

|| FOOD ACCESSIBILITY AMONG THE URBAN  
POOR UNDER CONDITIONS OF STRUCTURAL  
ADJUSTMENT PROGRAMMES: A CASE STUDY  
OF SOWETO/KAYOLE NAIROBI, KENYA. //

BY: ONDIEKI NYANDIKA

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A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENT  
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DECLARATTON

This Thesis is my original work and has not been presented for a Degree in any other University.

Signed  Date 7-11-1995

By:Ondieki Nyandika (Candidate)

This Thesis has been submitted for examination with my approval as the University supervisor.

Signed  Date 9-11-1995

BY:Dr.P.M Ngau (Supervisor)

DEDICATION

*To my late father and teacher Zacharia Nyandika and to the late Bishop Tiberius Mugendi of Kisii Catholic Diocese for financing my secondary school education.*

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However, errors and other weaknesses that may be identified in this piece of work must be attributed to me and I wish to take full responsibility.

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**ABSTRACT**

This study is about food accessibility among the urban poor under the conditions of structural adjustment programme. It attempts to highlight characteristics of household food consumption patterns, household economic decision making and the social cultural aspects of the households in relation to food accessibility during the period of food market liberalisation.

The major contribution of this research is to fill the gap in food security data base among the urban poor and its implication for planning. This is one area that has not been adequately studied in Kenya.

Qualitative methods have been used in data analysis and in testing the set hypotheses for the study. The major findings are that; food accessibility has a significant impact on household's economic decision making, on household consumption patterns and on social cultural aspects of the households.

The major limitation of this study is the failure to indicate precisely how much of the changes in prices of foodstuffs can be attributed to SAPs on one hand and inflation/increased money supply on the other since the two occurred concurrently. This is also a challenge for future researchers.

It is concluded that there is need to embark on the implementation of SAPs and to support Social Dimension of Adjustment programme to cushion the poor so as not to worsen levels of urban poverty. However, urban planners should in the short-run explore means and ways of integrating the informal sector activities like hawking, informal housing, petty trading and other survival strategies like urban agriculture adapted by the urban poor. For food relief agencies, it is recommended that food for work is a better option of identifying the urban poor who are in dire need for food aid.

## CHAPTER ONE

## INTRODUCTION

## 1.1 Statement of the problem:

Structural Adjustment Programmes (SAPs) are recommended and financially supported by World Bank and the International Monetary Fund (IMF) as part of an effort to solve the external account crisis (balance of payment) prevailing in many Less Developed Countries (LDCs). SAPs include policy reforms implemented in various sectors. They are pursued almost without exception in all sectors of the economy. The adjustments lead to the liberalisation of the economy, the rational reallocation of resources, reduced government spending to stimulate sustained growth in the face of a more adverse external environment. Broadly, SAPs are meant to trigger the growth of GDP, increase exports in LDCs and increase food production per capita which has been on the decline over the past 25 years.

One aspect of SAPs is the potential for expanded production of agricultural tradables in sub-saharan Africa. However, there is a risk that at least in the short or medium term, SAPs may worsen the economic situation of vulnerable groups of the people in developing countries. SAPs have also been extended to food production and agribusiness in the form of liberalization.

Although much has been written on food security in Kenya, less attention has been paid to food accessibility among the urban poor and the effect of food market liberalization on food accessibility among the Urban poor. Food accessibility in this study is the function of the ability of the household to acquire both basic and desired foodstuffs. The city of Nairobi has experienced exceptionally dramatic physical and population growth. Currently, about 30% of Kenya's population live in urban centres. It is also estimated that 34% of the urban population will be unemployed by the year 2000 and about 26% of the population of Nairobi would live below the poverty line by the same year (Mazingira, 1994). Before the advent of the World Bank and International Monetary Fund supported structural adjustment programmes (SAPs), the government was responsible to the urban poor by controlling the prices of foodstuffs. Today, food market liberalization has changed the terms of domestic trade to the benefit of some people in rural areas. The immediate impact has been the rising prices of foodstuffs. The urban poor have been hit by a crisis of food accessibility. This trend is aggravated by the fact that though Kenya set forth a comprehensive food policy in 1981, food deficits continue unabated. This research is therefore an inquiry about the conditions of food accessibility among the urban poor and the response of the urban poor to the liberalization of the food market. It sets to find out how the prices of food has influenced the socio-economic behaviour of the urban poor. The study also aims to find out the strategies of survival adapted by the poor. Lastly the study aims to make an overall assessment, draw conclusions and make recommendations for future researchers, planners and policy makers.

## 1.2 Objectives of the Study:

- 1.2.1 Assess the impact of food accessibility on household food consumption patterns,
- 1.2.2 To investigate the extent to which food accessibility has influenced household economic decision making,
- 1.2.3 Find out the impact of food accessibility on social cultural status of the household,
- 1.2.4 Endeavour to propose policy recommendations to assist the urban poor improve levels of food accessibility.

## 1.3 Hypotheses of the Study:

- 1.3.1 The impact of food accessibility on household food consumption patterns is insignificant.
- 1.3.2 There is no relationship between food accessibility and household economic decision making.
- 1.3.3 The social cultural characteristics of the households have remained constant with changes in food accessibility.

## 1.4 Conceptual framework

Food market liberalisation is affecting the accessibility of food to the urban poor. It is likely that a large percentage of their household income is spent on food than before. Their response could be proceeding on the following tracks, namely, more participation in urban agriculture, mass horticultural hawking at the city centre, increases of cases of theft, general psychological problems and apathy. Put in another way, the number of the urban poor, those living below the poverty line has increased significantly. They are caught up in the trap of food insecurity and the only alternatives of moving out of the vicious cycle of poverty and food insecurity

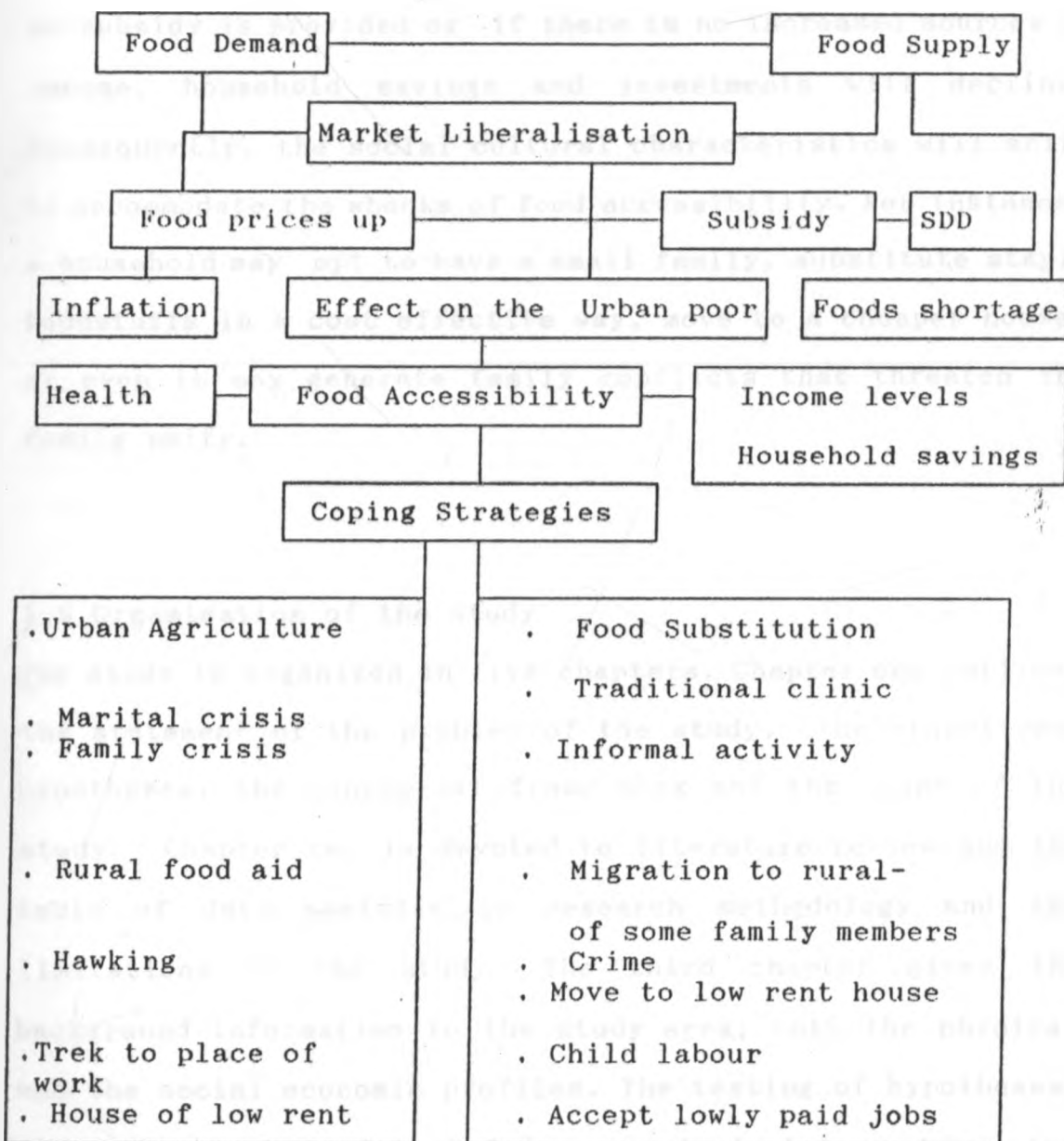


are:

- a). encouragement and support of the urban poor on urban agriculture,
- b). organising public works as a way of feeding them and as a solution to unemployment,
- c). looking for opportunities of marketing informal sector goods,
- d). extension service on waste organic matter recycling and better environmental management for high yields from urban agriculture,
- e). exploring the possibility of small credit schemes to enable them start business and,
- f). rehabilitation of some of the urban poor into rural areas or in agricultural settlement schemes in the country.

It is conceptualised that the Urban poor would respond to high food prices by adapting certain survival strategies. The strategies may include hawking, theft, participation in Urban agriculture, walking to places of work, shifting to low rental houses or squatter settlements, sanctioning child labour and food substitution among others. Though the prices of foodstuffs may have gone up partly as a result of inflation and food shortage, the immediate impact of food market liberalisation is the rise of prices. If there is no subsidy, prices will erode household incomes thus causing a household budget deficit since food is a basic need. Consequently, household savings will go down but the households will be provoked to generate more income through the informal sector. Should household members fail to get access to more food, their health conditions will deteriorate.

Figure 1: Conceptual Framework: Food Accessibility Among The Urban Poor.



Source: Ondieki Nyandika (1994).

Note that SDD refers to Social Dimensions of Development being mitigation projects financed by either the government or non governmental organisations or both to cushion the most vulnerable groups in society.

Finally, increased prices of foodstuffs would certainly reduce available household incomes through increased expenditures. If no subsidy is provided or if there is no increased sources of income, household savings and investments will decline. Subsequently, the social cultural characteristics will shift to accommodate the shocks of food accessibility. For instance, a household may opt to have a small family, substitute staple foodstuffs in a cost effective way, move to a cheaper house, or even it may generate family conflicts that threaten the family unity.

### 1.5 Organisation of the study

The study is organized in five chapters. Chapter one outlines the statement of the problem of the study, the objectives, hypotheses, the conceptual frame work and the scope of the study. Chapter two is devoted to literature review and the tools of data analysis or research methodology and the limitations of the study. The third chapter gives the background information to the study area; both the physical and the social economic profiles. The testing of hypotheses, the analysis of the household's economic decision making, the consumption patterns and social cultural status comprise chapter four. The last chapter (five) which contains the summary of research findings and recommendations to both researchers and policy makers.

## 1.6 Operational definitions:

### Food Accessibility:

Refers to the ability of the household to acquire both basic food and desired food. Indicators to food accessibility at household level include; malnutrition symptoms, income levels family and food consumption patterns.

### Food Security:

Food security may be defined as the ability of countries or households of a region to meet the adequate levels of food consumption on annual basis. It is the access by all people at all times to enough food for active healthy life. Its essential elements are the availability of food and ability to acquire it. Food insecurity is therefore the opposite.

### Household:

A household may be defined as a person or group of persons (usually bound by kinship), who normally reside together. In the context of this study it refers to individuals who share food from a common source.

### Poverty:

Hunger, a deterioration of health status and/or social productive performance of individuals arising from an intake of food either too low in quantity or of wrong kind or both. It is also closely related to poverty. Indeed poverty can

often be measured by the prevalence of hunger. But hunger is not equivalent to poverty for in some areas people are poor but not hungry.

Food Policy:

Refers to those guidelines for decision making on all issues related to food production, processing, marketing and distribution in a society.

Household Income:

Refers to gross household income (KSh) obtained by the sum of the value marketed output, wage, (off farm) income, dairy income, poultry, value of livestock or crops sold and from any employment.

Urban Agriculture:

Urban agriculture is defined as the practice of food production within urban areas and their surroundings. But can be used to include cultivation of all crops, fruits and vegetables, forestry, parks, gardens orchards, animal husbandry, fuel wood plantations, aquaculture and related agricultural activities in urban areas.

**Health:**

The World Health Organisation(WHO) states that health is a state of complete physical, mental and social well being of a person. For this study Health refers to non existence of clinical symptoms related to malnutrition.

**Liberalization:**

Refers to the abolition of impediments to free markets in the economy. All players act in their own interest, but no single player is powerful enough to influence the result and exploit the system at others' expense (Larsson 1994.p.50). In this piece of work liberalization refers to the free food market without government control.

## CHAPTER TWO

## LITERATURE REVIEW AND RESEARCH METHODOLOGY

## 2.1 Literature Review

The SAPs require that priorities be assigned in public expenditure. Cuts should be made in expenses that are not essential for alleviating poverty or for long term development. Such expenses include subsidies to producers and consumers, salaries for superfluous personnel and costs of unproductive activities.

It is clear that in many countries where liberalization has created adequate incentives and the producers have been given the freedom to react to them, its impact in terms of increased production has been dramatic. Larsson (1994) gives an example of Vietnam. The impact is not only generated by prices but also by greater access to consumer goods.

Liberalization enables a better budget balance to be achieved owing to both lower spending on subsidies and higher revenues. It enhances transparency in economic decision making process and reduces opportunities of manipulation, corruption and embezzlement of public funds. It increases efficiency in the use of resources by enabling the advantages of large scale production to be utilized in export production by exposing domestic sectors to more competition.

But market liberalization has a number of failures. Firstly, it does not lead to improved allocation of resources if the economies of scale exist thus resulting into a monopoly. Secondly, when there are external effects, individual producers and consumers do not take into account the full costs or income resulting from their actions.

Two other arguments against liberalization are that it results in inefficient consideration being given to income distribution and that it causes inefficient resources to be allocated to investments and long term growth (UNDP,1993).

Various strategies and approaches adopted as components of structural adjustment programmes (SAPs) have evolved over time since the early 1980s when the programmes were first adopted in a few countries of sub-saharan Africa (Quarcoo 1990). According to Mr. Quarcoo the implementation of SAPs has been orthodox, whether of demand management or supply-side variety, has most often, and inevitably, led to associated social costs such as unemployment and malnutrition of the most vulnerable groups of people in society. There has therefore arisen the need, not only to mitigate these social costs of adjustment, but to redesign the adjustment programmes so that it is human centred. He continues to indicate even further that, there is need to support adjustment programmes with 'a human face' targeted at human resource development with



protection for expenditures on basic needs of food, clean water, education, health, nutrition and sanitation for everyone. This is what UNICEF, WHO ILO and other agencies have been campaigning for over the past few years. Since 1987, the world Bank has collaborated with UNDP and ADB to finance the so called Social Dimensions of Adjustment (SDA) project involving the implementation and monitoring of poverty alleviation programmes in sub-saharan Africa.

Research on structural adjustment and food security in Senegal by Tom Amadou (1991) notes that the suggested policy by the World Bank hinges on a farm price policy which makes imported cereal (e.g rice) more expensive, removes subsidies in agricultural inputs and urban food consumption. He further contends that a farm price policy can be stronger when it comes to changing the forms of domestic trade to the benefit of the rural community and detriment to the people in towns. To illustrate the dilemma of formulating a farm price policy, in February, 1986, political upheavals forced the Senegalese authorities into lowering the price of imported rice thereby compromising their food security policy and showing how difficult it is to run the liberalisation process properly.

In 1982, a World Bank structural report on Kenya observed that Urban poverty despite the fear of many observed cases

was limited in extent and its incidence did not appear to have increased over the years. According to the same report Nairobi income distribution for 1982 and poverty line indicated that less than 3% of the Urban population were poor.

A World Bank report (1991) on food and nutrition policy deduce that fluctuations in both producer prices for foodstuffs are important sources of instability in the nutritional intake of poor families. SAPs have had fundamental consequences for the Nigerian society (Mustapha 1991). It has led to drastic fall in the living standards of populations with fixed salaries. Equally affected are some sections of the rural population and the Urban artisanal groups. This erosion of living standards has spurred many households to seek additional income by engaging in multiple jobs. He continues to state that SAPs may have intensified the search for income through a combination of petty trading and other activities but it is doubtful if it has improved the prospects for accumulation of or even economic survival through informal activities. What is clear however, is that increasingly, many Nigerian women and the youth are gravitating towards many forms of generating income.

Price incentives are an important element of any structural adjustment policy and an increase in agricultural prices might

stimulate aggregate food supply. However, whether higher prices will increase food supply is debatable. Structural reforms are undertaken in response to a series of economic shocks, although there is a broad consensus that many of these measures were necessary to realign development. Adherents of SAPs did not sufficiently foresee the negative effects that adjustment measures would have on individual households or on the Urban poor. Few studies have been done to illustrate the short term impacts of SAPs on household consumption patterns and nutrition levels.

A 1987 World Bank study; "Protecting the Poor During Periods of Adjustment" offers the following description of its social costs:

- a) the effort to restore macro-economic balance usually although not inevitably depress output, employment and consumption. To the extent that the poor bear these short-run declines, social costs typical of a recession period occur,
  
- b) changes in the structure of incentives stimulate the reallocation of resources between sectors and activities. Businessmen and employees in previously favoured activities are likely to suffer substantial declines in income and wealth while those in stimulated activities would benefit,

- c) Some transitional costs arise and the poor bear the losses in the transition, they suffer the social costs of restructuring.

According to Sanches (1990), the absence of SAPs in Argentina has been associated with increasing deterioration in income distribution. This deterioration derives from poor economic growth in turn resulting from the disarray of policies that have produced higher relative prices of non tradable and protective regulations favouring urban workers in the formal sector. Nevertheless, Sanchez agrees that at least in the short and medium term any adjustment process will inevitably increase poverty due to high transitional unemployment and drop in real wages.

Researching on the impact of price on agriculture in sub-saharan Africa, Kevin Clever (1985), advances reasons as to why Developing countries set low retail food prices before SAPs. These include: provide food for the poor, reduce price inflation, maintain political stability by keeping promises made at the attainment of independence; eradication of hunger, poverty and illiteracy. All these goals of governments are legitimate. The question is, at what cost and are there cheaper ways to attain the same objectives?

Since the United Nations World Food Conference (1974), there has been general agreement that action should proceed on two tracks: towards relieving hunger and preventing it in the future. Kenya's agricultural development policy has been characterised by a high degree of government intervention, which is often partly explained by a legacy from the colonial period and the significant contribution of the sector to Gross National Product (GNP). In the colonial era agricultural policy was geared towards safeguarding the privileged position of the settler farmers. The Swynnerton Plan of 1954 marked the beginning of a systematic encouragement of commercial agriculture for domestic urban and export markets with concentration on coffee, tea, pyrethrum and dairy cattle. Research done by World Bank in the African Continent indicates that the states have massive intervention on food systems. The virtually universal objective of governments would appear to provide food security and to stabilize real incomes of urban consumers (World Bank, 1989).

The writings of Thomas Malthus (1766-1834), a British economist and clergyman in 1798 presented the spectre of catastrophic population collapse as population growth outstripped the production of food. Malthus asserted that the power of population increase was greater than the power of the earth to produce subsistence. Hence population will increase in a geometrical manner and subsistence at an arithmetical

rate. But with Technological inventions in the world as a whole, food production has kept pace with population increases, although famine afflict a large number of people world over (Todaro, 1974). But still there is low food production per capita in sub-saharan Africa.

In Kenya, maize shortage is synonymous with food insecurity or hunger. This is because maize is a staple food. Over the years, there has been the recurrence of drought and famine in Kenya. In 1960-61, Kenya faced a severe famine. There was widespread drought in 1960 and devastating floods in 1960-62. During 1980-84 Kenya was confronted with food shortages and forced to import, maize, wheat and milk (Development Plan, Republic of Kenya, 1984/88). There was also low food production in 1992/93 crop year and in half of 1993/94, when bad weather and tribal clashes were the causal factors.

Kenya's comprehensive National Food Policy is found in the Sessional Paper No.4 of 1981. The overall objectives of the National Food Policy (NFP) are to maintain a position of broad self-sufficiency in the main foodstuffs in order to enable the Nation to be fed without using the scarce Foreign Exchange in food imports. Secondly to achieve a calculated degree of security of food supply for each area of the country. Thirdly, to ensure that these foodstuffs are distributed in such a manner that every member of the population has nutritionally

adequate diet. A decade after, Kenya's food security situation has not significantly improved.

True, that over half of our country receives less than 500mm of rainfall annually, a great percentage of our soils are infertile or in other ecological regions are degraded. Though the government finds sanctuary in these factors food problems in Kenya are also a result of poor policy formulations. For instance the NFP of 1981 did not explore all possible means of supporting and stimulating relevant research. It also failed to recognise the world interdependence by not making comparative studies. Likewise the policy did not assess guaranteeing consumption and sustaining household real income levels and disincentives to domestic agricultural production resulting from maize pricing. The NFP did not take note of the unique nature of food security for arid and semi-arid areas and thereby formulate a unique policy thereto. It also failed to analyze food security for the urban poor and the integration of urban agriculture to the National Food Security Policy. It also paid no attention to social cultural constraints, particularly the position of crop labour which has remained a preserve of females in the agricultural sector.

The foregoing food policy was formulated without considering its implications with SAPs. According to SAPs, agricultural production is expected to benefit from liberalization and the

abolition of net taxation of farming sectors. Liberalization offers great benefits if consumer goods are being distributed efficiently. Liberalization probably result in wider fluctuations in domestic prices since they are directly affected by world market prices. Consequently, there are good reasons why the state should intervene to stabilize prices (or income) for producers in the short term (Killick, 1993).

Six main household consumption surveys carried out in Kenya have been identified by (Shah and Froberg, 1980):-

- a): 1963 survey of middle income earners in Nairobi.
- b): WHO/FAO/UNICEF, Kenya food consumption and nutrition survey.
- c): Household budget surveys in Nairobi, Mombasa and Kisumu 1968/69.
- d): Rural Household's survey in Nyanza Province 1970/71.
- e): Integrated Rural Survey (IRS) 1974/75.
- f): Urban Survey, first phase Nairobi, Mombasa, Kisumu, Nakuru-food purchasing survey.
- g): Food consumption pattern- rural and urban Kenya, 1980.

The share of food on the total household income expenditure is about 31.4% for the whole urban population and 50.9% for the poor when evaluated at absolute poverty line level (Economic survey, 1992.p42). Studies conducted by Nairobi City Council in 1984 in low income residential areas show that 49% of the



children in these areas were undernourished. According to the 1989 Social Profile sponsored by UNICEF, about 52% of the children of the sampled children in urban nutrition survey were stunted.

It is important to have an overview on urban agriculture as it relates to food accessibility. Kenya researchers among them Kingoriah (1980) have examined urban land use patterns in Nairobi without making a comprehensive study on urban agriculture. True, that a significant proportion of vegetables consumed by the residents of Nairobi come from within the Municipality and its environs (Obara, 1988). It is estimated that some 85% of vegetables consumed by residents of Chinese cities are grown within urban areas (Silk 1986). The economic performance of Africa Countries can be improved if resources are used more efficiently with the given technologies and if superior technologies are introduced. However whether a given structural adjustment policy will produce economic gains even in the short run depends on how efficiently the resources are used and how the adjustment policy package is implemented. It is particularly important to know whether inefficient resource use is mainly due to internal price distortions or inefficient government intervention in the economy.

The Mazingira Institute has analyzed the patterns of food and fuel production and subsistence consumption by urban households in Nairobi (Smith, 1987). The analysis revealed that nearly two-thirds of urban households grow part of their crops within the urban area.

To escape from poverty, poor men and women seek to secure sustainable livelihood for themselves and their families (Lipton and Maxwell, 1992). The urban poor compared with other social groups are young with high but falling male/female ratio, with much lower female work force. They spend more income on food and the problem is that urban poverty is increasing fast and more research is needed in this field.

Mbweza (1988) observed that "garden farmers" have taken to squatting on vacant public land along roadside in Kiambu District. Although this practice is illegal, it is a phenomenon that is inevitable in major urban centres such as Nairobi. Can we therefore find a legal solution to urban agriculture whose positive side is the possibility of improving food accessibility for the urban poor?

Okul (1991), conducted a study of poverty, disease and malnutrition in Samia western Kenya and concluded that an increase in aggregate community food supply will not

necessarily eliminate malnutrition since disease interacts to precipitate its occurrence as well. He also noted that causes of malnutrition are both internal and external. They include environmental conditions and impaired absorption and increased nutrient loss from the body. FAO/WHO (1981) report explains that inadequate diets that results from insufficient purchasing power are a common problem among the desperately poor in the slums of major cities. The protein-calorie malnutrition (PCM) is the most widespread among the children in all LDCs.

In 1974 it was estimated that only 4.3% of households in urban areas of Kenya lived below poverty with Nairobi having a figure of about 2.9% (Collier and Lal, 1986). This is the reason why policy makers considered urban poverty in Kenya during 1970s a phenomena that did not require a major development strategy. Poverty figures of the urban poor in Kenya has been on the increase during 1980s and 1990s. During the launching of the conceptual framework and project profiles for social dimensions of development the government affirmed that poverty continues to afflict the country at an extremely worrying rate of 46% and 30% of the rural and urban populations respectively (Republic of Kenya, SDD, 1994).

A baseline survey of Basic Needs of the urban poor in Nairobi, carried out by the Kenya consumer organisation (KCO) in 1992

revealed that the growth rate of income for the urban poor in Nairobi was lower than the rate at which prices of basic commodities increased in the period between 1987 and 1991. Over 70% of the sampled households interviewed in low income areas recorded incomes of about ksh.2000 and below per a month.

According to the 1994 Economic Survey for Kenya, inflation rate rose from 19.6% in 1991 to 27.3% in 1992 and further to 46.% in 1993. The inflationary pressures are ascribed to a number of factors, among them the devaluation of the shilling, excessive growth in money supply in 1992 and early 1993. Output in the Agricultural sector declined in 1993 due to unfavourable weather conditions and high farm input prices. Poor performance in the agricultural sector is attributed to decline of production in staples, maize, beans and potatoes. Maize production declined by 21.7% in 1993 from 23 million bags in 1992/93 crop year to 18 million bags in 1993/94. Wheat declined by 38.9% in 1993 necessitating further imports worth K£ 152 million to meet local demand.

## 2.2 Justification of the Study:

From the reviewed literature it is evident that a lot of research has been done on the urban poor. But all these was done when the central government controlled the prices of most of the basic commodities and especially food. With the advent

of structural adjustment programmes in almost all sectors of the economy, there is need to investigate the response of the urban poor to these changes. And even though substantial research has been conducted on urban agriculture, the contribution of the urban poor in this enterprise has not been fully analyzed. There is also little information on how urban agriculture affects or interacts with the immediate physical environment.

How has food market liberalization then influenced the participation of the urban poor in urban agriculture? Are there any legislations governing the opportunity of urban land use; and if there is, how do they affect participation urban agriculture? Urban agriculture has also the opportunity to recycle the organic wastes of many households. Now that the urban poor are at the mercy of the forces of supply and demand, an alternative strategies to help them improve food levels of food accessibility is a moral obligation.

As far back as 1930s the League of Nations advocated that attempts to solve food and nutrition problems should be directed to the root causes. This research does focus on the vulnerable group and it is therefore useful for nutrition programmes.

Kenya's National Development plans since independence are aimed to reduce poverty and disease. Malnutrition pose a health

problem that hinders efforts to promote National Development. In the past, planners have seen nutritional levels as a characteristic of underdevelopment. It was seen as a natural stage that would come to pass. This was a narrow view that equated capital formation to increase in GNP. Thus planners advocated for policies that fostered the growth of a highly protected industrial sector ignoring the magnitude of the problem of deprivation in society since food consumption affects capital formation.

It serves no purpose to educate people about the biological utilization of food and nutritional requirements if they experience household food deficit. This research therefore is a deliberate attempt to fill all these gaps. From the reviewed literature it is not possible to conclude what the liberalisation of the food market has done to the vulnerable groups and their welfare at the household level.

Knowledge about the impact of food market liberalisation has important implications for the design of poverty reduction measures or compensatory programmes. For policy program purposes, a study of SAPs on the poor are indispensable to understanding relative and absolute poverty levels, as well as short and long term poverty to the ways in which these groups are influenced by changing economic conditions.

How are policy makers and planners to know what is the best combination of policies unless there is a viable database from which to draw necessary inferences?. How are they to know how different socio-economic groups have fared under the past and current policies?. The planner and policy maker requires relevant and timely data to choose the content and sequences of adjustment measures for making improvements in the overall performance of the economy and for controlling the impact of adjustment.

Studies at household level have greater advantage since they offer greater capacity for generating empirical data. Such micro-scale study would enable comparisons with macro-scale findings which to a large extent tend to be qualitative.

In research ( irrespective of attitudes to SAPs) the household is the central unit of study. This is because the characteristics of households are very important for understanding of the functioning and impact of SAPs. It is generally known that neither income or social characteristics are similar among different households.

## 2.3 Research Methodology:

### 2.3.1 Sources of Data:

Data was obtained from both primary and secondary sources, reconnaissance and personal observation of the physical and social economic characteristics of the study area.

#### Primary Sources:

- (a) Questionnaires were administered to households, owners of small enterprise (informal sector), and medical clinics in the study area.
- (b) The preparation of field transects based on observation and recording of types of land uses (residential, commercial, urban agriculture, institutional).

#### Secondary Sources:

The secondary sources of the study included;

- (a) a review of published literature on structural adjustment programmes with specific reference to World Bank reports.
- (b) various economic surveys of the Republic of Kenya.
- (c) social economic profiles of the city of Nairobi.
- (d) Development plans, of the Republic of Kenya were reviewed, this provided information on trends in food production and general government policy on food security.
- (e) clinical registers from clinics in the study area for data on cases of malnutrition.



### 2.3.2 Sample Design:

Table 1 shows the sampling frame followed in this study.

Table 1 Sampling Frame

Zone	Total Popn	No.H.holds
Soweto	12,704	3,100
Githau	1,635	399
Kibagare	2,452	598
Shauri Yako	1,145	279
Muhoroto	4,897	1,195

Source: Field survey 1994

Cluster sampling was preferred to drawing the above sample. Systematic random sampling and stratified sampling has been used. However, there are two limitations for using the two alternatives. Firstly, the housing layout in the area does not follow a systematic and consistent pattern. The houses are not conforming to a linear pattern in some zones. Secondly, this research has specific objectives which would have been invalidated. The target population of this study is on the urban poor. We know that the real poor households tend to reside in houses of low rent or illegal structure in which they pay nothing or low rents. In most cases such type of houses are clustered together in a certain zone. This needs a careful selection of a representative sample. This is why cluster random sampling was preferred. The study area is divided into five administrative units (Soweto, Githau, Kibagare, Shauri Yako and Muhoroto). Once a cluster of houses

poorly built or fabricated of very low rents, and poor living conditions was identified a questionnaire was administered to those households. On the other hand, a random selection was done on other households in the study area.

Table 2 Sample Size

Zone	H/Q1	H.Q2	Total Sample
Soweto	11	11	22
Githau	03	03	06
Kibagare	06	06	12
Shauri yako	05	08	13
Muhoroto	06	04	10
<b>Total</b>	<b>31</b>	<b>32</b>	<b>63</b>

Source:Field Survey 1994

**Where:**

H/Q1 = General Household Questionnaire

H/H2 = Specific Questionnaire administered to the head of the household only.

The small business enterprise questionnaire was administered to hawkers, second hand cloth sellers, small bars that sale traditional beer, foodstuff sellers and any other business that does not exceed the capital base of KShs.2000. The other questionnaire namely the Health clinic questionnaire was administered to those clinics located within the study area. It was meant to highlight the main clinical diseases diagnosed and the problems related with accessibility to health services by the urban poor. In summary therefore, there were four sets of questionnaires administered.

### 2.3.3 Data Analysis and Presentation:

Graphs have been used to portray relationships between variables. This techniques gives a quick visual impression of the variations. Tables have also been used in order to summarize information although graphs tend to show variations much more clearly than tables. Simple bar graphs are used to show frequencies of categories. Photographs have been used to help illustrate specific aspects of the study. Where appropriate, regression analysis has been used to determine the correlation between dependent and independent variables.

#### Land use Classification:

This approach is borrowed from Weaver J.C (1954) a great exponent of classification of land use which are derived from the data rather than those which precede its collection. Weaver's purpose was to delimit not single crop regions, but crop combination regions. In our purpose the following land uses are selected for analysis;

- a. Residential
- b. Transportation
- c. Commercial
- d. Temporally commercial
- e. Urban agriculture
- f. Free land (open space)
- g. Administration/education

The above selected land uses in each area are then represented

as a percentage of the total land in the area. Further, they are arranged in the order according to their percentage. Then compared with the actual range of percentage values with a series of model situations. In a system of mono land use all land would by definition of monoculture be devoted to a single land use. However, if there is an ideal land use system, 50% of land would be given over to each land use pattern.

The next stage is to find which of these ideal models fits the actual systems most closely. This is done by a simple measure where the differences between the percentage of land under each activity and that predicted for it by the model is squared and added to the differences calculated in the same way for all other land uses being considered. The purpose of using this approach is to estimate the area under urban agriculture and other public utilities in the area. To ascertain the amount of land available for future development.

#### 2.3.4 Critical Appraisal:

Because of financial limitations, it was not possible to interview the entire target population. Subsequently, a sample was arrived at. Obtaining raw data usually requires the greatest amount of time and effort. It is not possible to have full control over the research assistant though the provided questionnaires contained precise questions. However, this does not mean that the research assistant was not biased during the interview.

The research aimed at assessing the social economic effects of structural adjustment programmes at household level. The major limitation is that the effect of market liberalization and other economic changes are transmitted through markets and thorough social and economic infrastructure. Therefore, there are multiple forces in both markets and infrastructural levels that determine how either an individual or a household reacts to liberalization making it difficult to make a very accurate analysis.

During the period of administering questionnaires some heads of households were absent, this led to the rescheduling of interviews. In some cases, respondents were unco-operative. The interviewees lamented that many researchers have interviewed them over the years and they have never seen any benefits.

Inadequate and up to date secondary data for urban studies is a common encounter in developing countries. To be more specific, there is scarcity of data related to food consumption patterns amongst the urban poor households. In addition, all data collection in social sciences is liable to errors and no research method is free from errors. Social planning research problem involve more than one variable and often it is difficult to separate the variables so as to study their effects separately. The relationship by tables and other

graphics are mere associations between variables and do not represent causal relations. Qualitative variables and levels of analysis are an impediment in social science research because they rest on practical social distinctions of little or no scientific value. Measures of association cannot reflect in a single value all details and aspects of the distributions they simply make a general summary. Measures of association describe that particular value of a joint distribution produced by the tendency of two variables to occur together or vary together. Therefore, measures of association only gauge the degree to which the variation in one variable can be accurately inferred from the variation in the other. Perfect associations occur rarely in empirical research.

In measuring important socio-economic variables like the percentage of the household's monthly income spent on food, the measurement is mainly influenced by approximation and averages. Thus, the rounding of figures that often may lead to some inaccuracy must be cited as one of the main shortcomings of this research.

Statistical tools are not substitutes for basic planning methodologies, they are part of them in the planning processes. Both descriptive and inductive statistics are used. Both types of statistical procedures apply to various steps in planning research. Descriptive techniques are used to

summarise information and make it more useful in analysis.  
Social science research aims to help make better decisions.  
The test of reliability is whether another researcher would  
extract the same information from the same undertaking.

**CHAPTER THREE****STUDY AREA:****3.0 Introduction:**

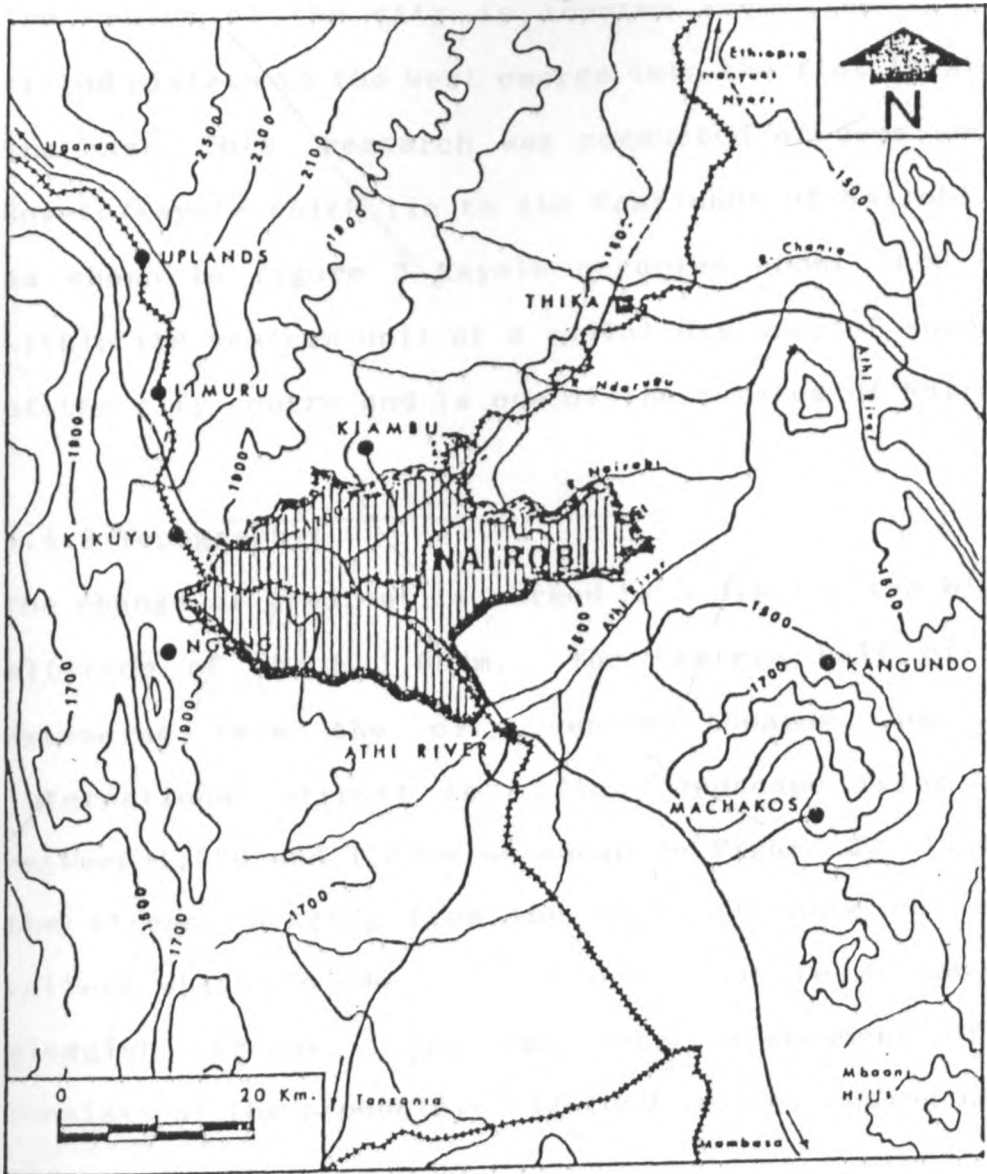
Nairobi city is now hundred years old. In 1895, a depot caravan trade was established at the present Ngara area of what later came to be known as Nairobi. When the Uganda railway reached the Nairobi site the settlement became the railway headquarters. In 1905 the colonial government established its capital in the same place and 14 years later launched it at the Nairobi municipal council. Nairobi has since recorded rapid growth in both population growth rate and physical expansion. The physical area of Nairobi expanded from 3.84 sq.km in 1910 to 25 sq.km in 1919. By 1948 the city boundary covered an area of about 83 sq.km. In 1963 the boundary was extended to 680 sq.km which is still the current official size of the city. Nairobi is the current capital city of Kenya. The Nairobi City Council (NCC) is a fully pledged planning authority in the management of the city and it is responsible for the provision of water, roads and other services like garbage collection and licensing of commercial activities.

**3.1.0 Physical Characteristics:****3.1.1 Location:**

The Nairobi city is situated at the South Eastern end of the agricultural heartland of Kenya. The site of the city falls into two contrasting regions; the low and virtually flat eastern part and the hilly and dissected western part.



Figure 2: Nairobi in a regional context



Source: Ogendero 1987

The centre of the city is located where the spurs of the tilted plateau to the west emerge into the flat lava plains to the east. This research was conducted at some sections of Soweto/Kayole which lie to the Eastlands of Nairobi.

As shown in figure 3 Kayole occupies about 1600 hectares, within its western unit at a radial distance of some 9km east of the city centre and is one of the Estates of Nairobi city.

#### **3.4.2 Topography:**

The change of gradient is marked by a distinctive bluff at an altitude of about 1,680m. The eastern half of the city extending from the city centre towards Jomo Kenyatta International Airport is a flat landscape lying generally between 1,520 and 1,650m as shown in figure 2. In the east, the streams merging from the highlands have cut very deep valleys while to the east it opens out to accommodate the sluggish streams. The immediate environment of Nairobi consists of the productive highland area extending northwards and westwards.

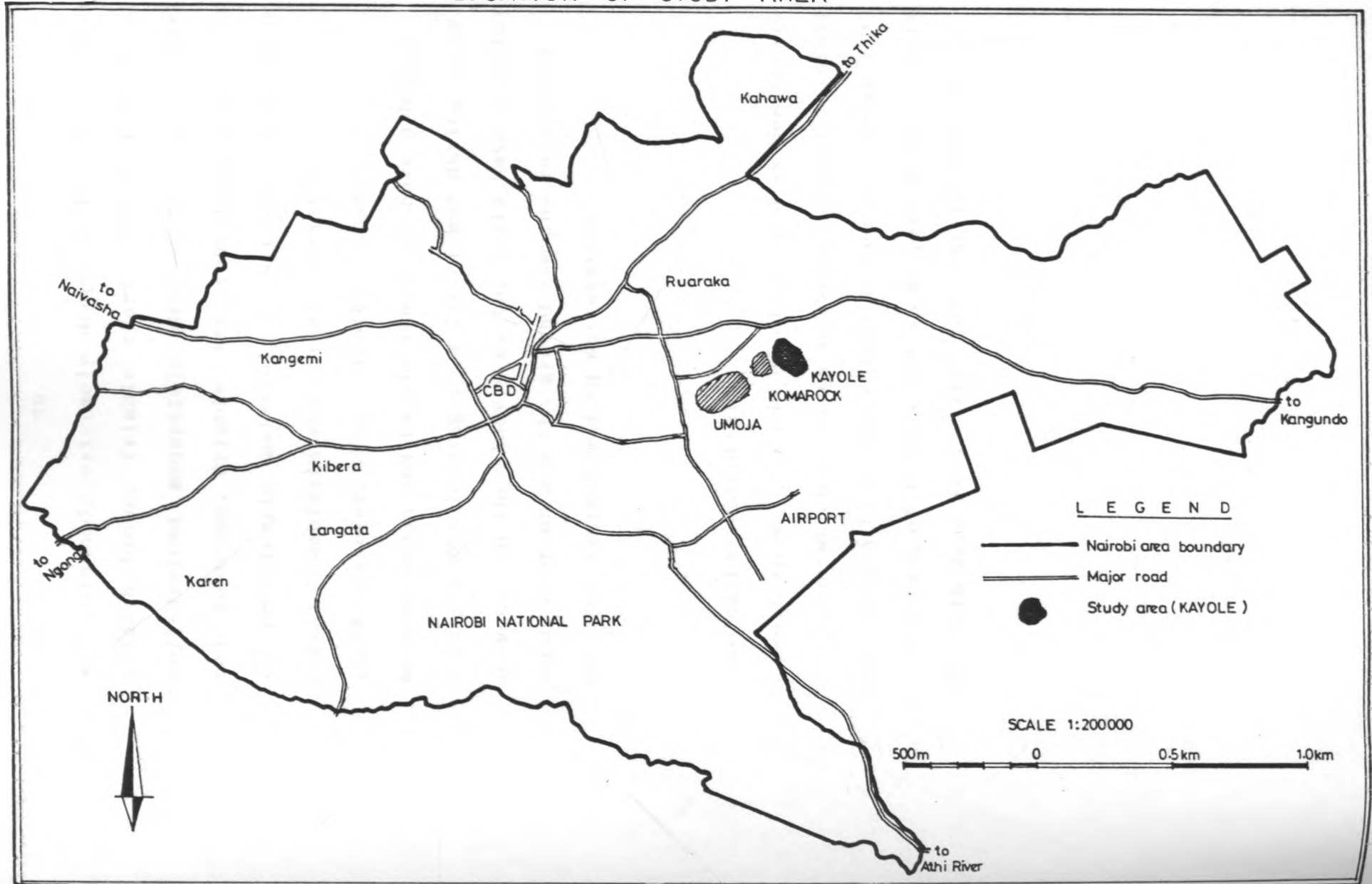
#### **3.1.3 Soils and Geology:**

The soils of Nairobi are classified as follows (Republic of Kenya, 1982): soils developed on plateaus and high level structural plains. To be more specific, these soils are:-

- (a) soils developed on tertiary basic igneous rocks, such as olivine basalt and nepheline phonolite, including older basic tuffs.

Figure 3:

LOCATION OF STUDY AREA



- (b) Well drained, extremely deep, dusky red to dark reddish brown, friable clay, with inclusions of well-drained moderately deep dark red to dark reddish brown. Driable clay, containing pisolitic or petroferrous material. (Nitisols with nitochronic cambisols and chronic acrisols, partly pisolitic or petroferrous phase).

Between Umoja and Kayole the soils have a higher clay content leading to a lot of mud during rainy seasons. In the study area the soils have a higher sandy content and the ground remains relatively dry with minimal mud in wet weather.

#### **3.1.4 Agro-ecological Potential:**

Eastern and southern Nairobi can be classified as semi-humid to semi-arid, a zone which receives an average annual rainfall of 600-1100mm. Along Athi plains rainfall average between 450-900mm. Here, the risk of failure for an adapted maize crop is about 25-75%. This zone is suitable for cattle rearing.

**Plate 1: Urban Agriculture**

Plate 1 shows the practice of urban agriculture at the study area. It is practised along the road reserve and at most open space.

**3.2.0 Social Economic profile:****3.2.1 Population Characteristics:**

The Nairobi Metropolitan Growth Strategy Reports of 1973 projected a population figure for Nairobi of between 3 and 4 million in the year 2000 AD. The current trends lead to an

estimated population of about 2.2 million by the turn of the century. The current population growth rate is about 5.7%. (Republic of Kenya: Social Economic Profile, 1990, p.176). The other population characteristics as contained in 1989 census are as follows;

#### Nairobi province

males	females	total	No.of Hs	Land sqKm	density
752,597	571,973	1,324,570	382,863	693	1,911

Population comparisons in areas where majority of the poor in Nairobi live:

#### Source: Field data 1994

##### Mathare:

males	females	total	No.of Hs	Land sqKm	density
30,388	17,334	47,722	16,852	2	23,861

##### Korogocho:

26,359	18,056	44,415	15,464	1	44,415
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##### Kibera:

74,975	47,668	122,643	42,722	3	40,881
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##### Majengo:

7,675	5,559	13,234	4,172	0.24	52,936
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Source: Kenya Population Census, 1989  
Vol.1 . Central Bureau of Statistics.

Table 3: Population Characteristics of the Study area:

Zone	Land sq km	Density	Estimated population
Soweto	0.24	52,936	12,704
Githau	0.04	40811	1635
Kibagare	0.06	40,881	2452
Shauri Yako	0.48	23,861	1145
Mohoroto	0.12	40,811	4897

According to the 1989 census the total population of Nairobi was estimated to be about 1,324 570. The population density for the city by then was 1,911 per square km. However, population density for Mathare, Korogocho, Kibera and Majengo areas that are inhabited by the urban poor have very high population densities. This is also true at the study area as shown in table 3 where there is an estimated population of 22,833 with a total area of about 0.9 square km.

### 3.2.2 Household income survey:

Although there was an urban household budget survey in 1982/83, the available data do not appear to have been analyzed systematically.<sup>1</sup> According to urban studies conducted in 1989, it was found out that female headed households have considerably lower income and that female workers earn less and are likely to be within the category of low income earners (Metropolitan Household Survey, 1989).

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<sup>1</sup> World Bank (1991): Kenya Food And Nutrition Policy  
p.52  
March 15, Report No8351-KE.

Table 4 :Urban income distribution 1981-82:Nairobi

Household income range (Ksh/mo)	% Nairobi Household
0-500	7
501-1,150	41
1,151-2,450	32
>2450	20

According to income distribution levels from the study area, income levels of the poor are not adequate in satisfying necessary consumption needs for most families. A family would require the following items as shown in figure 4, to maintain itself in a condition of basic health and social wellbeing.

Table 5: Mean income of household members in Nairobi

Zone	H/H	Wife	Husband	Mean H/size
Mathare	1967	701	1879	4.00
Kayole	1946	1250	1986	3.34
Kibera	1467	767	1463	3.37
Korogocho	1213	606	1588	4.55

Source: Ondiege and Syagga (1990.p.26).

As shown in table 4 husbands earn more income than wives. And that by 1990 the mean income of household members in low income bracket was below ksh.2000.



Table 6: Revised income patterns in Nairobi, 1992.

Income group	Monthly household earnings(ksh)	
	From	To
Lower	below 700	below 2000
Middle	700-2499	2000-7999
Upper	2500+	8000+

Source: Economic Survey (1992,p.34).

In 1992 households earning an income below ksh.2000 were categorised as low income earners.

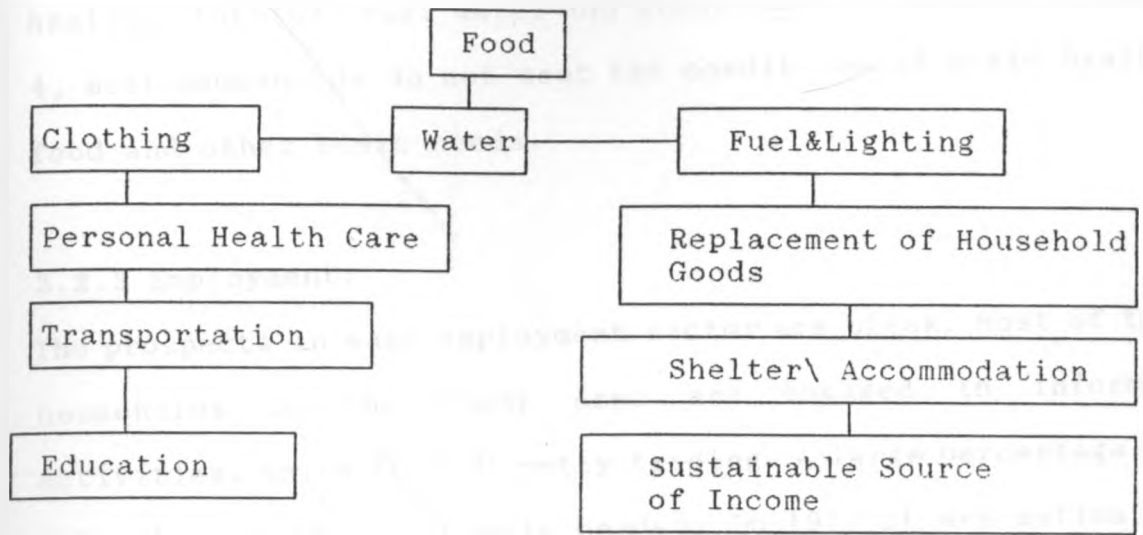
Table 5 Household income distribution 1984/89 in Nairobi

income group	monthly income(ksh)		% of households	
	1984	1989	1984	1989
Very low	<700	<1000	13.2	22.1
Middle low	700-1500	1000-2000	39.2	36.8
Upper low	1501-2000	2001-3000	13.2	15.5
Low middle	2001-3000	3001-6000	13.3	15.1
Middle	3001-6000	6001-8000	12.8	10.5
Upper middle	6001-8000	8001-1100	-	-
High	>8000	>11000	8.2	

Source: Social Economic Profile (1989,p.179)

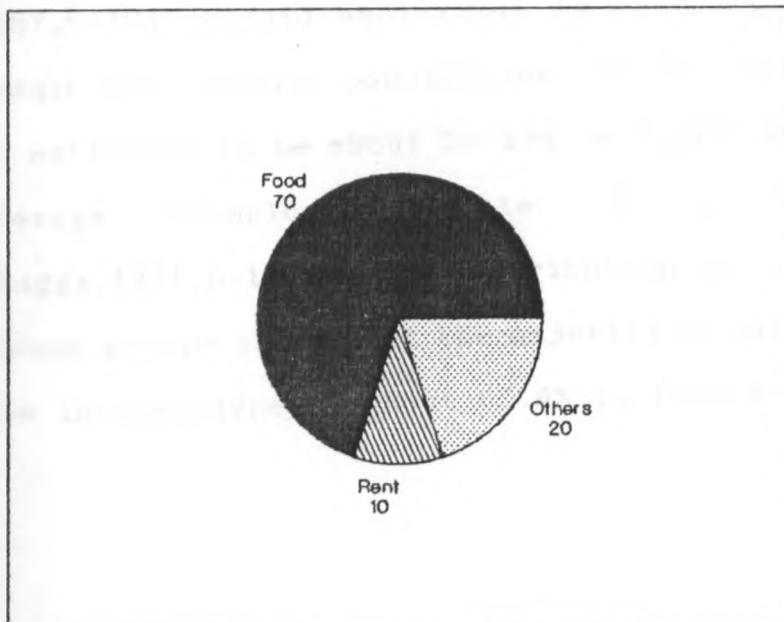
As illustrated in table 5 about 13.2% of residents of Nairobi had very low income in 1984. But this figure increased to 22.1% in 1989 showing that the number of the urban poor has continued to increase.

Figure 4: Conditions of basic health and social wellbeing of a household:



This research has found out that about 70% of the household incomes is spent on food per month. Rent payment takes up to 10% and 20% on others as shown in figure 5.

Figure 5: Household income expenditure:



Source: Field data 1994

Given that only about 20% of the household income is left for health, clothing, fuel water and other factors shown in figure 4, most households do not meet the conditions of basic health food and other basic needs.

### 3.2.3 Employment:

The prospects in wage employment sector are bleak. Most of the households in the study area are engaged in informal activities. Which include petty trading. A large percentage of urban households are female headed. In 1979 it was estimated that 24% of the households in Nairobi were headed by women. Estimates in 1987 put female headed households at 30%. However, studies in three squatter areas namely; Korogocho, Mathare and Kibera conducted between 1985 and 1987 revealed that up to 80% of all households were headed by women (UNESCO 1987,p.19). Unpaid employment is very high especially among female and children populations. Unemployment rate in Nairobi is estimated to be about 20-25%, a figure above the estimated average unemployment rate of 16.5% (Ondiege and Syagga,1991,p.177). The distribution of wage employment by income groups shows that the majority of Nairobi employees are low income earners, about 65.6% in 1984 and 75% in 1987.

Table 8: Main business activities:

Activity	Frequency
Butchery	06
Hardware	10
Saloon	12
Petty trading	102
Shoe repairs	05
Hotels	61
Posho mill	03
Second clothes	25
Kinyozi	06

Source:Field data (1994)

As indicated table 8, most households are employed in the informal sector. About one hundred people in the study area are engaged in selling foodstuffs, miraa(stimulants), waste paper and bottle collection and all other forms of hawking of the goods of values less than five hundred Kenya shillings. Prostitution is also included in this category. Hotel business is also thriving because household heads (especially unmarried people) find it relatively cheaper to eat from hotels than preparing a meal at home which will include costs of fuel,cooking oil among other costs.

#### 3.2.4 Urban Agriculture:

The practise of urban Agriculture in Nairobi is on a small scale (small plots). Production from this sector contribute towards food security levels of the practising households and to the residents of Nairobi by ensuring availability of food

in the market at reduced or fair/affordable prices. Nairobi residents get food from as far as 100 km away (Obara, 1988). Research conducted in Sub-saharan Africa Cities indicate that urban residents pay up to 30% more for food produced in rural areas than the same produced in urban areas (Yeung 1985). The conditions under which urban agriculture is practised in Kenya have not attracted the attention of the government. Whereas in some countries like Japan, urban farmers are protected and reinforced by favourable land use regulation and tax concessions. About 2/3 of urban households in Kenya grow part of their food while 29% grow these crops within the urban area in which they live (Manundu,1985).

Table 9: Source of income ranked position one by the household:

Source	Frequency	%
Urban Agriculture	07	22.6
Salary	01	03.2
Seasonal/Kibarua	03	09.7
Informal	04	12.9
Retail shop	08	25.8
Hawking	08	28.8

Source:Field data 1994

As illustrated above in table 9 about 22.6% of those interview ranked urban agriculture as a number one source of income.

Table 10:Field Survey:Urban Agriculture

R	A	B	C	D	E	F	G
R1	2	3	1KM	1	1	10	90
R2	2	2	1KM	2	1	50	50
R3	1	5	1KM	1	4	80	20
R4	2	1	2KM	1	2	40	60
R5	2	5	N	3	1	50	50
R6	2	3	100M	2	2	60	40
R7	2	6	500M	2	3	80	20
R8	2	4	500	3	2	50	50

Source:Field data 1994

Where:

A=Sex of respondent:male(1)female(2)

B=Residence:Umoja(1)Kayole(2)Kibagare(3)Mohoroto(4)Soweto(4)

C=Distance in km to the farm. Negligible(N)

D=Main crops:Maize(1)Vegetables(2)Potatoes(3)

E=Number of years has practised urban agriculture.

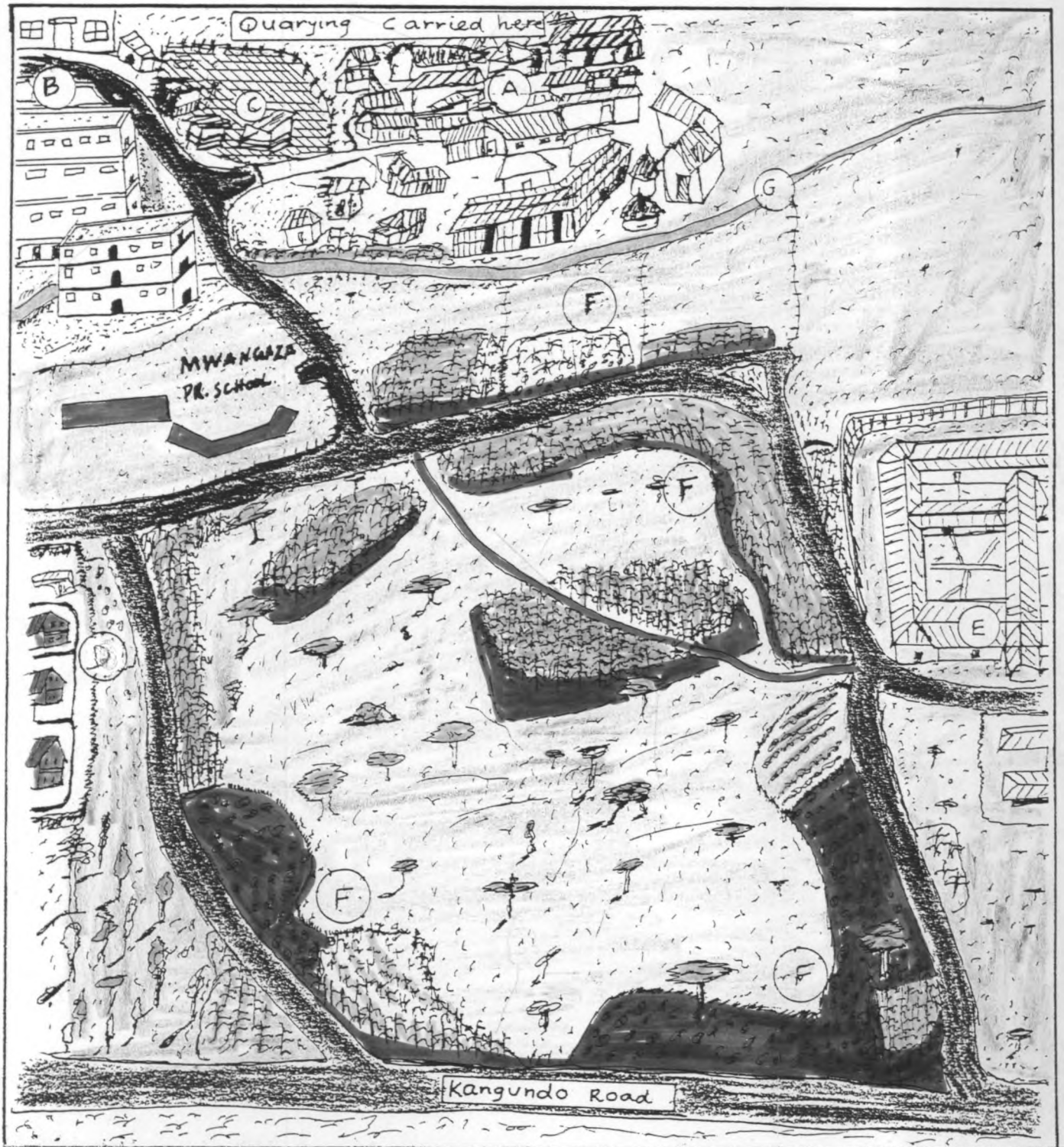
F=How much food is sold(%)

G=How much food is consumed(%)

R-Respondents

Figure 6: Urban agriculture zone

## Fig. 6: URBAN AGRICULTURE ZONE



## LEGEND

- A Slum areas
- B Kayole Highrise estate
- C Open Market
- D Komorock estate
- E Umoja estate
- F Urban Agriculture zone
- G River

Source: Field Survey 1994

Urban agriculture is mainly practised by women or female population as indicated in table 10. Some do walk up to a distance of 2km from their homes to the farms. However, it is not a monopoly of the urban poor. Indeed, some middle income earners from Umoja residence do compete with the urban poor for urban arable land. The harvest makes a contribution to household food budget directly while the rest is sold to generate income to help stabilize the household income levels.

### 3.3.0 Infrastructure:

#### 3.3.1 Water Supply:

The study area is not supplied with clean piped water by the city council. The residents rely on piped water that they fetch from the Kayole Estate. Water is sold to them at a price of between three shillings to five shillings per a gallon . However, some landlords through the spirit of "Harambee" or collective effort have managed to combine resources to have reticulation of water into their homes. In the whole, a lot of time and energy is wasted through fetching water. It is evident that water supply problem is not a monopoly of rural areas. Thus the notion that urban centres are well supplied with clean water is invalid at Soweto. During rainy seasons most residents depend on roof catchment. Water supply is a major problem that existing institutions like Bethlehem community centre face. The centre helps in the rehabilitation of street children, it houses, feeds and educates the



children. The centre pays a daily bill of about Ksh.350 per a week for water supply (water for cooking and washing utensils).

Plate 2: Road Conditions:

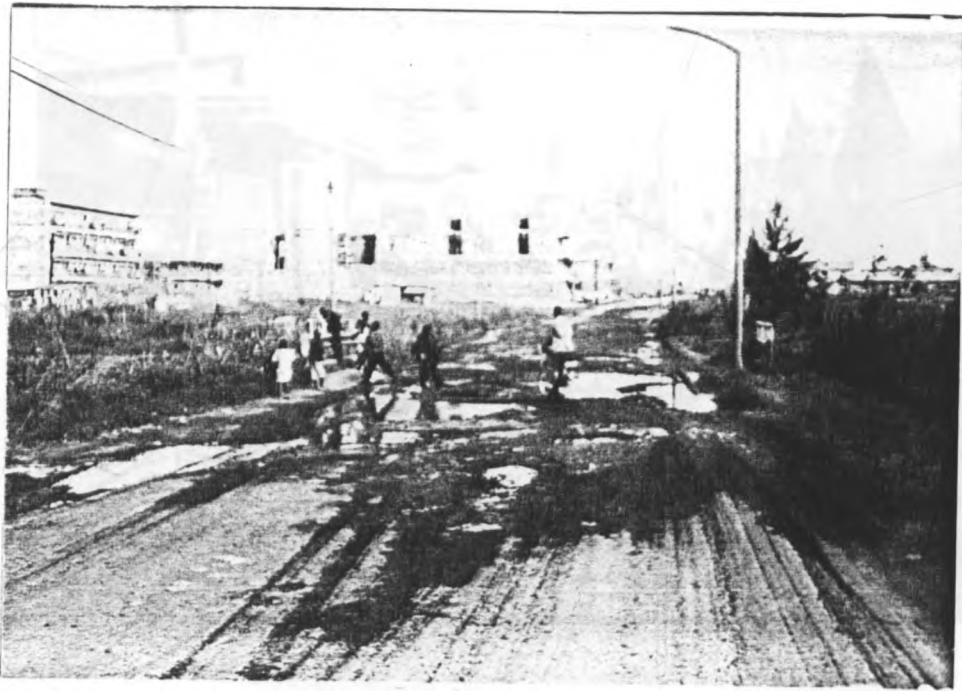


Plate 2 shows the poor state of road network in the study area.

Most households purchase a 20 litre gallon of water at about Ksh.5.00. The prices does vary with seasonality. During the dry spell or when there is acute water supply prices go up.

Plate 3 : Conditions of the Streets:



As shown in Plate 3 the streets are waterlogged and are made worse by poor drainage and solid waste.

### 3.3.2 Sanitation:

Waste water management in the study area is very poor. The common method of waste disposal is on site disposal. Since about 80% of water consumed ends up to be waste water this leads to poor sanitary conditions. The area is highly congested. The area is devoid of sewerage system. In connection with toilet facilities, the households are served with pit latrines (refer to table 11). Up to an average of twenty households use a single toilet. The communal use of toilet facilities has contributed to poor conditions of sanitation. Unattended children also contribute to poor sanitary conditions. Table 11 shows that only about 6.5% of the toilets belong to individual households and that 93.5% of the toilet facilities are communal. Solid waste management is the sole responsibility of each household. There is neither community initiative nor city council services except the boys who collect some material for sell. Uncollected garbage is disposed next to residential buildings. Because of poor surface drainage there are several water bodies that breed mosquitoes.

Table 11: Use of toilets:

Use	Frequency	Percent
Individual-household(personal)	02	6.5
Communal	29	93.5

Source:Field data 1994

According to the development plan for Kayole, it was noted that due to the fact that rocks are so close to the surface it was not possible to adopt a disposal system based on ground soakage. Under such circumstances,Pit latrines are preferred but would require frequent emptying by pumping due to poor soakage. Already soakage is contributed to poor sanitary conditions in the study area.

Table 12: Type Of Toilets:

Type	Frequency	Percent
Pit Latrine	29	93.5
Flush Toilets	02	6.5

Source:field data 1994

Plate 4: Solid waste disposal and housing conditions:



Plate 4 shows the common method of solid waste disposal in the study area. Waste is dumped anywhere. It also shows nature of housing situation that comprise temporary structures.

### 3.3.3 Educational and health institutions

According to the Social economic profile of 1989 (Republic of Kenya 1990) all members interviewed in Nairobi have had primary education while 32.5% have completed secondary education. On the other hand 15.5% have no formal education at all. Slums and unplanned settlements have fewer residents who have completed primary school.

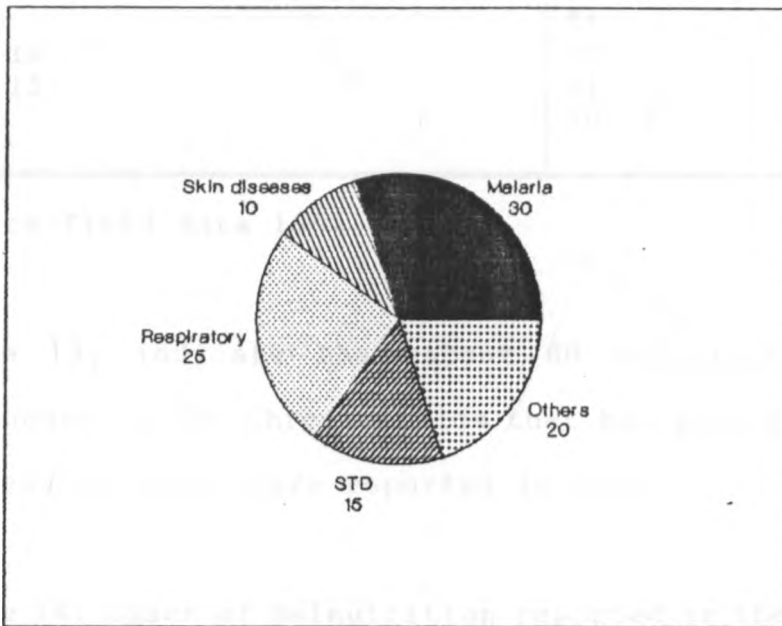
The Bethlehem community centre is a non governmental organisation registered under the society Act since 1990. It feeds and educates about 400 children from Soweto, Githau, Mohoroto, Kibagare, Shauri Yako and Kayole. About 100 students are being accommodated by the centre. The community offers classes from nursery to standard six. The centre has doubled classes for 1995. In most of the class rooms there is no furniture consequently the pupils just sit on the floor. There are two rented dormitories, one for boys and another for girls. The staff at the centre comprises a total of about 20 persons, they include two watchmen and two cooks. The teachers are volunteers and some are O'level and A'level, all unemployed graduates. The other volunteers are degree graduates who occasionally offer services at their free time.

Some of the donors to the centre include World Vision, the Inter-Aid Kenya which has helped to construct two class rooms. The other is UNICEF that is helping in immunisation of

the children and donates foodstuffs for malnourished children. The Giants Kenya also donate food.

According to figure 7, the main diseases are shown with malaria leading with about 30%.

Figure 7: Main diseases in the study area:



Source: Field data 1994

Table 13, gives the age brackets of patients attending at various clinics. about 51% fall within age 0-5. Therefore most of the patients are children. The minimal attendance of adults confirms the fact that most of them are seeking alternative and cheaper treatment like traditional medicine.

**Table 13: Age brackets of the patients attending local clinics 1994:**

Age	percent
0-5	51
26-10	12
11-15	01
16+	36

source:field data 1994

Table 14, indicate that about 60 malnutrition cases were diagnosed in the three clinics that had good medical records. Whereas 89 cases were reported in 1994.

**Table 14: Cases of malnutrition reported in the Health clinics per a month 1993-94:**

Health Clinic	1993	1994
A	20	40
B	00	2
C	40	46

Source:Field data 1994



Health Officers attributed the increasing number of malnutrition cases in the area to high illiteracy levels, inflation, low income, social dimension (i.e alcoholism). Findings from the questionnaire surveys show that most households indicated two main causes of malnutrition as being;

- a) inadequate food accessibility due high prices of foodstuffs,
- b) large household size.

Most Health clinics extend credit facilities to their patients. However, the credit is a preserve of those employed in the formal sector. The Soweto Primary Health Care Clinic Project Manager indicated that the project has incurred big losses because of bad debts not cleared by patients from the informal sector. Water-borne diseases transmitted via pathogens are prevalent. Diarrhoea is the most common. The other common water related diseases are via insect vector that is, diseases are spread by insects which either bite near water or breed in water (malaria filariasis, onchocerciasis and yellow fever).

Plate 5: Health institution:



Plate 5, shows the premise of Soweto Primary health care clinic sponsored by the church. This is the main health clinic in the study area. It is relatively cheaper and it gives credit to patients.

#### 3.3.4 Housing:

The study area is a slum settlement. Settlement patterns do not adhere to land use regulations. Houses are congested (e.g close to each other) and are erected in an haphazard manner.

There are no parking reservations, no streets except footpath and cul de sacs. Most of the houses are temporary structures and are poorly maintained..

### 3.5 Land use classification:

For purposes of this study, a general overview about a land use pattern in Soweto can be given by the acreage data on land use activities. This approach however provides a generalised estimation of the total land for a certain land use. This was arrived at by observations and drawing of transect.

Table 15: Land Use Pattern in the Study Area:

Area	1	2	3	4	5	6
Soweto	68%	06%	03%	22%	00%	01%
Githau	75%	08%	07%	22%	00%	00%
Kibagar e	51%	05%	18%	20%	05%	01%
Shauri Yako	55%	10%	15%	10%	05%	05%
Mohorot o	50%	10%	20%	10%	00%	10%

Source:Field data

1. Residential
2. Roads/footpaths
3. Open space
4. Light commercial
5. Administration/education
6. Urban agriculture

The land use potential shown in table 15 can be described as being mainly residential and light commercial area. For instance in Soweto about 68% of the land is devoted to residential buildings, in Githau it is 75%, Kibagare 51% Shauri Yako 55% and Mohoroto about 50%.

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## CHAPTER FOUR

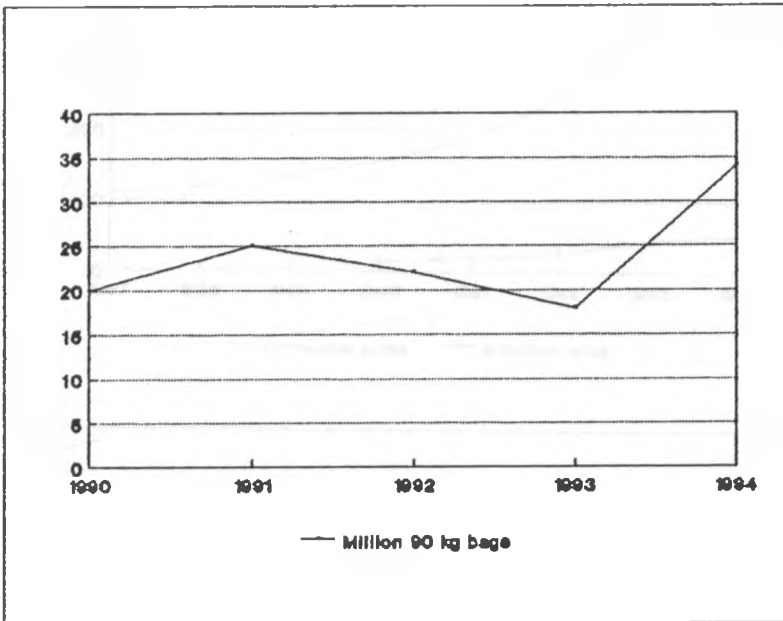
## FOOD ACCESSIBILITY AMONG THE URBAN POOR AND THE PLANNING ISSUES

## 4.1 MACRO LEVEL INDICATORS

## a) Trends in maize production

Maize is the staple food in Kenya. Therefore trends in maize production indicates the food security situation in the country. Maize production declined during the drought years of 1984/85 and 1987/88. However, since 1988/89 there has been a downward trend in maize production that cannot be attributed to weather uncertainties.

Figure 8: Trends in maize production in Kenya

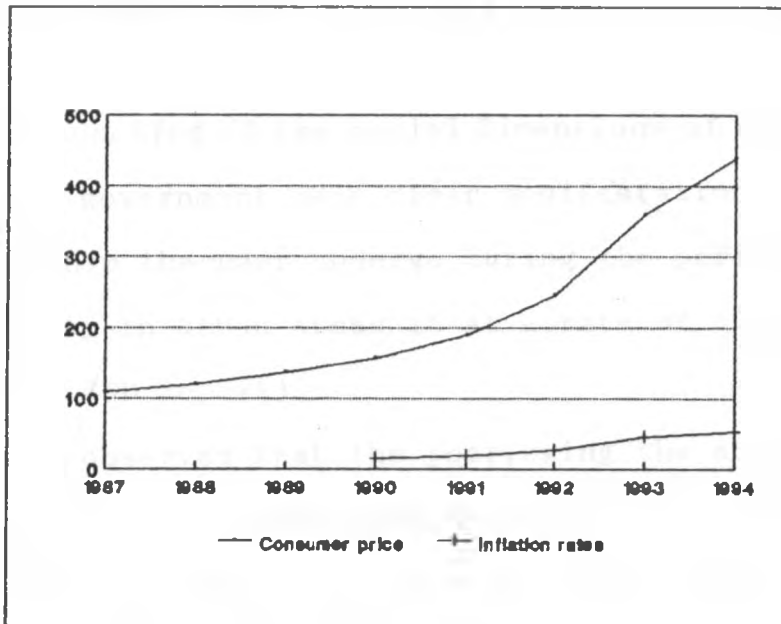


Source: Economic surveys (1990-94)

The amount of maize cultivated in Kenya has declined from its peak of 1.44 million hectares in 1988/89 to below 1.30 million hectares by 1992. Maize production as shown in figure 8 declined by 21.7% in 1993 from 23 million bags in 1992/93 crop year to 18 million bags in 1993/94 but there has been increased yields since mid 1994.

b) Inflation rate rose from 19.6% in 1991 to 27.3% in 1992

Figure 9: Trends in consumer price index



Source: Economic surveys (1987-94)

and further to 46.0% in 1993. Figure 9 shows the price movement between 1987-1994. The price levels of commodities as represented by the consumer price index (CPI) rises gently between 1989 to around 1992 but tends to accelerate stiffly until 1994 when the prices show the tendency to decline.

c) The food relief programmes provided by the Office of the President and channelled through the provincial administration have been on. Drought levy of 2.5% was introduced during the 1994 budget but it will be withdrawn from December 1995 according to the 1995 budget.

d) The launching of the Social Dimensions of Adjustment by the Kenya government is a clear manifestation of the economic hardship the poor undergo during the period of SAPs. Poverty in urban areas is at a rate of 30%(Republic of Kenya SDD Report).

e) It is observed that the poor, using the absolute poverty line spent a larger proportion (27.7%) of their food budgets including own consumption on maize purchases(Economic Survey 1992.p.41).

In summary, food production has been on the decline in Kenya since 1989. That the consumer price index has increased sharply between 1992 and 1993 and this has been compounded by high inflation rates and low economic growth. Therefore during the period under review the purchasing powers of consumers was eroded.

#### 4.2 HOUSEHOLD ECONOMIC DECISION MAKING

The hypothesis to test here is that there is no relationship between food accessibility and household economic decision making. Most researchers engaged in SAPs studies agree that it is incorrect to infer that SAPs increase poverty among the most vulnerable groups of people. The question to ask then is, has market liberalisation sufficiently improved the economic conditions of the people?. The prices of consumer goods play a significant role in changing the economic behaviour of all groups of people. In the short run, market liberalisation rises prices of goods and particularly those of foodstuffs since most developing economies have often controlled the agricultural sector or assisted it with subsidies. However, it is not obvious that foodstuffs would increase in price more than other goods, except, in cases where food prices had previously been either regulated, controlled, subsidized or both.

Plate 6: Informal Sector: Maize roasting:





When prices of foodstuffs increase they have a greater impact on the economic behaviour and decision making amongst the poor people in society. The household budget would therefore experience constraint. One of the ways that the Food accessibility variable has been measured in this study by establishing the frequency that a given household has foregone supper because of lack of money.

**Table 16:** Frequency when the household has missed supper

Response	Frequency	%
None	03	09.7
Rarely	17	54.8
Regularly	11	35.5
Total	31	100

Source:Field survey 1994

Prices of foodstuffs increased considerably in 1993 and many households became captive consumers. About 35.5% of the sampled households went without supper regularly in 1994. This figure would have been higher were it not for the gains accruing from the coping strategies by the poor. Indeed, many households were engaged in multiple income. About 36.4% of the households began their businesses in 1993.

The argument is that the costs of adjustment are too high and that the poor households are unable to absorb them, leading to absolute declines in the living standards including irreparable damage through malnutrition ( Beneria,1992.p.32).

Some indicators of changing pattern of household economic status:

- (a) Percentage of total monthly income allocated to food acquisition.

Table 17: Percentage of Monthly income spent on foodstuffs.

%Income	Frequency	%
60	01	03.2
70	07	22.6
80	17	54.8
85	01	03.2
90	05	16.1

Source: Field survey 1994

In 1994 the minimum expenditure was at 60% of the total income. Whereas about 74.1% of the respondents spent about 80% and over of their monthly incomes on foodstuffs. The average expenditure was at 77%.

- (b) Percentage of the households that posted either foodstuffs or income to their rural areas/homes between 1993-1994.

Table 18: How often foodstuffs/incomes/farm inputs were posted to aid the next of kin in rural areas in 1993:

Response	Frequency	%
Annually	01	03.2
Monthly	02	06.5
Occasionally	06	19.4
Regularly	02	06.5
None	20	64.4

Source: Field survey 1994

Table 18 shows that the number of respondents who posted income was 64.5% in 1993. On the other hand the number of those who posted aid regularly was as at 06.5% in 1993.

**Table 19: How often Foodstuffs/income/farm inputs were posted to aid the next of Kin in rural areas in 1994:**

Response	Frequency	%
Monthly	01	03.2
Occasionally	11	35.5
Regularly	01	03.2
None	18	58.1

Source:Field survey 1994

The percentage of those that recorded nil aid to assist their rural kinship in 1994 was 58.1%.

**Plate 7: Informal Sector:**

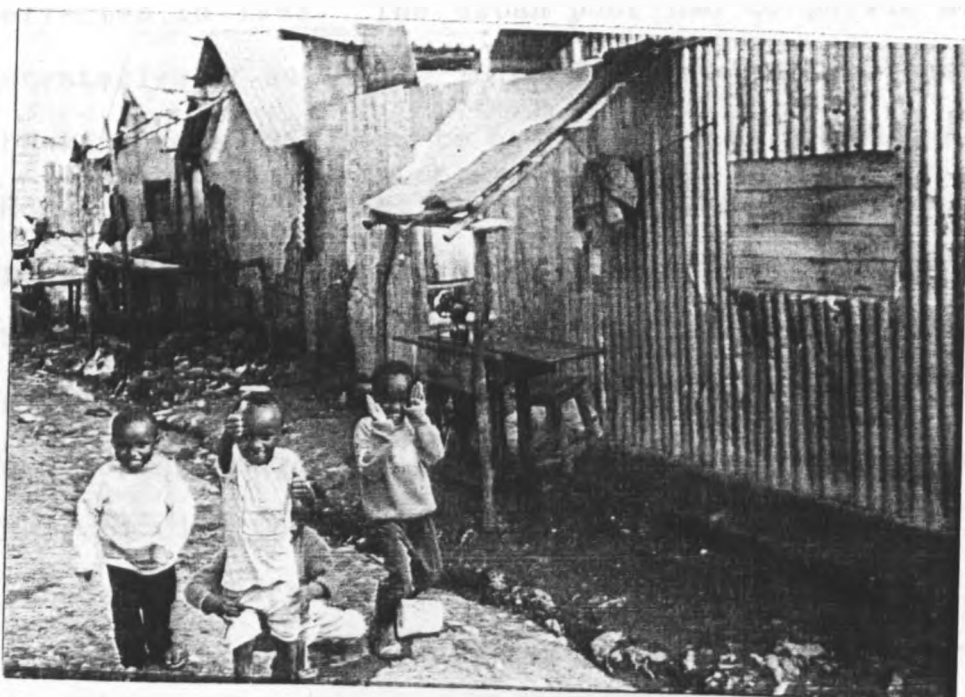


Plate 7, shows tailoring as one of the informal activities. The sewing machine is outside the house of the tailor and no rent is paid, this is a strategy to minimize costs and maximise gains.

Informal sector is an important sector since it offers great employment opportunities in most of the developing countries implementing SAPs that are accompanied with retrenchment programmes. It is also often assumed to play a significant role during the structural adjustment process since it is particularly flexible and labour intensive. Experience shows that it is the informal sector that reacts first to new economic signals and creates new opportunities (Larsson;1994 p.16). The implementation of SAPs in Kenya was greatly effected in 1993. The urban poor had to pursue alternative strategies of survival. Informal sector activities including hawking have continued to be intensive in the city of Nairobi. Research on the effect of SAPs on the vulnerable groups of people in urban areas indicate a rise in street trading. Street trading is one of the more intractable informal sector problems facing local authorities in urban cities in the developing world during the era of SAPs. Reports from the Nairobi City Council indicate that street hawking is a major menace in efforts to keep the city clean and orderly. Street traders are seen to occupy urban space in a disorderly manner, generating garbage and causing traffic congestion. I have

witnessed an increase of this in Nairobi since 1993.

**Table 20: Year of starting informal business:**

year	%
1970	04.5
1990	04.5
1992	04.5
1993	36.4
1994	50.0

Source:Field survey 1994

Very few (13.5%) business activities were started before 1993. In 1993 new business initiatives stood at 36.4% and 50% in 1994 (reference to table 20). Between 1993 and 1994 increase in informal activities was by about 37.4%. It is evident that most informal businesses were initiated between 1993 and 1994 respectively. This trend can be associated with the implementation of SAPs.

**Table 21: Main goods sold by the Urban Poor engaged in the informal sector:**

Goods	Frequencies	%
Vegetables	4	17.4
Clothes	3	13.0
Cigarettes	1	4.3
Shoe Shining	1	4.3
Pillows	2	8.7
Porridge	1	4.3
Miraa	1	4.3
Herbs	2	8.7
Beer	1	4.3
Bottles	1	4.3
Roast maize	1	4.3
Lady Accessories	1	4.3
Fish	1	4.3

Source:Field survey 1994

According to table 21 the main goods traded in the informal sector are vegetables representing about 17.4% and second clothes with 13%.

**Table 22: Household engaged in both formal and informal sectors.**

Response	1993	1994
Yes	87.09%	83.87%
No	12.9%	16.13%

Source:Field survey 1994

Multiple modes of earning a livelihood are an aspect of the concept of household survival strategies which attempts to explain the mutual interactions between domestic units and macro soci-economic structures and processes especially in periods of rapid changes and increased social stress. The number of households engaged in formal and informal income activities was 87.09% in 1993 ( refer to table 22).It rose by 3.7% between 1993 and 1994.

**Plate 8: Market Centre:**

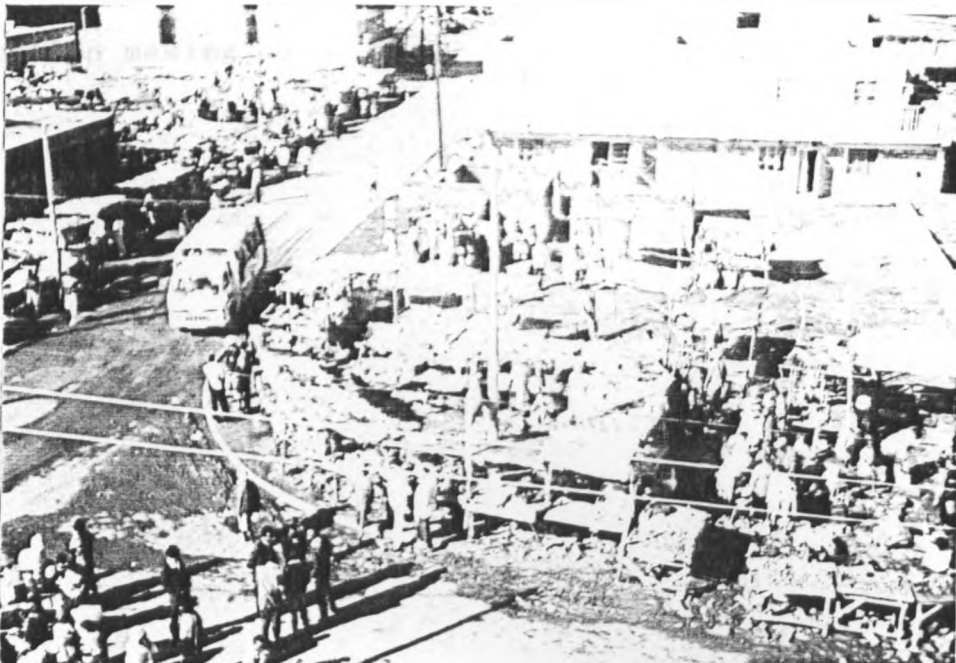


Plate 8: shows the multiple goods being traded at the market centre. This is the Soweto market centre

The inflation rate estimated by raised Nairobi consumer price indices rose significantly from 19.6% in 1991 to 27.5% in 1992. The first quarter of 1993 was marked by a general increase in consumer prices. As a result the month on month rate of inflation was recorded at 32.4% in January 1993 rising to 41.9% in February 1993. Among the factors contributing to high inflationary pressures were; price decontrol on 72 items in the course of 1990; withholding of foreign aid; use of Forex certificates in importing goods and services; devaluation of the shilling and high monetary expansion (Republic of Kenya Economic Survey 1993,p.3-4).

Considering the evidence given above we reject the null hypothesis and accept the hypothesis that there is a relationship between food accessibility and household economic decision making

### 4.3 HOUSEHOLD FOOD CONSUMPTION PATTERNS

Urban household food consumption patterns are influenced by the following factors;

- (a) family income,
- (b) household size,
- (c) ages of the households,
- (d) gender characteristics,
- (e) prices of foodstuffs,
- (f) other sources of food (urban augment, relief food supplement from rural areas,
- (g) prices of other goods and services,
- (h) tastes and preferences,
- (i) cultural and traditional status,
- (j) area of residence and accessibility,
- (k) health conditions.

**Table 23: Meat consumption 1994**

Response	Frequency	Percent
Regularly	03	9.7
Monthly	03	9.7
Rarely	09	29.0
Occasionally	16	51.6

Source: Field survey 1994



Table 24 indicates meat consumption patterns at the household level. It shows that about 29% of the households consumed meat rarely. The prices of meat are decontrolled and the prices have maintained an upward trend. At the study area, a half a kilogram of meat cost ksh.35 in 1992, ksh.45 in 1993 and ksh.50 during the period of interview. It is therefore rational to conclude that it is because of the increasing prices of meat that only about 9.7% households consumed meat on a regular basis. It is important to note that any meat consumed out of the household has not been taken into account.

Table 24:Consumption of vegetable oil 1994

Response	Frequency	Percent
None	05	16.1
Rarely	11	35.5
Regularly	15	48.4
	31	100

Source:Field survey 1994

Table 24 shows the consumption pattern of vegetable oil at the household levels. Indeed vegetable oil is an essential ingredient in food preparation. It indicates that only 16.1% of the respondents did not consume vegetable oil. On the other hand about 48.4% of the households consumed vegetable oil on

a regular basis. However, about 35.5% of the respondents affirmed that they rarely consumed vegetable oil because of higher prices. Small packages of vegetable oil that cost less are the most popular among the respondents.

Plate 9: A Bar:



Plate 9 represent one of the attractive bars that sell the cheaper traditional brew. Many people have shifted from the informal bear to affordable traditional brands ( see also table 25).

Inferences on food consumption patterns in this research have been drawn from the following parameters:

- (a) frequency of meat consumption,
- (b) frequency of alcohol consumption,
- (c) cases when households have prepared foodstuffs without vegetable oil,
- (d) the extent to which prices of bread, milk and Blue Band has influenced their consumption and,
- (e) occasions when breakfast has been taken without sugar.

Under SAPs, price decontrol affected 72 items during the year 1992. Among the items decontrolled and which affected consumer budgets directly were fats and edible oils, rice, tea and milk. It has been ascertained that the consumption of cooking oil among the urban poor declined. Maize market was decontrolled on December,1993.

The first quarter of 1993 was marked by a general increase in consumer prices following the floating of the Kenyan shilling leading to devaluation of up to 50%. Of the few foodstuffs whose prices were still controlled in 1992, an increase in the

price of maize-meal was announced in July and subsequent increase in the prices of bread and wheat flour announced in October, 1992.

Table 25: Alcohol consumption patterns of head of household 1993-1994:

Response	%1993	%1994
Traditional	38.7	32.2
Formal Beer	06.5	06.5
Any occasionally	16.0	06.5
Avoid	19.4	29.0
None	19.4	25.8

Source: Field survey 1994

Table 26 : Porridge consumption patterns.

Response	%1994
Regularly	06.5
Occasional/ substitution	41.9
Rarely	38.7
Abandoned	12.9

Source: Field survey 1994

The price of maize led to increased retail prices of flour especially in late 1993 and early 1994. There were about 6.5% regular consumers of porridge in 1994. This is a very low figure given that it is not an inferior food among the poor. This decline corresponded to the increase in consumer price of maize flour (refer to table 26).

Table 27: Frequency of taking Breakfast without Sugar.

Response	Frequency	%
Occasionally	13	43.8
Regularly	2	6.5
Rarely	6	19.4
Traditional	6	19.4
None	4	12.9

Source:Field survey 1994

The study found out that in 1994 about 41% of the sampled population occasionally prepared/consumed their breakfast without sugar. While 19.4% of them indicated that consumption of breakfast without sugar had become traditional or common because of affordability (see table 27).

Table 28: Effect of price of milk on consumption.

Response	Frequency	%
Occasions	20	64.5
Substitution	4	12.9
No longer consumed	3	9.7
Regularly	4	12.9

Source:Field survey 1994

Only 12.9% of the households consumed milk regularly in 1994 while 64.5% consumed it occasionally. About 12.9% had substituted milk with black coffee by 1994 ( refer to table 28).

Table 29: Effect of price of eggs and consumption.

Response	Frequency	%
Occasions	15	48.4
Substitution	9	29.0
No longer consumed	4	12.9
Regularly	3	9.7

Source: Field survey 1994

Because of price increases about 12.9% of the interviewed households could no longer buy eggs while 48.4% could purchase eggs occasionally in the same period ( refer to table 29).

From the analysis above we can accept the hypothesis that the impact of food accessibility on the household food consumption patterns is insignificant.

#### 4.4 HOUSEHOLD SOCIAL CULTURAL CHARACTERISTICS

The null hypothesis to be tested is that the social cultural characteristics of the households have remained constant with changes in food accessibility.

It is important to assess the impact of SAPs on the social cultural characteristics of the poor in society. UNICEF has made the best effort, it has put all the relevant literature together though there is a problem of distinguishing the effects of recession and the effects of SAPs. Both the World Bank, IMF and other agencies have done little systematic analysis of the impact of SAPs on various poverty groups, on low-income, peasant farmers, on the landless, street hawkers, beggars, artisans, tenants and shopkeepers.

With some exceptions, researchers are not in a position to say what the impact of adjustment process on poverty has really been. It is important to note that no serious research has been undertaken to determine the impact of SAPs on the welfare of urban poor households. The literature available is summarily a set of hypotheses about the impact that adjustment will have on poor people. For instance, the typical adjustment programmes would try to contract the fiscal deficit by cutting demand of goods and services.

Most of the studies on poverty identify the attributes that characterise poverty (World Bank,1993). Some common ones are higher dependency ratio on part of the poor than non poor; completion of few years of school and higher illiteracy rates for the poor than non-poor; and a tendency of heads of poor households to participate in any labour force activities or public works to generate income.

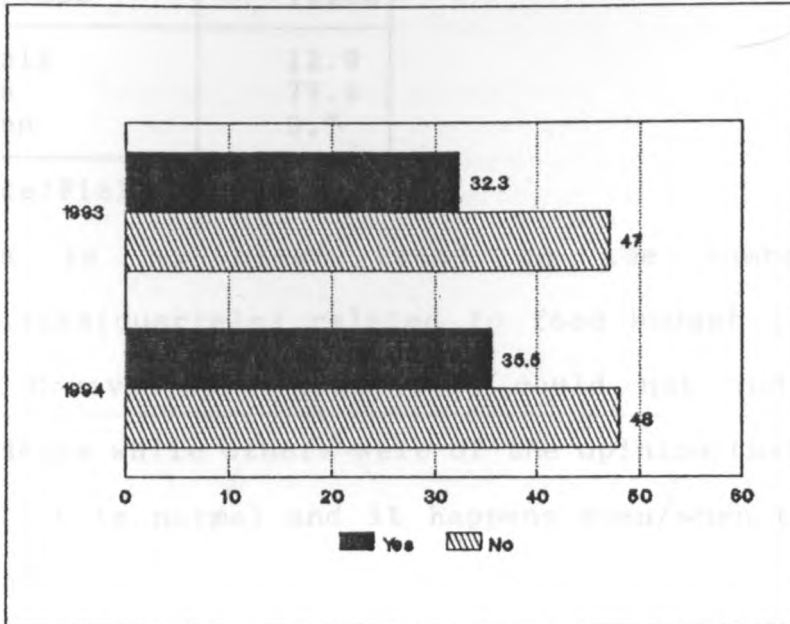
Unlike informal sector, multiple modes of earning a livelihood may include "criminal activities". In reality most multiple modes of earning are quasi illegal (street hawking, moonlighting, drug trafficking). Survival strategies also underscore roles and forms of employment that cuts across social cultural characteristics. For instance men engaged in the selling of vegetables (usually associated with women) or women becoming touts (usually associated with men).

Measurement of indicators of social cultural status of a household include:

- (a) cases of child labour recorded and recalled
- (b) family members who have migrated to stay or live in rural areas between 1993-1994,
- (c) family conflicts related to food accessibility or expenditure.
- (d) decision and perception of the head of the household o the desired household size,
- (e) use of traditional medicine.



Figure 10: Child Labour 1993-94:



Source: Field data 1994

As shown in figure 13 the number of migrations rose to 35.5% and 41.9% between 1993 and 1994 respectively. It is rational to extrapolate the fact the migrations were triggered by high costs of living in urban areas. Members of the families might have migrated to rural areas to generate income from agricultural activities and even produce food to mitigate their urban families. The bout of SAPs crisis is borne by the urban sector and the adjustment can reduce the rural urban migration (Dharam, 1990, p.119).

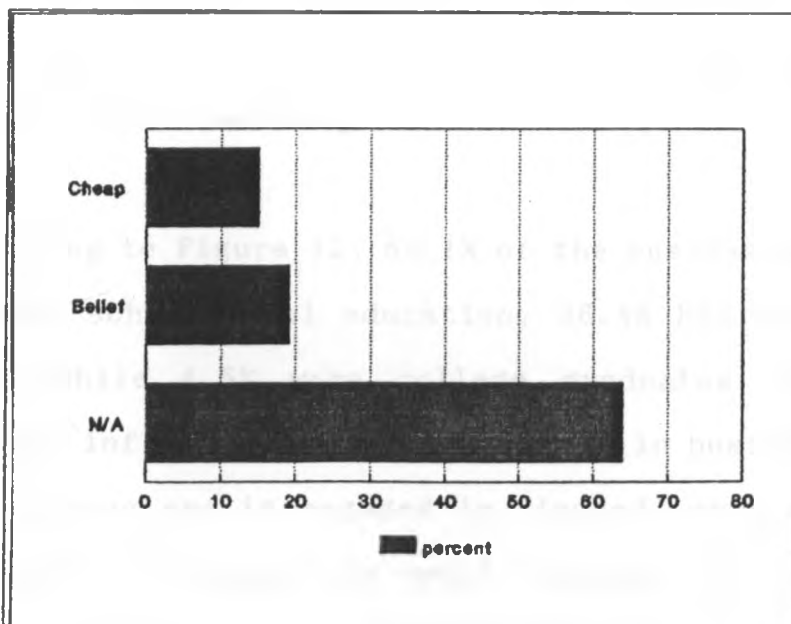
Table 30: Family conflicts associated with household food budget.

Response	1994%
Rarely	12.9
None	77.4
Often	9.7

Source:Field Survey 1994

There is no clear trend on the number of family conflicts (quarrels) related to food budget (refer to table 30). However, most households could not indicate specific incidents while others were of the opinion that a food budget conflict is normal and it happens even when there is enough income.

Figure 11: Reasons for Using Traditional Medicine:



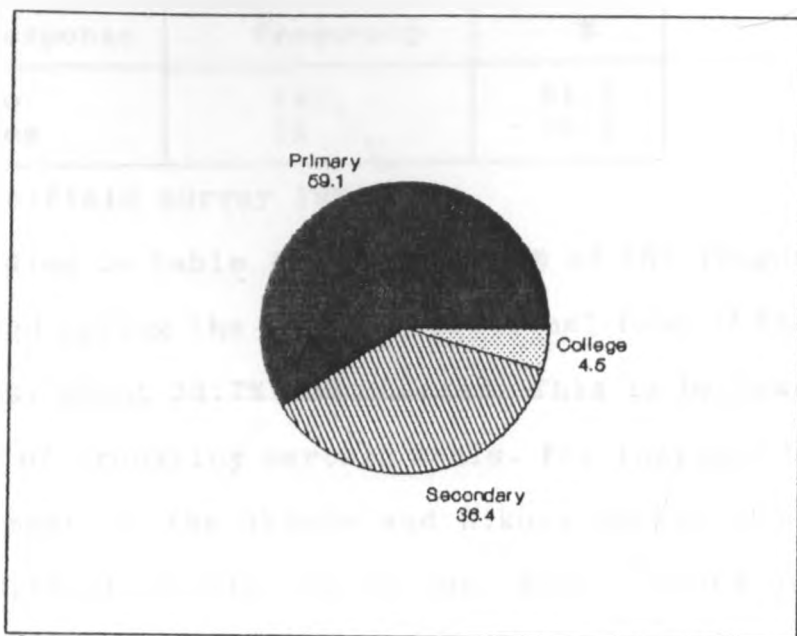
Source:Field data 1994.

About 35.5% of the respondents were using traditional medicine and about 67.7% had not sought traditional medicine (refer to figure 11). The reasons for using traditional medicine are mainly because they are relatively cheaper, easily accessible and because of traditional beliefs.

According to the small business enterprise survey about 59% of owners for businesses were single/widowed/separated and 40% were married. About 47% of the owners were female and 53% were male. Thus showing that gender characteristics do not influence greatly the participation in business. As matter of fact, men are selling vegetables as much as women do. This phenomena is rarely noticeable in rural Kenya. It does not conform to African Customs and it is therefore an indicator of social cultural instability. What then has compelled men to sell vegetables in Urban areas if the reason is not associated with economic hardship ?.

According to Figure 12, 59.1% of the businessmen had attained primary school level education, 36.4% had reached secondary level while 4.5% were college graduates. Education level neither influences the participation in business nor the type of business one is engaged in. Indeed, even the most highly educated are engaged in small business activities including petty trading.

Figure 12: Level of Education:



Source: Field data 1994

Because of economic hardships, some heads of households have encouraged and supported their children to drop out of school to engage in child labour. Particularly, many children are employed as maids while others are begging in the streets. The cases of child labour were 32.3% in 1993 and 35.5% in 1994 (see figure 10). About 90% of the children engaged in labour activities were girls and 10% were boys.

**Table 31: Whether the Staple food of the household is similar their with tribe**

Response	Frequency	%
No	19	61.3
Yes	12	38.7

Source:Field survey 1994

According to table 31, about 61.3% of the respondents had not changed eating the staple traditional food of their respective tribes. About 38.7% had changed. This is because of the total costs of preparing certain meals. For instance it was observed that most of the Akamba and Kikuyu people who traditionally eat Githeri (a mixture of corn maize, beans and vegetables) have found the traditional food costly as compared to preparing Ugali and vegetable meal.

**Table 32: Malnutrition symptoms noted at household level during day of interview**

Response	Frequency	%
Yes	7	22.6
No	24	77.4

Source:Field survey 1994

Data in table 32 above shows that about 22.6% of the sampled households were observed to have malnutrition symptoms. In about 77.4% of the households no malnutritional symptoms were identified.

Table 33: Households wishing to have more children:

Response	Frequency	%
Yes	6	19.4
No	24	77.4
N/A	1	3.2

Source:Field survey 1994

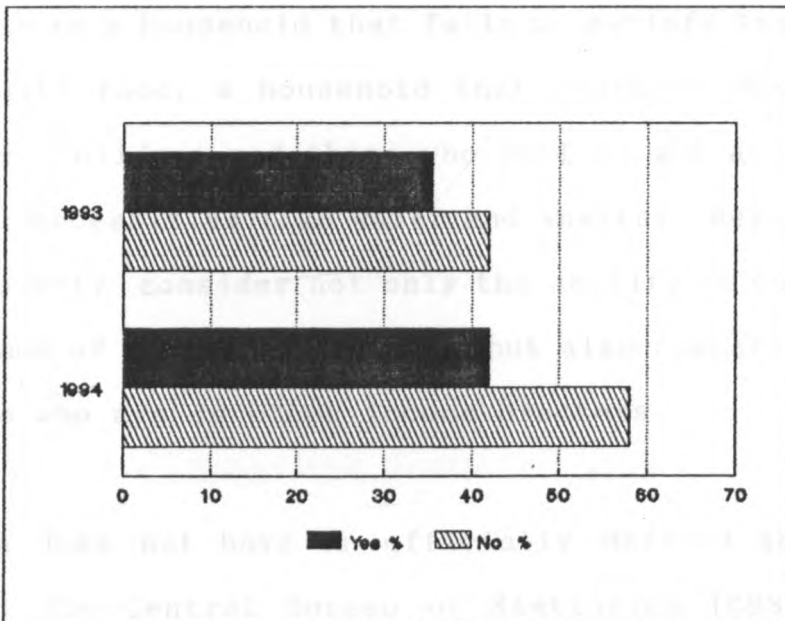
Table 33 shows that about 19.4% of the married households indicated the desire to have more children while about 77.4% declined on grounds of economic hardship.

Only about 13.6% of the business enterprise pay charges to the city council while about 72.7% do not make any payments. On the other, about 13.7% made payments and penalties of between ksh.150-500 after being arrested by the city council inspectorate. while it is not rational to associate the 72.7% of defaulter cases to structural programmes, because people and particular traders tend to avoid paying taxes it is prudent to say that SAPs have increased the number of defaulters.

Some household survival strategies clearly lead to the deterioration in the position of women. One is the disintegration of households with men leaving(perhaps to seek work elsewhere). Male migrations reduces the expenses of the household but all too frequently reduces the household resources by even greater extent( Beneria,1992.p.33).

The deterioration of the urban economy hurts the lower paid public sector workers most. In Cote D'Ivoire, though access to basic services was protected the social conditions declined systematically for the poorest households which cut back their educational spending. There was a decline in school enrolment for girls among the poor (World Bank, 1994, p166). There is therefore substantial evidence to support the alternative hypothesis that the social cultural characteristics of the households have not remained constant with changes in food accessibility.

Figure 13: Family migrations



Source: Field survey.

#### 4.5 URBAN POVERTY

There are many definitions of poverty. However, there are three main definitions that have emerged. A definition of poverty that stipulates a certain minimum level of consumption or resources, yields what is called absolute poverty. The second definition is relative poverty which places more emphasis on relative comparisons of various groups in society. The third definition is derived from the response of individuals who evaluate their own sense of well being. Poverty measures derived from such an approach yields what is called subjective poverty.

For our analysis, poverty is stated in relative terms. It refers to a household that fails to satisfy the requirement of adequate food, a household that stays in slums and include street children and those who fail to get access to adequate basic necessities like water and shelter. Relative definition of poverty consider not only the ability to consume a certain minimum of goods and services but also compares the poor with those who are in other income brackets.

Kenya does not have an officially defined absolute poverty line. The Central Bureau of Statistics (CBS) has tried to develop one. The CBS defines poverty in terms of consumption. A household is considered poor if despite prudent management of consumption resources at its disposal it still cannot



attain recommended food energy intake. The requirement level of nutrient intake used is 2250 calories a day per adult and an allowance for non food consumption. (Economic survey, 1994. p. 30).

The current official measure of poverty in America primarily relies on a methodology of setting a threshold established by Mollie Orshansky. The threshold relies on a simple approach of using food budgets (Kimenyi 1995. p. 98). Surveys of Orshansky established that food represented about one third of all expenditures of a typical family in 1955. After a classification of households based on whether the family was headed by a male or a female, household size and whether a family lived on a farm, Orshansky classified all families and established the minimum sufficient food budgets for various types of families. Orshansky then multiplied the food budgets by a factor of three to establish the income threshold. It was contended that by multiplying the food budget by a factor of three (a multiplier) the income threshold would then meet the food requirements for a household and other goods and services. In Kenya the official measure of poverty follows the Orshansky's approach. The threshold level of income is obtained by adjusting for changes in prices over time using the consumer price index (CPI).

It is therefore evident that the share of the household budget spent on food plays a central role in the establishment of official poverty threshold. For a poor family with 7-8% of total income spent on purchased maize, and with other things being equal, this price rise alone represents a fall in the purchasing power of household income of more than 18%<sup>2</sup>. Nevertheless, there is neither a generally acceptable definition nor a more or less comprehensive and stringent theory of poverty.

The most recent survey on poverty in urban areas in Kenya is the Baseline study of Basic Needs in Nairobi that was conducted in 1992 by the Kenya consumer organization. Findings from the survey indicated that the rate of growth of income for the urban poor in Nairobi has been lower than the rate at which prices of basic commodities have increased in recent years (1987-91). Further that over 70% of households interviewed in the low incomes zones had income below KShs.200 per month. This study therefore, affirms the fact that there is an increase in the number of the urban poor in Nairobi.

Increasing levels of poverty in urban areas would have far reaching planning implications. It would have implications on the maintenance of law and order, development of informal

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<sup>2</sup>. World Bank (1991): Food and Nutrition Policy in Kenya. Report No.8351-KE.p.53.

housing or squatter settlements, environmental deterioration, and on general urban land use policy.

A measure of poverty helps planners to know how many people are poor at a certain period in time. This will guide towards a clear policy on the provision certain basic needs like affordable housing or allocation of land. Non governmental organisations and other charitable organisations by looking at trends in the poverty rates over time, can determine what is happening to the numbers of the poor population and try to mobilize community resources to help improve their welfare.

Any policy to tackle the problems of poverty must take into account the causes of poverty. There are two main views about the causes of poverty. The first view blames poverty on the management of the national economy while the second view blames poverty on the individual. The premise for this views is that some people are poor because they have made bad choices while others are poor because of forces beyond their control.

Most poor people have little education; they would thus require certain forms of employment in urban areas. This can lead for the formulation public works programmes like say food for work. To some extent many poor people actually work (the working poor). The main cause of poverty for this group is low

wages. For this group, employers may be encouraged to build affordable housing so as to enable them spend less and afford basic food to maintain and increase labour productivity. A suitable means of transportation that is relatively cheaper like urban railway network or non-motorized transport for this group can be planned for.

The cost of living is generally higher in urban areas partly because of the fact that all food to be consumed is bought as compared with households in rural areas that can produce some food from their farm. According to the World Bank household surveys of 1981-82(rural) and 1982-83(urban) it is indicated that staple food grains, vegetable oils, meat and sugar were 10-20% more expensive in urban areas<sup>3</sup>. This may require a review of existing regulations that are related to urban Agriculture. If urban poverty is seen as a form of deprivation to various economic, social and/or political areas of human life, it means that various economic social and political needs of certain social groups are not satisfied. In urban areas, successful projects and programmes to reduce urban poverty require fullest possible analysis.

Other things being equal, the lower the per capita income, the greater the extent of food scarcity and absolute poverty.

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<sup>3</sup>.World Bank (1991): Kenya Food and Nutrition Policy. March 15,1991 Report No.8351-KE.p.132.

Since this average income is in turn an indicator for the level of economic and social development, poverty can partially be explained in terms of the factors responsible for haphazard and slow development of a town.

A well conceived urban development policy and plan can at the same time be a functional policy for reducing urban poverty levels. Tackling poverty requires an increase in GDP per capita growth, securing the right growth and investing in social services that will enhance the capabilities and welfare of the poor<sup>4</sup>.

Efforts to reduce urban poverty can have large payoffs for the urban physical environment. Poverty and the environment are often linked. An urban zone where the poor live is characterised by poor sanitation and deterioration of general aesthetics. As the World Development Report 1992 of (World Bank,1994) points out, the poor are both the victims and the agents of damage to the environment.

#### 4.6 SOCIAL DIMENSION OF ADJUSTMENT

It is UNICEF that has carried out studies since 1980 that show that the implementation of SAPs has been orthodox. The international organisation contends that the trickle down

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<sup>4</sup>. World Bank (1994): Adjustment in Africa. Washington DC. p.161.

effect to benefit the poor has not occurred and that vulnerable groups such as the rural and urban poor, the unemployed, aged, women and children continued to be more impoverished (Quarcoo P.K.,1990,p1). Consequently UNICEF started to advocate for the implementation of SAPs with "a human face". That is implementing, SAPs with measures to cushion the most vulnerable members in society. This kind of adjustment is referred to as social Dimension of Adjustment (SDA). UNICEF approach emanate from research by international agencies, it is unable however to explicitly confront the question of what happens if governments are not enlightened. The UNICEF Approach is therefor concerned with the protection survival form of adjustment but not transformation.

The World Bank and the International Monetary Fund while supporting SDA programmes argue that the policy that would hurt the poor most, is the failure to implement SAPs fully. The implementation of SAPs in Cote'D'Ivoire is often used as an example. Between 1985-1988 Cote'D'Ivoire backslided in the process of SAPs. The Gross Domestic Product declined under an abandoned adjustment effort while the number of people living in extreme poverty increased by 57% (World Bank,1994). The Cote'D'Ivoire's experience underscores the fact that poverty can increase in even a short period of economic decline and destabilisation if countries are adjusting insufficiently.<sup>5</sup>

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<sup>5</sup>.World Bank (1994): Adjustment in Africa. p.165.

The campaign for SDA programmes began in earnest at the International Conference held in Khartoum in 1988 on Human Dimensions of African's Recovery and Development. During this Conference it was agreed that in general, adjustment programmes in Africa have cut public spending on the provision of basic services and there is little evidence that the composition of spending has improved substantially in favour of the poor.

The United Nations Development Programme (UNDP), the African Development Bank (ADB) and the United Nations Children's Fund (UNICEF) support social Dimensions of Adjustment. The effort include funding of implementation and monitoring of poverty alleviation programmes.

In 1988, the government of Ghana launched a two year project namely programme of action for mitigating the social cost of adjustment (PAMSCAD). The project got international funding up to a tune of US\$85million. This is one of the best known SDA country programmes in sub-saharan Africa. The main focus of PAMSCAD was poverty alleviation and the target population comprised both the rural and urban poor. The package funded food for work programmes, credit to small enterprises, and funding of urban water supplies and sanitation. In general, PAMSCAD contributed towards progress in community development, and reduction of urban poverty levels during the early period

of economic adjustment.

The concern of the Kenyan government regarding the poor during the implementation of SAPs is contained in the social Dimension of Development project report launched in November, 1994. Most of the projects in the Social Dimension of Development (SDD) compendium are already in the public investment programme reflecting the full integration of SDD proposal in the overall development strategy. On welfare and basic services, the SDD key projects under this theme are targeted at women and children and the very poor both in rural and urban areas. The main intervention measures include immunisation programme to benefit about 1.5 million children in disadvantaged groups, nutrition support programme for children, the school feeding programme targeted to improve the nutritional status of pre-primary and primary school children and urban settlement upgrading programmes to improve the living and working conditions of urban slum dwellers. The projects under SDD would require K£2.3 billion between 1994/95 and 1997/98 with K£1.2 billion being direct commitment from the central government. Money has also been allocated to continue to finance the food relief programme managed by the Office of the President.



## CHAPTER FIVE:

## SUMMARY OF FINDINGS AND RECOMMENDATIONS

## 5.1 SUMMARY OF FINDINGS

Food accessibility has significant impact on households economic decision making. Most household spend up to 70% of their monthly income on food alone and yet they do not meet the household food sufficiency levels. The participation by the urban poor in multiple income generating activities is quite high. Those households with severe food accessibility problems participate in hawking and petty trading activities.

Food accessibility levels influence household consumption patterns. The consumption of meat and cooking oil has been constrained. Whereas some households have substituted some commodities with cheaper alternatives namely, common beer with illicit alcohol, tea with porridge, fermenting flour for porridge instead of preparing porridge with sugar. In some instances some households go without supper, lunch or breakfast.

There is some relationship between food accessibility and the social cultural aspects of the households. Households with low levels of food accessibility have high school drop out rate and most children are engaged in child labour to generate income to support the household. Household food related conflicts have also been recorded in the same households.

Secondly, some households have shifted to the use of traditional treatment and medicine because of affordability.

Household members are willing to embark on public works like, cutting grass, sweeping roads, road and building repairs and garbage collection in exchange of food (maize flour). About 74.2% of the respondents were willing to take up public works while about 25.8% indicated that they could not undertake such works. The fact that 74.2% of the respondents are willing to embark on public works in exchange of a pocket of maize flour per a day illustrates how food accessibility is acute in some households.

Liberalisation of the food market in late 1993 was followed by the subsequent increase of prices of commodities during the same period. This obviously must have constrained the household budgets thus provoking people to look for other options of generating incomes. Given the fact that most small business enterprise were started between 1992 and 1993 it is rational to infer that the number of those engaged in multiple income generating activities has also been on the increase.

Structural adjustment programmes may have triggered the growth of urban to rural migration as evidenced by the number of household members who lived in Nairobi by 1993 and 1994 and have since moved to rural areas on grounds of harsh economic

conditions in the urban. The migration rate increased by 18% between 1993 and 1994. This trend if it has occurred in other urban centres would have strong social economic implications in both the forward and backward linkages. More labour force would be supplied to the rural agricultural sector. It would also reduce the stress and demand of urban basic services and leave a leaner urban informal sector that will become more lucrative. The migration trends will also reduce the rural and urban imbalance by strengthening the growth of small rural trade centres through the growth of agriculture and entrepreneurial skills (by urban migrants).

It would appear that in the short run SAPs have reduced the amount of capital flow to aid agricultural activities in rural areas. Between 1993 and 1994 the number of those posting capital to rural areas decreased, this may have had negative impact on agricultural production in the same period.

Food is one of the basic needs. It has been shown and illustrated the extent to which increased expenditures on food reduces the levels of accessibility to shelter, water, health services and education among others. The survival activities in the form of cheaper informal and poor housing, street hawking that lead to problems of solid waste management and obstruction of human traffic, informal activities and lead to land use conflicts, and the practise of urban agriculture and

its impact on the physical environment are some the key planning issues that emerge. All these would require that both planners, researchers and policy makers should make an inquiry into our land use policy and other regulations related thereto.

## 5.2 RECOMMENDATIONS TO RESEARCHERS

More research should be done at micro-scale level to determine levels of food security and accessibility and its implications. At the moment research on food accessibility is done at macro-scale (National level) are the total harvest of maize is compared with the total population. Such research fails to reveal the accessibility to food by the poor households especially in urban areas where most households cannot supplement food from farms like is the case for rural households. A micro scale (household) research like this study facilitates greater accuracy in data collection and analysis. It also makes it possible to compare findings of micro-scale level and those at macro-level on food accessibility on different income groups in order to formulate appropriate policy recommendations.

Food liberalisation is not the only measure that has increased

prices of foodstuffs. There has been low levels of food production and inflation. Whereas, the prices of foodstuffs alone cannot determine level of food accessibility. There are other factors like dependence ratio, household size, taste and preference and other social, the cultural factors and economic forces that influence food accessibility. Hence more research is needed to facilitate the quantification of the contribution of SAPs and that of other factors to the emerging trends in food accessibility among the urban poor.

It is important to note that unpaid work carried out mainly by women and also by children plays an important role in food accessibility by stabilizing incomes through reducing the aggregate household income expenditure. Scholars should not disregard the role of unpaid sector during the era of SAPs and therefore it requires more research.

This research has failed to ascertain the role played by the head of the household in determining food accessibility. Social cultural studies should be done to assess how food accessibility levels are influenced at female and male headed households respectively.

This study has also brought to the fore the urban-rural migration pattern that is related to SAPs. The backward and forward linkages between rural and urban areas. It has been

observed that the harsh economic conditions in Nairobi has triggered urban to rural migration. More research is required to quantify the inter-dependence of urban and rural areas and its impact in rural agricultural sector and the urbanization process. The emerging fact is that the flow of incomes from urban areas to support rural areas has declined.

### 5.3 RECOMMENDATIONS TO PLANNERS AND POLICY MAKERS

The Provision and improving access to infrastructural services to the urban poor is an important and an essential ingredient of poverty reduction that will consequently their standards of living. For instance the provision of piped water to the urban poor would reduce household expenditures thus leading to the improvement of food accessibility and health conditions the households.

The issue of hawking, petty trading and illegal structures along the urban streets is associated with the poor and it appears to be a living problem. The urban poor are mainly found within the informal sector and among the unemployed. They have higher participation rate in low income self-employment than the average household. The City Council need to review licensing procedures for small business enterprise and plan the land-use patterns to accommodate the business of the urban poor.

There is need to embark on the implementation of SAPs since the poor are likely to benefit from SAPs in the long run as has been in Ghana. In the short run, SAPs have negative impact on the poor. Therefore the NGOs and government should finance programmes that will deliver social services to the poor. There is need to launch social dimensions of development (SDD) to help improve and stabilise household incomes thus improving food accessibility among the poor. Food in exchange for public works (like repair of roads, dispensaries, garbage collection, repair of bridges) provides employment opportunities to the urban poor. Public works are the best in screening the households that are in dire need for food since those who are well-off would not embark on such programmes. The SDD programmes should be objective and specific poverty reduction and help reorient public expenditure programs in favour of the urban poor and stimulate the participation of community groups and NGOs. Action of the government should be varied from project specific initiatives to policy level actions. The purpose of subsidies is to mitigate the socio-economic conditions of the poor. Selective measures are preferable to general subsidies. In really situations, it is difficult to institute effective measures aimed directly at mitigating poor households in the economy. This is why the public works proposal appears prudent.

Levels of illiteracy and school dropout rate is high among the urban poor. Sometimes it is not food accessibility that lead to malnutrition symptoms, it is compounded by poor nutritional education. Hence food accessibility levels can be improved through nutrition education, immunisation programme and provision of clean water.

The provision of urban basic services to the poor should not be seen in the light of social perspective per se. On the other hand, it is also a productive investment in the long run. This is because it will reduce dependence ratio by enabling the poor move into income generating activities thus enhancing economic growth. In most cases, a productive perspective along with the social perspective lead to cost recovery and sustainability of infrastructural investment in the long run.

If the purpose of the subsidies is to mitigate the deserving cases among the poor, selective measures are preferable to general subsidies. The dilemma is that, it is difficult to institute accountable and target measures aimed directly at the poor households in society. This is because to identify the poor is not an easy endeavour.

There is need to re-examine the role of urban agriculture in improving food accessibility among the poor. Urban



agriculture also helps in solid waste management in urban areas. Town planners should look for ways of integrating other urban land uses with urban agriculture. This is because urban agriculture contributes significantly towards improving food accessibility among some urban poor households.

Economic adjustments and its impact on food accessibility has a bearing on increased cases of informal housing. The poor tend to move from rental houses into slums and squatter settlements. Hence improving food accessibility levels is one of the ways of resolving informal housing in urban areas. This is because if less money is spent on the acquisition of basic foodstuffs it is likely that more household income will be available for housing. It has already been indicated that most of the poor people spend about 80% of their income on food.

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## Appendix A

DEPARTMENT OF URBAN AND REGIONAL PLANNING, UNIVERSITY OF NAIROBI.

FOOD ACCESSIBILITY AMONG THE URBAN POOR UNDER CONDITIONS OF SAPs

## HOUSEHOLD QUESTIONNAIRE

## 1.0 BACKGROUND INFORMATION

Area.....  
 Name..... Household size.....  
 Age..... Date.....  
 Marital status 1 single..... 2 Married.....  
 Employment 1 Formal.....  
           2 Informal.....  
             Driver  
             Tout  
             House construction  
           3 Unemployed.....

Approximate salary per a month

Ksh. 0-1000  
 1001-2000  
 2001-3000  
 3001-4000  
 4001-5000

## 1.6 Sources of Household incomes Per a month

source	Ksh.
Urban agriculture	.....
Salary	.....
Seasonal Kibarua	.....
Informal employment	.....
Shop/retail	.....
Hawking	.....

## 1.7 How much is your rent per month ( Ksh.).....

Nil.....

## 1.8 How old are your children

child	age	school.class	sex
1			
2			
3			
4			
5			
6			
7			
8			

## 1.9 Is there any child of school going age who is not in

school?

If yes why	1.	since when	1.	sex
	2.		2.	
	3.		4.	

1.10 Has any of your child died ?

sex	age	year	Reason
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

.....

2.0 FOOD ACCESSIBILITY AND NUTRITIONAL CHARACTERISTICS

2.1 What is your main/staple food.....

2.2 What is your tribe.....

2.3 Is your main food also the main food among your tribes mate ? yes/no

2.4 If not, why do you prefer your main food.....

Breakfast: this morning

tick

Tea without milk/Coffee.....

Tea with milk .....

Porridge.....

Githeri.....

Any other specify:

.....  
.....  
.....

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2.5 How many occasions have you taken your breakfast without sugar last month

2.6 What did you take during your breakfast this morning?

.....  
.....  
.....

- 2.7 Has the price of the following affected their consumption by the family.yes/no
- Milk.....
  - meat.....
  - Eggs.....
  - Bread.....
  - Blue Band.....
  - Sugar.....

1.for occasions 2. substitution 3.no longer consumed.  
4.any other

- 2.8 Do you have any food in the store  
yes  
no

If yes what is the type and quantity

type	value(ksh)
Corn Maize	.....
Maize Flour	.....
Wheat Flour	.....

Any other specify

.....  
.....  
.....

- 2.9 Have you been advised by a doctor to feed your child or yourself with certain foods. yes/no
- | type of food: | year: | month | Child/Adult |
|---------------|-------|-------|-------------|
| 1             |       |       |             |
| 2             |       |       |             |
| 3             |       |       |             |
| 4             |       |       |             |

- 2.10 Have you been given food relief? yes/no if yes please name the source.....

- 2.11 Personal observations by the researcher.  
Do you witness any malnourished children in the household if the answer is yes describe their conditions briefly.

Child

symptom

3.0 SURVIVAL STRATEGIES

3.1 Do you practise Urban Agriculture?

Where land size Distance(from residence)

.....

tick

What do you grow:

Maize

Vegetables

Beans

Tomatoes

Any other specify

.....  
.....

3.2 What problems do you experience in this activity.

Theft

Destruction by animals

Eviction

Competition for scarce land

Poor soils

Bad weather

Any other specify

.....  
.....  
.....  
.....



3.4 Do you apply the following?  
Tick

- Fertilizer
- Pesticide
- Farm Manure

3.5 Do you intend to get more children-yes/no  
Give reasons:.....  
.....

3.6 Can you do public works like planting trees or repairing  
the road in exchange of a packet of maize flour.yes/no

3.7 Which of the following public works would you prefer ?

- 1. sweeping of streets
- 2. repair of roads
- 3. cutting grass
- 4. garbage collection
- 5. any of the above
- 6. none of the above

3.8 What food items would you buy today ? ( in the order of  
preference , please indicate three main immediate needs)

.....  
.....  
.....  
.....

3.9 Why do you stay here ?

.....  
.....  
.....

3.10 When did you move to your present house?

3.11 What are the three reasons that made you to move to your present house

- 1.
- 2.
- 3.

3.12 Do you intend to have a small family ?  
yes/no if yes please give three reasons

3.13 Traditional doctors have sometimes helped to ill the sick, have you ever gone to one for treatment  
yes/no

3.14 If yes, please indicate the reasons why you went for the treatment.

- 1. are cheap
- 2. beliefs
- 3. any other (specify)

3.15 Are you employed in the formal sector? yes/no

3.16 List the type of informal activities you are involved in

## Appendix B

## QUESTIONNAIRE :SPECIFIC FOR THE HEAD OF THE HOUSEHOLD

## 1. Marital Status

1994

- 1 married
- 2 single
- 3 widowed
- 4 re married
- 5 divorced

## 2. Occasions when the household has forgone supper because of lack of money

1994

- 1. none
- 2. rarely
- 3. regularly

## 3. Nature of meat consumption in the household

1994

- 1.regularly
- 2.weekly
- 3.monthly
- 4.rarely
- 5.occasions

## 4. Have you engaged in more than one income generating activities

1993

1994

- 1. yes
- 2. no

## 5. Kind of alcohol consumed

1993

1994

- 1. Traditional
- 2. Formal bear
- 3. Any occasionally
- 4. Avoid
- 5. None

## 6. Approximate % of total income spent on foodstuffs

1994

income per month

% on foodstuff

## 7. Cases of family conflicts related to expenditure on food.

1994

- 1.rarely
- 2.none
- 3.often

8. Any child of below 15 years engaged in income generating activities

1993                      1994

1. yes

2. no

3. sex of the child

9. Trends in porridge consumption

1994

1. Regular

2. Occasional substitution

3. Rarely

4. Abandon

10. If married do children/mother/husband stay in rural area

1993                      1994

1. yes

2. none

Reasons.....

.....

11.4 How often do you send aid to next of kin in rural areas

1993                      1994

1. monthly

2. annually

3. occasionally

4. none

12. How often food is prepared without vegetable oil

1994

1. none

2. rarely

3. regularly

13. How often do you get foodstuffs from your rural home

1992                      1993                      1994

1. Annually

2. monthly

3. occasionally

4. Regularly

5. none

**Appendix C**

**DEPARTMENT OF URBAN AND REGIONAL PLANNING , UNIVERSITY OF NAIROBI.**

**QUESTIONNAIRE :SMALL BUSINESS ENTERPRISE**

Hawkers, Cigarette retailers, Green maize roasters, and any other business that does not exceed capital base of Ksh.2000.

Area.....  
 Name.....  
 Age.....Time.....Date.....Sex.....

**Level of education**

primary.....  
 Secondary.....  
 College.....

1.1 When did you start your business.....

1.2 Source and amount of your initial capital

Loan.....	Ksh.0-500
Personal savings.....	600-1000
	1001-1500
	2000-2500
	2500+

1.3 Factors that influenced you into this business(rank according to priority).

- |  | rank                 |
|--|----------------------|
| a). unemployment                                 | <input type="text"/> |
| b). family size                                  | <input type="text"/> |
| c). high prices of food                          | <input type="text"/> |
| d). high rent                                    | <input type="text"/> |
| e). a friend ( if so are you partners and why ?) |                      |

1.4 How much profit do you make at the end of the month in  
 Ksh 0-200  
 300-500  
 600-1000  
 1000+

1.5 How do spend your earnings( rank according to priority)  
 Ksh.

School fees

Food

Rent

Medical

Transport

1.6 What are your current aspirations ( rank according to priority)

rank

Buy land

Rent a Shop

Set up a wholesale

Sufficient water

Move to a better house

Any other specify  
 .....  
 .....  
 .....

1.7 How much do you pay to the City Council for services  
 .....  
 .....  
 .....

1.8 Do you remember occasions when you had problems with city council inspectorate after defaulting?

Date	Reason	penalty(Ksh).
.....	.....	.....
.....	.....	.....
.....	.....	.....

1.9 What items will you take home today.

Vegetables

Cooking oil

Maize flour

other specify

Bread

1.....

Wheat flour

2.....

Rice

3.....

Milk

4.....

Sugar

1.10 Which basic food items are missing at home and which you cannot buy because of financial constrain

1.11 What is the respondent selling?

Item	Value(Ksh.)
1.....	.....
2.....	.....
3.....	.....
4.....	.....
5.....	.....
6.....	.....

1.12 What problems are you experiencing in doing your work ?

Appendix D

INSTITUTIONAL QUESTIONNAIRE :HEALTH CLINICS

1.1 What are the main disease that you attend to?

Disease	%
1.....	
2.....	
3.....	
4.....	
5.....	

1.2 What is the age bracket of the patients like per a month

Age	%
0-5.....	
6-10.....	
11-15.....	
16-20.....	
21+.....	

1.3 How many cases of malnutrition do you attend to per a month ?.....

1.4 What are the common malnutrition symptoms do you record, symptoms %

1.....	
2.....	
3.....	
4.....	
5.....	

1.5 What is the trend of reported malnutrition cases to this health centre ?

cases per month

last year 1993

This year 1994

1.6 What in your opinion are the main factors that account for the trends above ?

1.....	
2.....	
3.....	
4.....	
5.....	

1.7 What reasons do you give to support the factors given above

1.....	
2.....	
3.....	
4.....	
5.....	



1.8 Do you sometimes treat people on credit yes/no

1.8 If yes which category of patients ?

1. those in formal employment
2. those in informal employment

1.9 What your observations about affordability of medical services of the people in this area.