-folds (aggregated). Thus, as will be discussed later in the section dealing with the coping strategies, this level of welfare has been achieved through utilisation of sources that are reported in the households' expenditure.

Excess expenditure over income, in itself, reflects the deteriorating economic conditions of the middle class, which can be attributed directly to income decline. According to the classical

economic wisdom, this can be explained on the basis that they have a high propensity to consume and a low desire to save. This view ignores the difference between the desire to save and the inability to do so. This also does not necessarily mean that they are irrational, since they are trying to strike a balance between their limited income and the increasing cost of living. A group with such living conditions and a growing income-expenditure gap is necessarily compelled to deplete other resources for the purpose of bridging that gap and attaining a minimum level of consumption.

A minimum cost of living, therefore, is a mere subsistence level that should be achieved for survival. For instance, those who are identified as poor, on the basis of the welfare distribution (Table 3), are those who fall in the categories below the level of Ls. 27,000/month. This means that 60.8% and 41.5% of our middle class are poor on the basis of income (aggregate) and expenditure respectively. These results have been obtained by employing a poverty indicator represented by a poverty line that is fixed over the welfare frequency so as to distinguish the poor from the non-poor.

3.2 Choice of Poverty Indicators

The second fundamental issue is the choice of the poverty indicator that separates the poor from the non-poor. In this respect, a money-metric poverty line is derived to represent the borderline that sets apart the poor from the non-poor on the basis of our welfare map. We determine an absolute poverty line that covers minimum basic needs of food items and also allows for the qualification of non-food items. The food poverty-line is objectively decided using Anand and Nur (1988) method, the steps of which were summarised in Chapter Two. Thus, we first compute the food poverty-line using the following equation:

$$Z_f = P^i F \quad (2)$$

Where Z_f is the food poverty line, P^i is commodity price vector and F is the food basket common in people's diets. For the food items, 12 food baskets were chosen by Anand and Nur (1988) on the basis of the pattern of consumption and nutritional content of Sudanese food. We first focus on determining a lower level poverty indicator (subsistence standard) in the following section to establish an absolute food poverty-line.

3.2.1 Estimates of Absolute Poverty Line

The absolute food poverty-line shows the minimum cash necessary to buy the minimum nutritional requirements by a person for his survival. Using the commodity price vector of February 1996, the estimates of the absolute poverty line food basket, (Z_f), are shown in Table 4.

Table 4. Absolute Food Poverty-Line Per Person Per Annum (February 1996)

Item	Unit	Quantity	Price/unit	Cost/head
Milk	Litre	043.8	0.55	24.09
Cooking Oil	Litre	004.2	1.31	05.50
Bread	Piece	306.6	0.05	15.33
Beans	Kg.	015.3	0.80	12.24
Sugar	Kg.	011.0	1.01	11.11
Dura	Kg.	108.0	0.30	32.40
Okra	Kg.	008.4	4.35	36.42
Meat	Kg.	018.2	1.40	25.48
Onions	Kg.	020.3	0.20	04.06
Salt	Kg.	006.1	0.10	00.61
Tea	Kg.	000.7	3.27	02.28
Total Cost of food per person/annum				Ls169.556

Source: Author's calculations using February 1996 Prices.

Table 4 defines the absolute poverty line which is based on the minimum subsistence standard of living for an individual per month, denoted as Z_f . This sum is equal to Ls. 14,129 per person/month. At this stage, there are two other items that should be included in the calculation of the food costs, namely: an estimated dish of 'salad' and a cooking fuel. This is estimated from our data on household's expenditure after converting the household size into standard adult-equivalent. The standard family size, according to our conversion, is 5.29. The cost of 'salad' and cooking fuel per household per month is Ls. 24,000. The share of an individual per month of these two items has been calculated as equal to Ls. 4,536.9 per person/month. Adding this figure, the food poverty line becomes Ls. 18,666.6. But, since poverty is multidimensional, we will allow for non-food items such as clothing, shelter, education, transport and health, using certain adjustment factors ($1+a$) as shown in the following equation:

$$Z = (1+a) Z_f \quad (3)$$

where: a = The average household expenditure on non-food items as a proportion of households' average total expenditure.

Using our recorded household expenditure figures, the factor (a) is computed as equals to (0.43%). Therefore, the resultant poverty line (Z), using the equation (3), that allows for both food and non-food items, is computed as follows:

$$Z = (1.436) (18,666.6) = \text{Ls. } 26,805.2 \quad (4)$$

For the purpose of calculation, we will round off this figure to Ls. 27,000. Therefore, anyone who spends/receives less than this estimated poverty line is identified as poor in this study. Then, it remains to determine the level of existence and magnitude of poverty among the middle class.

3.3 Existence and Magnitude of Poverty

Once welfare is distributed and the poverty margin is delineated, the level of existence and magnitude of poverty can then be ascertained with the assumption that those who have a welfare level below the poverty line are regarded as poor. The number of poor units (**q**) below the poverty line is represented as a proportion of the total population (**n**).

Our main objective here is to investigate the anti-poverty consequences of coping mechanisms attributable to income and expenditure measures. Accordingly, the existence and magnitude of poverty will be studied from three dimensions:

- (a) Poverty without coping mechanisms, with emphasis on normal (basic) income (Y_n) from salaries as a measuring stick;
- (b) Poverty with coping practices with consideration of subsidiary incomes from sources other than salary, such as secondary income (Y_s), family contribution (Y_f) and other incomes (Y_o) from remittances, transfers, donation, businesses, rents, etc.; and
- (c) Poverty with coping practices on the basis of expenditure.

To apply the first two income criteria, the specified income components will be added up to the basic (normal) salary income (Y_n) so as to show the anti-poverty effects attributable to the resultant (total) income levels. To perform the exercise, we applied the following three equations 5, 6 and 7 respectively for the three levels of income:

$$Y_1 = _ [Y_n + Y_s] \text{ (5)}$$

$$Y_2 = _ [Y_1 + Y_f] \text{ (6)}$$

$$Y_t = _ [Y_2 + Y_o] = \text{Total income (7)}$$

Applying these stages, we end up with five main indicators to show the existence and magnitude of poverty among the middle class. These are, as specified above: income (Y_n), income (Y_1), income (Y_2), and income (Y_t), in addition to the expenditure indicator. The latter four indicators include coping practices, while the first one does not. A summary of the computations using equations 5, 6 and 7 is provided in Table 5 below.

Table 5: Existence and Magnitude of Poverty (with and without coping mechanisms)

Welfare Indicator	% Poor	Anti-poverty Effect	Cumulative Effect	Expenditure-Income Fold
Income (Y_n)	93.8%	00.0%	00.0%	2.26
Income (Y_1)	81.5%	12.3%	12.3%	1.96
Income (Y_2)	77.7%	03.8%	16.1%	1.87
Income (Y_t)	60.8%	16.9%	33.0%	1.45
Expenditure	41.5%	19.3%	52.3%	1.00

Source: Author's calculations.

As indicated by the figures in Table 5, a substantial ratio (93.8%) of the public sector middle class would have vanished without applying different coping mechanisms. This also indicates that the middle class is in the process of disappearing. However, despite the different combinations of socio-economic crises, this class tries to move upward, away from the poverty line. This is reflected in its adoption of various anti-poverty measures aimed at utilising the different accessible income sources other than the basic income (Y_n).

From Table 5, we note that by applying the anti-poverty effect of Y_1 and Y_2 , the poor middle-class was reduced by 33.0%, mainly attributable to income. Taking the expenditure indicator, the reported anti-poverty effect was calculated at 52.3%. This is an evidence of the strong effect of the households' own income generation mechanisms and expenditure behaviour that are not recorded in any official statistics.

The crises of the structural adjustment programmes (SAPs) and economic liberalisation policies have also brought about a considerable drop in real income and in the state of social welfare of the middle class. Both products' and money markets have been liberalised while the labour market has been left frozen as wages and salaries of the middle class are centrally controlled and fixed by the government. Indeed, the government's policy in this respect is a demand-management policy, which neglects the supply side of the economy. The result is that prices are always outrunning salaries. Even when salaries are increased, prices tend to accelerate further by a higher margin. The deteriorating conditions of the labour market have their direct implications to the socio-economic conditions of the middle class, which is finding it difficult to enjoy favourable living standards. The middle class, therefore, has been relegated to a category of the 'new poor'. This, in turn, indicates that this class would in due course exhaust both its physical and human resources to maintain the status quo of its expenditure levels prior to 1990.

The above description indicates that members of this class consume more than their disposable income as most of them are still have certain ambitions different from those of the "old poor". That is why we are referring to them as the "new poor" since they have different socio-economic characteristics and consumption patterns.

3.3.1 Measuring Middle-Class Poverty

Poverty is measured in terms of incidence, depth and severity. The incidence of poverty is measured by the ratio of those who fall below the poverty line; its depth by income gap of the poor from the poverty line; and the severity by means of income distribution among the poor reflected by the "Gini Coefficient". One poverty index that satisfies all these three measures is the one suggested by Foster-Gereer-Thorebeck (FGT) (1988). We have used FGT equation (8) from which we derived other equations (9-16) to satisfy our objectives.

For measuring the incidence of poverty, we used the FGT formula to compute the head-count ratio (**H**) of the poor units (**q**). For the depth (intensity) of poverty, the income-gap (**I**) will be accounted and these two indices, (**H**) and (**I**), are direct derivations of the FGT index in the form of a poverty gap (**PV_a**) as shown in the following equations:

$$PV_a = \frac{1}{n} \sum_{i=1}^n [Z - Y_i]_+^a \quad (8)$$

when setting $a=1$, the index is reduced to its form of the head-count ratio:

$$PV_{a=0} = q = H \quad (9)$$

Taking $a=1$, the index becomes a multiplication of both the head-count and the income-gap measure reflecting both the incidence and depth of poverty:

$$PV_{a=1} = \frac{1}{n} \sum_{i=1}^n [Z - Y_i] \quad (10)$$

$$= \frac{1}{n} \sum_{i=1}^n [1 - Y_i] \quad (11)$$

$$= [q - \bar{Y}] \quad (12)$$

$$= [1 - \bar{Y}] \quad (13)$$

$$q^z$$

where \bar{Y} is the average income of the poor, q , (Y) (14)

$$q$$

$$= [1 - \bar{Y}] = HI \quad (15)$$

where $[1 - \bar{Y}] = I$, is the "income-gap ratio" (16) Z

To apply this framework to our data, we will use both the income and expenditure indicators as measuring rods. This requires the substitution of the average income of the poor middle-class in equation (15) when taking income and average expenditure, i.e., taking expenditure as a yardstick. This means that we consider, exclusively, the income- and expenditure-gap ratios since our main objective is to show how middle-class members respond to poverty by adopting coping practices and/or anti-poverty consumption behaviour.

The summary of the computation of poverty levels on these bases, using the above equations, is summarised in Table 6 below.

Table 6: Poverty Indicators for the Poor Middle Class

Indicator	Mean Values (Ls)	Poverty Index		
		H(%) = q/n	I=(1-Y/Z)	PV ₍₁₎ = HI
Income (Y _n)	09,166.60	93.8	0.66	0.62
Income (Y ₁)	09,742.96	81.5	0.64	0.52
Income (Y ₂)	11,649.00	77.7	0.57	0.44
Income (Y _t)	14,344.62	60.8	0.47	0.29
Expenditure	19,471.37	41.5	0.28	0.12
Poverty Line				Ls. 27,000

Source: Author's calculations.

Regarding the normal income (Y_n) in Table 6, it can easily be observed that the expenditure of the middle-class is higher than its normal income (Y_n) by a substantial ratio of over 112%. We can also note that this income is below the poverty line by over 177% as reflected in the income-gap ratio I. This means that for the majority (93.8%) of the members of the middle class, who fall below the poverty line on the basis of their normal income (Y_n), to be lifted above the poverty line, salaries need to be at least tripled. When the same exercise includes other indicators (coping mechanisms), we observe the systematic drop in the ratio of those who are below the poverty line and also the narrowing of the gap between income and expenditure.

What the above implies is that the classical term "middle class" that has historically been associated with government employees in the Sudan (*effendiya*) is no longer valid since only 6.2% of them are above the poverty line and these are leading civil servants and top-level managers of parastatals.

On the basis of the above, we note that poverty has resulted in the redivision of the, mostly urban, social classes in Sudan into two main classes: the very rich few and the large majority poor. The middle-class mobility in that process, however, was mainly in a downward path.

It has always been assumed that, over time, economic development would lead to higher per capita income and that the number of the poor below the poverty line would decrease or, at the worst, would remain static. With the middle class falling below the poverty line, the picture has been reversed. Hence, the assumption is invalidated.

The economic crisis of the 1980's, accompanied by the universal catastrophes, man-made and/or natural, and the liberalisation and structural reform policies adopted by the State in the 1990's have brought about a total absence of the economic and social redistributive function of the state. This is clearly reflected in the poor services delivered and the significant fall, in real terms, of the salaries of the public sector middle class. The middle class has, as a result, considerably lost its social status, suffered severe deterioration in working and living conditions in addition to the weak income levels relative to other classes in the society.

4 ADAPTATION TO POVERTY: Middle-Class Adjustment Strategies for Survival

The prevalence of conditions of poverty has brought about the emergence of quite a number of complex adjustment mechanisms that enable households to escape or withstand the impact of poverty. As has been revealed by our data, the expenditure of the middle-class households exceeds their normal income by over 177%. In what follows, we will try to trace the coping and survival mechanisms or strategies applied by poor middle class to close the gap between their fixed incomes (salaries) and ever-rising expenditure on basic needs.

When addressing the question of coping and survival strategies, one assumes that a small deficit in the household budget can lead to the mobilisation of its 'sedentary' resources. In this respect, coping and survival practices refer to the ordinary mechanisms people pursue to mobilise resources to handle difficult situations. This is because as long as there is a deficit, people find themselves compelled to engineer possible alternatives to bridge the gap between their income and expenditure either by increasing income to match expenditure or to reduce expenditure (i.e., consumption) according to the level of their income. Thus, the concepts of coping and survival practices describe the ways in which the poor increase their earnings in order to realise the minimum standard of living.

Usually, household economy embodies production, consumption and exchange activities. This household economy is a function of the number of household members, their demographic composition (characteristics), their activities, ownership of resources and the way these resources are utilised. Households in the Sudan are characterised by extended families. So it becomes the primary objective of the household economy to maintain food security and minimise exposure to the risks of budget deficit. The secondary objectives include provisions for the children's education, health care, support for the old parents, guests, and provision for their future security. This implies that while coping practice is a short-term response, survival strategies are long-term responses. Therefore, households, groups or individuals choose the appropriate ways they

perceive suitable to organise themselves and their resource endowments to balance their income and expenditure and probably make some savings. In this case, saving should be seen basically as a "postponed consumption" rather than a form of accumulation.

In a crisis economy, coping and survival mechanisms are highly influenced by a number of factors such as the prevailing socio-economic formation, socio-cultural value system, beliefs, social networks, ability to mobilise resources, personal motivation, degree of economic vulnerability, ownership and access to productive assets, availability of alternative job opportunities and the economy of scale.

In a stratified society characterised by multiplicity and marginality, like that of the Sudan, the nature of response to socio-economic changes becomes very multifarious. So it would be misleading to speak of it in terms of a holistic generalisation or a unified form of response to crisis. This elicits a multitude of perceptions of different categories towards factors relating to their living conditions vis-à-vis resource endowment, exchange entitlement, work conditions and social linkages. These factors, among others, constitute the determinants to the most suitable ways of response.

To cope with poverty, the Sudanese middle class uses a variety of quite complex allocation mechanisms to reorganise resource use. According to our survey results, several coping and survival strategies that are applied by the middle class have been identified. To show the means of adjustment to economic crisis and poverty, we have identified two periods of time when the middle class started to suffer from budget deficit (Table 7). These periods are: pre-1989 and 1989-and-after. We chose 1989 as a base time because it is the starting period of the aggressive implementation (in 1990) of the privatisation and economic liberalisation policies in the Sudan. According to our survey results, about 77% of the middle class started to experience an income-expenditure gap after 1989, with the introduction of the economic liberalisation policies. However, the process may have started prior to that with the introduction of IMF stabilisation and reform policies that started since late 1970s.

Table 7: Periods of Deficit Penetration in the Middle Class Households' Budget

Period	% of Households
Prior to 1989	23.1
1989 & after	76.9
Total	100.0

Source: Survey data, February 1996.

In dealing with the Sudanese middle-class adjustment mechanisms when coping with poverty, three stages have been identified. The first stage of the adjustment measures is the engagement in a source generating supplementary income. Those who are engaged in this form represent 69.2% of the middle class involved in six supporting income sources (Table 8). Revenue from businesses includes revenue from transport, trade, and agricultural activities. Domestic production includes in-door household activities and handicrafts production. Rent of property

includes rent of whole house, part of a house or house-attached estate. Finally, the external support mechanisms include remittances, transfers and donations.

Table 8: Percentage of Middle-class Households according to Supplementary Income Sources

Source	HH prior to 1989		HH after 1989	
	%		%	
	Total	Engaged	Total	Engaged
	%	%	%	%
Secondary occupations	07.7	11.1	63.0	91.1
Revenue from businesses	21.5	31.1	38.5	55.6
Domestic production	01.5	02.2	22.3	32.2
Rent of property	03.8	05.6	26.2	37.8
Disposal of possessions	00.0	00.0	60.0	86.7
External support	21.5	31.1	67.7	97.8
Total number of the sample population				130
Total no. of those engaged				090

Source: Survey data, February 1996.

When these income sources fail to fill the income-expenditure gap, 91.5% of the middle class resort to the second form of adjustment measures that are shown in Table (9). Nevertheless, some of the reported measures are included in the two tables (8, 9).

Table 9: Percentage of Middle-class Households' Adjustment Mechanisms

Mechanism	Total	Engaged
	%	%
Borrowing	71.5	78.2
Disposal of possessions	60.0	65.5
Revenue from utilisation of property	26.2	28.6
Increasing no. of income earners	58.5	63.9
Readjustment of consumption habits	53.1	57.1

Total no. of the population	130
Total no. engaged	119

Source: Survey data, February 1996.

The third form is the invisible adjustment measures which are adopted by members of the middle class themselves or their families, but they do not want to report them as they have either not kept records of them, or are somewhat ashamed to mention them. These include corruption, bribery and other immoral practices. In the following sections we will give a qualitative break-down of those mechanisms and strategies adopted by the middle class.

4.1 Group Solidarity Strategies

By group solidarity strategies, we mean the joint response of certain groups (household members) within the context of their social networks to combat poverty. This type of response reflects the social solidarity and the process of integration within society. The more fortunate groups are those with integrated and social solidarity systems, i.e., the kinship relations. As long as there is a deficit in the household budget, it is always confronted through burden-sharing. Most of the household members respond quickly by looking for options to relieve that budget deficit, each on the basis of his/her ability and access to different means and resources. However, poverty defined in terms of income cannot be dealt with in isolation from the social setting. The group solidarity strategies, however, comprise two main sub-strategies, such as the increase in number of income earners and the external support mechanism.

4.1.1 Increasing Number of Income Earners

Increasing the number of income earners in the family is the principal as well as the first defence line at a time of economic stress. The norm in Sudanese society is that the head of the household (male) is the breadwinner and bondsman of the family. With the penetration of poverty and the intervention of illness, retirement or death of the male breadwinner, some changes in people's attitudes have evolved.

Previously, the woman's (wife's) work used to be a matter of conviction for the enlightened families. Nowadays, for these families, her work has become both a matter of conviction and an economic necessity. Families who in the past do not approve of women working, presently consider it an economic requisite. The same applies to child work. Table 10 demonstrates the scale and attitudes of middle class households towards women and child work.

Table 10: Percentage of Households according to Their Attitude towards Women and Child Work

Attitude	Woman Work		Child Work	
	Previously	Currently	Previously	Currently
Conviction	51.3	20.6	00.0	11.8
Necessity	23.1	42.6	00.0	70.6
Both	25.6	36.8	00.0	17.6
Total	100.0	100.0	00.0	100.0

Source: Survey data, February 1996.

The table indicates that new changes in people's lives have brought about other changes in people's attitudes towards what, when and how family labour is utilised to secure their livelihood. This implies that needy people may go beyond the constraints of social convention to allow or facilitate woman and/or child work to alleviate poverty. School-age boys get involved during holidays or after school day in selling magazines, cigarettes, plastic bags, vegetables, or engage in car washing and shoe cleaning. Women, on the other hand, may go beyond their domestic responsibilities to engage in commercial in-door activities such as knitting, sewing, dressmaking, food selling, making traditional perfumes, decorating accessories, etc. Women who are involved in in-door household activities represent 15% of the total population. Obviously, child labour may have a negative impact on the children, their families and the society as a whole. These include impact on child health, school achievement, possible deviant practices and other risks involved.

4.1.2 External Support Mechanisms

Not only permanent members of the middle-class households, but also friends and relatives working locally inside and abroad contribute to its budget in the form of substantial transfers and remittances. Remittances, in particular, represent a major component of the middle class household budget. Those who work abroad contribute both financially and in kind, including essential items such as clothes, medicine, furniture and electronic goods.

However, the dependence on transfers and remittances seems to threaten the sustainability of the household budget to meet the basic requirements since these are irregular and affected by other factors. The flow of remittances, however, has also recently been affected by Sudan's external relations, especially since the Gulf War. In the last few years, Sudan was branded by the international community and some neighbouring countries as a country exporting terrorism. These have led to a reduction in the number of people going abroad (opportunities) as a result of bans by host countries and the government's requirement of national military service. This implies a remarkable reduction in the number of youth going abroad

and this in turn threatens the sustainability of remittances as a means of bridging the income-expenditure gap.

4.2 Income Diversification Strategies

Poverty has become a common threat in the sense that a single activity is not enough to sustain life. Thus, the state of poverty has pushed people to change their prior-to-poverty activities and income portfolios. Income diversification activities are regarded as 'multi-survival strategies' consisting of migration, subsistence remunerative work on commission or wage basis, self-employment and urban informal sector jobs (Bangura 1994).

It is now the norm for middle class heads of households (91.1%) to have secondary activities besides their main occupations. They do this in their free time, after the regular work, and this extra work may extend till late into the night. Sometimes, these activities may be an extension to their main work through additional hours. Thus, instead of spending their holidays and leisure time among their families and for self-development, they devote it to generating extra income to fulfil the minimum life-sustaining necessities.

Working many hours, above the normal workload has its negative implications in terms of physical health and psychological situation. For the head of the household, it also means shelving many family obligations and social commitments to earn an extra income for the family. One direct consequence of this overwork is the depreciation of the ability to work as an asset on its own.

4.3 Disposal of Possessions

The main problem of the poor middle class is the shortage of real liquid money due to low salaries that do not match family needs. The monthly salary of most households can only sustain the family for a few days. To bridge the gap, people resort to borrowing from friends and relatives within and outside their kinship circle. As shown in Table 9, most of the interviewees (72.1%) have asserted that they resort to borrowing and that they are permanently in debt. When this debt accumulates over time, people dispose of their household assets for the purpose of debt repayment and to satisfy their need for cash.

Distress sale of assets has become a major strategy among different segments of the Sudanese society, including the middle class (60% of those interviewed). A number of newly established local markets have mainly emerged to deal with the exchange of second-hand assets. These markets are known by the days of their occurrence, for instance, Friday Market, Saturday Market or Wednesday Market. Old clothes, furniture, electronic goods, fans, scrap goods, doors, windows, chairs, etc. are, sold at these markets. These items are also getting a good market since the buyers themselves cannot afford new ones. The middle-class households are also engaged in selling domestic possessions and assets as indicated in Table 11.

Table 11: Disposal of Possessions by Type

Type of Possession	Total %	Engaged %
House	7.7	12.8
Private car	16.2	26.9
Land	06.9	11.5
Old clothes	17.7	29.5
Electronics	28.5	47.4
Scraps	06.2	10.3
Furniture	15.4	26.6
Housewife gold	19.2	32.1
Total no. of population		130
Total no. engaged		078

Source: Survey data, Feb 1996.

· Note: The total percentage is not equal to 100% since some are engaged in more than one type of sale.

Assets comprise of financial and productive possessions such as farmland, buildings, equipment, a house; urban land and durable consumer goods. Families who have these assets are relatively better-off. It is most likely that they would dispose of these assets for the purpose of investment so to secure a sustainable income rather than just for consumption. The problem is that if these families dispose of these assets and do not succeed in their investment/business, they will be more vulnerable to poverty simply because they need time to readjust themselves to the new situation as they are originally relatively high consumers.

A considerable part of these resources, particularly land and estates, are social assets that raise the social status of the owner. Losing them means losing one's social status and prestige.

4.4 Readjustment Strategies

To reduce vulnerability and the risk of falling into the poverty trap in the event of economic hardship, people readjust with changes in the pattern of utilisation of their assets and in their consumption behaviour. Readjustment strategies are sometimes self-generated and preventive in nature, especially utilisation of assets or property. Changes in utilisation of assets include rent of a house or part of a house, and turning a private car into a taxi. A change in the consumption patterns is primarily qualitative and includes a direct cut-back on consumption.

4.4.1 New Forms of Asset Utilisation

In the past, each middle-class family used to occupy a complete house. Now, family members live in a part of the house and sublet the remaining part to reduce cost, if it is a rented house, or rent the rest their own house as a source of extra income.

Some families also have opted to live in low-class residential areas while renting their houses that are located in high-class residential areas mainly for making use of the difference in rent, especially to secure the advance rent payments. Similarly, families that do not own a house also behave in the same way by moving from a high rent residence in certain quarters of the town to cheaper ones in lower residential quarters to make a saving in the rent.

4.4.2 Cutting-Back on Consumption

In this strategy, people either reduce the quality or quantity, or both, of their food consumption. The Sudanese food consumption norm is three meals a day. Now, according to our survey results, 23.2% of the middle-class households have gone down to two meals a day, with concentration on basic food items and getting rid of others such as fruits and dessert. Food tables have become much poorer as the same items may be repeated in more than one meal and for several days. This is asserted by 82.1% of the respondents who attributed deterioration of food tables to the deterioration of their economic status (Table 12).

Table 12: Forms of Deterioration of Middle-class Food Table

Type of Deterioration	HH Total	HH Engaged
	%	%
Quality	07.0	08.7
Quantity	41.5	50.0
Both	34.6	41.7
Total applicable	82.1	100.0

Source: Survey data, February 1996.

Securing food for the family represents a major day-to-day difficulty for 58.7% of the middle class (Table 13). From the table we can note that the first problem ranked by the majority of the middle-class government employees is the provision of food. They may solve other problems such as clothing and medication through remittances, donations or presents, but in the case of food, they have no other way than buying it with cash. When they fail to secure enough food, the mechanism under their immediate control is to cut-back on their food consumption.

In times of economic stress, women play an effective role as controllers over the quantity and quality of food consumed, cost of cooking and reduction of food wastage. This is done, for example, by means of planning to shop and cook once a week. The difficulty in getting food is partly a result of the government policy of removing subsidies from the main food items such as bread and sugar. For the middle class households, the actual problem is not the shortage of food supply, but the inability to buy it.

Table 13: Daily Difficulties Experienced by Middle-class Households (%)

Rank	Daily Difficulties					
	Food	Housing	Clothing	Education	Health	Transport
First	58.7%	22.3%	01.8%	12.1%	07.1%	09.6%
Second	23.1%	17.0%	06.3%	12.1%	24.1%	22.8%
Third	11.6%	5.4%	21.4%	18.7%	31.3%	12.3%
Fourth	05.8%	4.5%	29.5%	16.8%	17.0%	20.2%
Fifth	00.8%	13.4%	30.4%	17.8%	13.4%	18.4%
Sixth	00.0%	37.5%	10.7%	22.4%	07.1%	16.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Survey data, February 1996.

In 1992, the government announced the economic liberalisation policy in which prices were left to be determined by market forces, but salaries remained centrally frozen by the government. The direct consequence of this process is a weak purchasing power of the salaried/waged people who, in the absence of other means, usually readjusted by means of reducing the number and quality of their meals.

4.5 The One-day Trade Strategy

This policy is adopted by some of the salaried in the weekend. After receiving his/her salary, a salaried employee immediately delivers it to one agent to invest it in the local open markets, particularly of vegetables. In return and as an interest, the market trader pays interest to the creditor's family in the form of vegetables and possibly other items for the rest of the week, while leaving the starting capital untouched. However, in most cases, contingencies and unforeseen expenditure may force the salaried employee to get back part or all of that capital, gradually diminishing its value and the revenue generated. The family then faces again the income-expenditure gap.

Those who choose such a strategy said that they were not personally involved in this transaction; rather, they gave the salary to one of the family members or to an agent to invest it. This is because of the feeling that such activities do not suit their social status. This in turn demonstrates how their attitude and perception of their class position has been affected severely by the state of

poverty. This indicates that expenditure is not governed only by food needs as such, but also by a perceived social status that is no longer matched by actual economic status.

5 CONCLUDING REMARKS

In this study, to distinguish the poor from the non-poor, an absolute poverty line has been determined on the basis of the basic needs of both food and non-food items. The estimated line, at the February 1996 prices, was Ls. 27,000 per person/month. This figure is equivalent to USD \$27 according to the prevailing rates of the 'Exchange Bureau' on that date, i.e., USD \$1= Ls. 1,000. Two indicators were used to define 'who the poor are' on the bases of their satisfying the properties of being measurable, comparable, observable and distributable. These are the income and expenditure indicators.

Accordingly, the study findings indicate that the majority of the 'middle class' in the public sector (93.8%) are below the poverty line if measured in terms of salaries alone. Also, on the basis of aggregate income, about 61% of them are below the poverty line, i.e., the "new poor" category.

During the last two decades, the middle class has been affected severely by poverty and is believed to be on the verge of being totally eliminated as a social stratum. The figures above show that the middle class would have vanished long ago without the coping practices the members apply to bridge the gap between their fixed incomes and the ever-increasing cost of living.

Many types of coping practices have been identified and some of these related to increase of income while others are mainly adjustments in amount of expenditure. Strategies that relate to income have reduced the ratio of the poor by 33%, i.e., in terms of aggregate income, the poor go down to 60.8% of the total. When measured by expenditure, the ratio of the poor stands at 41.5%, which means that the anti-poverty effect of expenditure is 52.3%.

Usually, income is assumed to match or exceed expenditure. On the basis of the above figures, we note that there is still a considerable percentage (19.3%) of the 'middle class' who managed to escape or overstep the poverty line. It is important to stress that the way they managed to do so is not reflected in their income but in their expenditure. This raises the question of how and from what source(s) they managed that. This confirms that there are other means of adjustment that some of members of the middle class resort to but were not mentioned among the income sources reported, which means that these are either of a corrupt nature or out of their records.

This study argues that the coping and survival practices, which are exhausting both physical and human assets, are directed mainly to consumption rather than productive activities. It has also been observed that some of the middle-class members are engaged in activities which are incompatible with their present professional and/or their previously defined social roles.

The public sector puts huge resources into the training of members of the middle class for specific professional and socio-economic roles which they can perform in the long-run. With the poor salaries paid and poor services provided despite the continuously increasing cost of living,

the government's policy is systematically pauperising this class which is becoming largely dependent on its members' savings or sources other than their salaries to survive. Ultimately, most of them would abandon saving and drain their physical and human resources on consumption rather than investment activities.

The question that is raised here is: What will happen if they erode all their available/potential resources and fail to meet the minimum subsistence level? The answer could be a brain drain out of the country, an exit from the public sector or, if they stayed, a resort to corruption and other immoral practices, thus further weakening the performance of the already beleaguered civil service.

With the continuous crisis of the national economy, the process of impoverishment is more likely to be aggravated. The situation is ultimately going to be transformed from being an economic cost paid by the government (in terms of salary increases to match prices) to a social cost paid by the society as a whole. Thus, a vicious circle is set in motion for both government and society in which the middle-class members are the main victims.

On the basis of the above, it is clear that the socio-economic conditions of the middle class have been affected severely by the prevalence of poverty. First, it has hampered any innovation or excellence by intellectuals, who constitute a part of the middle class, since most of them are putting their energy into the struggle for survival. Secondly, poverty has almost reversed the social value system vis-à-vis the social status of the public sector employees, who are the least favoured. For example, they have limited access to loans since their salary does not provide a sufficient guarantee for repayment. Third, and as a result of the above, this has generated some scepticism among the youth on the value of education. Fourth and most seriously, this has resulted in the spread of corruption in the public sector as a coping strategy for some public sector employees and an extra cost on access to public services for the general public. There are also some other attendant immoral practices such as sexual harassment, whose victims are mainly young females in the public sector.

The process of pauperisation of the middle-class employees is followed by the emergence of a new economic stratum comprising mainly groups with some or no education and a few of the ex-middle-class government employees, who are all operating as middlemen and black marketers. The emergence of this "new rich" stratum has worsened the situation as it promoting itself at the expense of the middle class. The main aim of this "new rich" strata is capital accumulation and realisation of social prestige regardless of the negative consequences. They are mostly engaged in black marketeering, smuggling, brokering and financial speculation. Most of their activities involved dealing in hard currency which, through their speculative action, result in the decline of the value of the national currency and hence the drop in the purchasing power of the salaried middle class as well as a vicious circle of pauperisation.

The youth, who are not necessarily part of the middle-class government employees, have not escaped the impact of poverty on the middle class. Those who originally belonged to the middle class have suffered as a result of the above as much those who were dreaming of joining the middle class after completing their education because the middle class is disappearing. Many teenagers have been compelled to discontinue their university education due to its high cost or

their families' economic hardship. Their aspiration to secure a good standard of living for themselves and their families was reduced to a tough battle for fulfilling the basic life-sustaining requirements. Since the public sector jobs, when available, cannot maintain them and their family, many university graduates are now joining the informal sector. Simply because the "free market" can offer a better opportunity to withstand inflation than the public sector does, they carry out other work which is mostly not compatible with their qualification.

The phenomenon of the low rate of marriage among the youth, at least in urban areas, can be considered one of the direct consequences of the poverty situation. Migration, unemployment and low income of young males have been major factors in this regard. Now female employees outnumber male employees in most government organisations and higher education institutions. This situation is thought to have destructive consequences on the morality and value system of the society.

6 THE QUESTIONNAIRE

1. Information on Household Demographic Structure:

N o.	RH H	Sex	Age	Educational	Marital Status	Place of Birth	Place of Residence	Employment Situation	Main Occupation	Sector	Secondary Occupation	Sector	Monthly Income (Ls.)	Contribution to HH Budget (Ls.)
1														
2														
3														
4														
5														
.														
.														
.														
12														

*Fill the table starting with the head of the household (HH)

* Additional information about the (HH): (1) Years of work (..... years) (2) Group: 1st, 2nd, etc. (.....) (3) Employer: (.....) (4) Previous work: (.....)

2. Sources of Supplementary Income

No.	Source	Prior to 1989	At present	Value	
		1. Exists 2. Doesn't exist	1. Exists 2. Doesn't exist	Last Month	Last Year
1	Remittances				
2	Transfers				
3	Donations				
4	Rents				
5	Commerce				
6	Agriculture				
7	Transportation				
8	Handicrafts				
9	Sale of possessions				
10	In-door household activities				
11	Others (specify)				
12	Not applicable				

3. Household Expenditure Per Month (type & cost)

No.	Item	Quantity	Comment (day, week, month)	Price (unit)	Cost (Ls.)
1	Foods and Drinks:				
	Cereal and flours				
	Bread				
	Meat				
	Fresh vegetables				
	Dry vegetables				

Beans

Peas

Cooking oil

Spices

Milk

Sugar

Tea/coffee

Fruits

Others

2. **Other requirements:**

Washing soap

Bathing soap

Tooth paste

Newspapers & magazines

3. **Housing:**

Electricity

Water

Rent

Other services

4. **Cooking fuel**
(wood/charcoal/gas)

5. **Transport**

6. **Clothing**

7. **Education**

8. **Health**

9. **Others (specify)**

4. Residence Characteristics

(1) Residential area: (1) Class (2) Quarter.....

(2) Type of ownership?

(1) Owned (2) Rented (3) Government house (4) Other (specify)

(3) If owned, was it:

(1) Purchased? (2) Donated? (3) Own built? (4) Inherited? (5) Others

(4) If rented, who pays the rent?

(1) You? (2) Your employer? (3) Others (specify)

(5) House building materials?

(1) Jalous (fine bricks) (2) Bricks (3) Concrete

(6) No. of rooms:

(1) One (2) Two (3) Three (4) More than three

(7) Source of drinking water:

(1) Pipe inside the house (2) Pipe outside the house (3) Water carriers

(4) Others (specify)

(8) Type of toilet:

(1) Pit (2) VIP (3) Others (4) None

(9) Type of lighting:

(1) Gas (2) Electricity (3) Kerosene (4) Wood (5) others

(10) Type of cooking fuel:

(1) Gas (2) Electricity (3) Charcoal (4) Wood (5) others

5. Family Ownership of Assets?

Asset	Yes No		Number		Source				
			Previously	At	Purchased	Gift	Inheritance	Donation	Borrowing

present

Refrigerator
TV.
Radio
Potagasz
Washing
machine
Telephone
Private car
Commercial
truck/Va
Motorcycle
Bicycle
Other

6.Coping and Survival Strategies

(1) Is there a deficit, surplus, or balance in the household's budget?

(1) Deficit (2) Balanced (3) Surplus

(2) If there is a surplus, how is it utilised?

(1) Saving (2) Investment (3) Buying assets (4) Consumption (5) Other (specify).

(3) If there is a deficit, why?

(1) Inflation (2) Increase in family size (3) Increase in needs

(4) Others (specify)

(4) When did the deficit start first time? (year).....

(5) If individual needs increased, why is it increasing?

(1) Cultural change (2) Change in consumption habits

(3) Change in quantity consumed (4) Other (specify)

(6) If your normal income is not enough, do you engage in other work?

(1) Yes (2) No

(7) If yes, what type of work?.....

(8) How do you co-ordinate (manage) between your official and additional work?.....

(9) If there is a deficit, do you opt to one or more of the following?

- (1) Borrowing (2) Disposal of Possessions (3) Sale of assets
- (4) Rent of Property (5) Renting part of house
- (6) Transfers, Remittances and Donations (7) Reutilization of Asset
- (8) Cutback on consumption (9) Increase No. of income earners
- (10) Others (specify)

(10) If you sell possessions, is it:

- (1) House? (2) Car? (3) Land? (4) Electronics?
- (5) Furniture? (6) Clothes? (7) Scraps? (8) Others (specify)?

(11) In case of rent of property (house), state class of residential area?.....

(12) Has your food table deteriorated?.....

- (1) Yes (2) No

(13) If yes, how?

- (1) Quantity (2) Quality (3) Both

(14) Did your residence change during the last five years?

- (1) Yes (2) No

(15) If yes, state form of change?

- (1) From higher to lower class of residence
- (2) From lower to higher class of residence
- (3) From owned to rented house (4) From brick to mud (fine bricks) house
- (5) From a whole to part of house (6) From planned to unplanned residential area

(7) From a house with services to one without (8) Other (specify)

(16) Do you feel that your economic status has deteriorated?

(1) Yes (2) No

(17) If yes, did this affect your social status?

(1) Yes (2) No

(18) If yes, how?.....

(19) Does the housewife work?

(1) Yes (2) No.

(20) Does she practice any productive domestic activity (in-door)?

(1) Yes (2) No

(21) If yes, what type?

(1) Handicrafts (2) Making and/or sale of food

(3) Local perfumes (4) Other (specify)

(22) Are the family children involved in any productive activity?

(1) During holidays (2) After school day

(3) Others (4) Not applicable

(23) If they work: what type of work?.....

(24) How do you view the child work, is it a:

(1) conviction? (2) an economic necessity?

(3) others? (4) not applicable

(25) How do you view the wife work, is it:

(1) a conviction? (2) an economic necessity?

(3) others? (4) not applicable

(26) Do you receive any support from any one of the Social Funds or Organisations?

(1) Yes (2) No

(27) If yes, state which.....

(28) If yes, what is the type of support?

(1) Kind (2) Cash (3) Both

(29) Do you own a residential land?

(1) Yes (2) No

(30) If yes, how did you acquire it?

(1) Purchased (2) Inherited (3) Allotted in a government-housing plan

(4) Others (specify).....

(31) What are the most important daily difficulties you experience? (please, rank)

(1) Housing (...) (2) Food provision (...) (3) Cloth (.....) (4) Education (.....)

(5) Medication (.....) (6) Transportation (.....) (7) Other (specify).....

(32) Fill the indicators of living conditions deterioration applicable to your situation in the following table.

Indicator	Prior to 1989	After 1989
Ownership of private car (Yes/No)		
Attendants (Yes/No)		
Ownership of the house (Yes/No)		
Size of the house (Complete/Part)		
Place of residence (Quarter and Class)		
Transportation means (Public/Private)		
Private education of children (Yes/No)		
Medication (Public/Private clinics)		
No. of meals (3/under 3)		

Entertainment (Yes/No)		
Other		

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1 We will consider that the society is broadly classified into three broad categories. First, those who use their capital are regarded as belonging to the upper class. Second, those who use their mental abilities and technical know-how are considered as members of the middle class. Finally, those who use their physical abilities, such as the urban workers, are taken as belonging to the lower class.