

BLDS
(British Library for Development Studies)
Institute of Development Studies
Brighton BN1 9RE
Tel: (01273) 915659 Email: blds@ids.ac.uk
Website: www.blds.ids.ac.uk

Please return by:

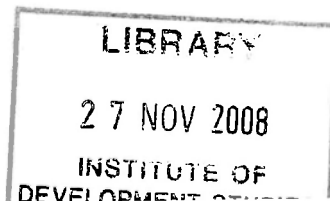
IDS Discussion Paper No. 300

IDS Discussion Paper No. 300

Food Security Trends
A Situational Analysis of Food Supply
Differentials in Rural Kenya

by

Mary Omosa
Senior Research Fellow
Institute for Development Studies
University of Nairobi



Address all inquiries to

Institute for Development Studies
University of Nairobi
P.O. Box 30197
00100 GPO
Nairobi; Kenya.
Telephone: 254 020 318262/247968
Mobile: 0733-524903
0722-499706
Fax: 254 020 222036
Email: director-ids@uonbi.ac.ke
URL: www.uonbi.ac.ke/faculties/ids

IDS Discussion Paper No. 300

**Food Security Trends
A Situational Analysis of Food Supply
Differentials in Rural Kenya**

by

Mary Omosa
Senior Research Fellow
Institute for Development Studies
University of Nairobi.

Views expressed in this paper are those of the author and should not be interpreted as reflecting the views of the Institute for Development Studies (IDS), University of Nairobi.

Copyright © February, 2006 Institute for Development Studies (IDS), University of Nairobi.

This paper is not for quotation without permission as specified in the Copyright Act, Cap. 130, the Laws of Kenya.

Abstract

This paper looks at food security trends at three different levels; national, district and household. The paper aims to go beyond the conventionalist view of food security by focusing on the dynamics that characterise the apparent differentials in access to adequate food. The central argument is that obtaining adequate food is a function of interactions, negotiations and social struggles and the extent to which some succeed (and others fail) in their search for adequate food is bound to vary even in situations that appear similar. The paper thus concludes that food security and attendant policies must be conceptualised and defined in the context of people's actual experiences. In essence, therefore, food security goes beyond numbers as it includes the existence of social networks and the capacity to juggle opportunities.

Introduction

Food security defies conventional boundaries. It exists in mid-income as well as low income countries, the food self-sufficient and the food-deficit, the drought prone and the drought free ... those with generally sound economic growth policies as well as those without, those facing civil disturbance as well as those at peace, those undergoing adjustment as well as those outside the adjustment process, those where the government and the Bank spend a lot of time agonizing over the subject and those where it is largely ignored (World Bank 1988, p.3).

According to existing literature, three lines of interpretation dominate debate on how and why some succeed and others fail in the search for food security. According to modernisation theories, food insecurity results from a lack of sufficient supplies among the food needy, a condition that they attribute to the existence of structures that do not facilitate the necessary balance between supply and demand (cf. Schultz 1964; Seavoy 1989; Braun et al 1993; Pingali and Rosegrant 1995). Proponents of this school recommend, among other things, the commercialisation of the factors of production and, in particular, putting the 'right' policies in place. Another argument, however, is the view that food insecurity results from inability to utilise an existing potential to produce adequate food, and that this is due to a lack of bargaining power deriving from the establishment of these commodity relations (cf. ECA 1980; Raikes 1988; Devereux 1986; Mackintosh 1990; Aboyade 1994; Delgado 1995; Engberg-Pedersen et al 1996). A third position is the

argument that food insecurity results from a failure in entitlements, that is, the right to obtain sufficient amounts of the food that is available. Largely emanating from the work of Amartya Sen, this approach argues that people go hungry because of a breakdown in the relations governing their access to food, following a shift in exchange mappings or a loss of possessions (Sen 1981; Dreze and Sen 1989; de Waal 1990).

However, the above perspectives do not unravel the discrepancies that continue to characterise food patterns at different levels and, in particular, that attaining food security remains a distant hope for some in spite of clear efforts on their part to meet defined obligations towards succeeding in obtaining required food. This paper aims therefore to go beyond the conventionalist view of food security by explaining, from the actor-oriented perspective, the apparent differentials in access to adequate food. The perspective argues that even when conditions may appear relatively homogenous, there are differential responses to similar structural circumstances. These differential patterns arise, in part, as a creation of the actors themselves. This is because human beings are active participants who process information and strategise in their dealings with various local actors as well as with outside institutions and personnel as opposed to assumptions that they are simply disembodied social categories or passive recipients of intervention (cf. Long 1992, p.21). Therefore, the different patterns of achievement that emerge with regard to success in obtaining required food result from the interactions, negotiations

and social struggles that take place during the search for food security.

Advancing this actor-oriented perspective, Norman Long underscores the centrality of human agency by arguing that the notion of agency attributes to the individual actor, the capacity to process social experience and to devise ways of coping with life, even under the most extreme forms of coercion (Long 1992). In other words, the extent to which some succeed in their search for adequate food is bound to vary even in situations where both groups seem to be operating under similar circumstances. Hence, food security means different things to different groups of people and this plays a central role in determining success and failure in the search for required supplies.

Therefore, whereas Amartya Sen argues that food security results from entitlements and a subsequent ability to command existing sources of food (Sen 1981, p.2), the actor-oriented approach tends to explain why and how command over required food is mobilised successfully but only for some. The issue then is whether in fact we can talk about success and failure in absolute terms.

In this paper, food security is conceptualised as a household's ability to command an adequate amount of staple grain (maize) through any one or a combination of existing sources. Over and above the quantities obtained, food security could remain unattained if households have insufficient, little and/or

unpredictable command over any or a combination of existing sources of food, or if this command is gained at the expense of other equally compelling needs. As such, we cannot begin to understand food security at the rural household level without bringing into the picture the *actual* experiences of these households, and in particular, how they conceptualise and thereafter interweave their goals, opportunities and constraints during the search for adequate food. Thus, food security goes beyond numbers to include social networks and the capacity to juggle opportunities.

The rest of the discussion in this paper looks at food security differentials. The aim is to understand the difference between those who succeed in obtaining adequate supplies and those that fail to do so. Among the issues covered is, who has command over adequate food, what underlies this command, and who fails to gain command and why. This discussion is preceded by an analysis of the food supply trends in the country and some of the major fluctuations that have been experienced over time. This is followed by an analysis of the food situation among the Gusii both at the regional and household levels. In all cases the question that lingers on is: who enjoys food security and who fails to do so, when and why?

National Food Supply Trends

Kenya's food policy argues that intensified production is necessary in enabling the country to maintain a position of broad self-sufficiency in the main foodstuffs so as not to use scarce

foreign exchange on food imports (Kenya 1981, p.2; Kenya 1994b, p.4). At the policy level, food security is equated with national self-sufficiency and the general assumption is that agricultural growth will automatically translate into adequate food both at the national and household levels. However, an analysis of the food supply trends in the country shows that this has not always been the case largely because of climatic constraints, the policy environment and household level decisions. Below, we look at some of the fluctuations in food supply and what this has meant for the country's food security. These discussions are based on the maize crop largely because in Kenya, food is generally synonymous with maize, both in terms of the actual volume of consumption and cultural perceptions. Indeed, almost all major famines and reported food shortages have come about following drastic fluctuations in maize production and/or availability on the market (cf. FEWS 2005).

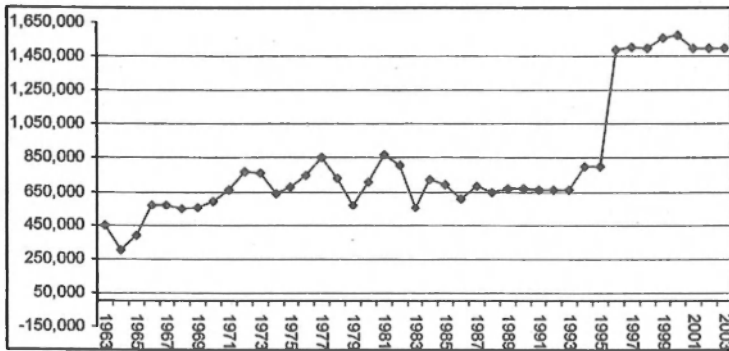
Acreage under maize

On average, acreage under maize has been on the increase, rising from 447,600 hectares in 1963 to over one million hectares in 1996 and close to two million hectares in 2003. This increase has however also been characterised by fluctuations and some of the most remarkable have coincided with severe national level food shortages.

The first major drop in hectares under maize was experienced in 1964. The area planted dropped from 447,600 hectares in 1963 to 298,800 hectares in 1964, before picking up again to

384,000 hectares in 1965. This upward trend continued steadily with 1972 constituting the peak period. However, Kenya suffered a major set-back when area under maize dropped from 772,000 hectares in 1972 to 637,000 hectares in 1974. This, however, picked up fairly quickly and by 1977 area under maize had risen to 854,000 hectares before dropping to 728,000 hectares in 1978 and a mere 567,000 hectares in 1979.

Figure 1: Area under maize (Hectares)



Source: Compiled from Statistical Abstracts, Economic Surveys and other National Records.

Although hectares under maize rose steadily at the beginning of the 1980s, a downward trend was experienced soon after and in 1983, the area under maize dropped to 553,000 hectares from 810,000 hectares in 1982, making it the lowest coverage ever after the 1960s. And much as area under maize increased, this remained relatively low during the mid 1980s through to the early

1990s. A major rise occurred in 1996 when the area planted almost doubled over the previous period and in 2000, a record 1,571,000 hectares were put under maize. However, there was a slight reduction the following year when the area planted reduced to 1,500,000 hectares and this seems to have remained the case to date (Figure 1 above).

It is apparent that most of the seasons when there was a reduction in area under maize were followed by severe food shortages the following year. This was the case in 1965, 1974, 1980, and 1984. However, these occurrences became less apparent in subsequent years mainly because food shortages became even more frequent, especially in the 1990s. This linkage between area under maize and national food security emanates from the fact that Kenya's food policy derives from self-sufficiency. Therefore, factors that could have a potentially negative effect on the quantity of harvest end up impacting directly on the country's food security position.

Maize harvest

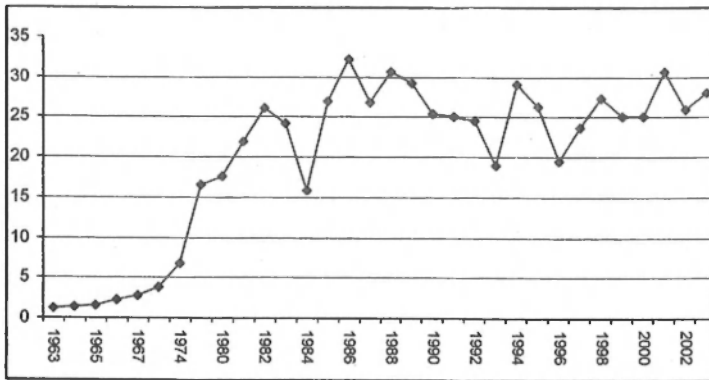
Although there seems to be a linkage between area under maize and food self-sufficiency, this relationship is less obvious when we look at the volume of harvest vis-à-vis the food situation in the country. The general trend, however, suggests that production has been on the increase although with some obvious fluctuations.

The national maize harvest rose from 1.3 million bags in 1963 to 1.46 million bags in 1964 and 1.56 million bags in 1965. By

1968, national maize production had quadrupled (3.9m) over the 1963 figures. The volume of maize produced in the country rose even more in the late 1970s and early 1980s. However, this steady rise in maize production faced a major set-back when production dropped from 24.2 million bags in 1983 to 15.8 million bags in 1984. Although the country recovered only the following year, this was short lived.

In 1987, Kenya faced yet another drop in maize production and this seemed to set the beginning of a downward trend that characterized most of the late 1980s and early 1990s, culminating in an all-time low of 19 million bags in 1993.

Figure 2: National maize harvest ('000'000 bags)



Source: Compiled from Statistical Abstracts, Economic Surveys and other National Records.

Although there was a near instant recovery with production rising to 29.1 million bags in 1994, maize production in the country

has since been characterized by major set-backs, notably in 1996, 2000, 2002 and the current looming crisis (Figure 2 above).

Again, a comparison between area under maize and production shows that some of the major reductions in area planted did not necessarily coincide with a drop in production. In fact, although hectares under maize reduced rather drastically in 1964 and the country faced a major food shortage in 1965, maize production was on the increase during this period and it continued to rise in subsequent years until 1983.

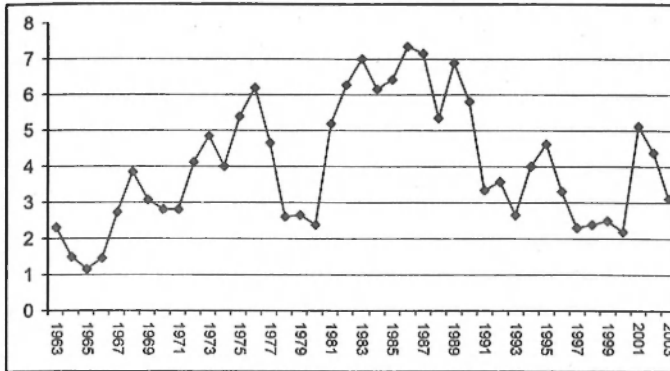
However, a different pattern becomes apparent in the 1980s and this seems to have become a common feature to date – maize production is closely tied to fluctuations in area planted. For instance, the 1983 reduction in area under maize was followed by a major drop in production in the 1984 season. This was repeated in 1987/88, 1996/97 and 2000/2001. This pattern tends to suggest that prior to the 1980s, a reduction in area planted was easily absorbed and did not therefore translate into food shortages. In later years, however, the use of productivity enhancing technologies either reduced or they reached their optimum and the enhanced effect was no longer self-evident, hence any slight reduction in area planted easily gives way to food shortages.

Quantity marketed

The market is a major component in the food security chain. Households that do not cultivate or those who fail to obtain required supplies through cultivation can meet the shortfall on the market. This is particularly true for a country such as Kenya whose food policy derives from national self-sufficiency. Indeed, one of the key targets in Kenya's pursuit of self-sufficiency is ensuring that available food is distributed in such a manner that every member of the population has a nutritionally adequate diet (Kenya 1981). Therefore, one measure of success towards making food available is through ensuring that food markets function well and all the time.

However, an overview of the maize market depicts a very volatile scene. Historically, some of the periods when the least amount of maize was available on the Kenyan market coincided with major food shortages in the country. One could therefore argue that food markets are a reflection of the food security position of a country or region.

Figure 3: Amount of maize marketed ('000'000 bags)



Source: Compiled from Statistical Abstracts, Economic Surveys and other National Records.

The amount of food available on the market declined from close to 1.5 million bags in 1964 to less than 1.2 million bags in 1965, at which point the country faced severe food shortages. Although supplies on the market improved between 1967 and 1970, another downward trend was experienced in 1970/71, followed by a period of recovery between 1972 and 1977. However, the period between 1978 and 1980 was characterised by very low maize supplies on the market. Again this coincided with major food shortages in the country. Nevertheless, the quantity of food on the market improved generally until 1988 when there was a major drop. Although maize supplies into the market picked up, the 1990s were characterised by fluctuations and a general downward trend that continued into the start of the new millennium and beyond (Figure 3 above).

Seemingly, non-availability of food on the market is one of the first indications that there is a food shortage. This suggests therefore that once there is a shortfall in production, most growers hold back on the little that there is for own consumption. In other words, people who are dependent on markets for their food security become more vulnerable as compared to growers of own food. Nevertheless, not all major food shortages in the country have coincided with non-availability of food on the market. In some instances, food insecurity has co-existed with abundant supply mainly because of inability to access this food. Indeed, there are instances when food shortages are reported at the household level in spite of its availability on the market.

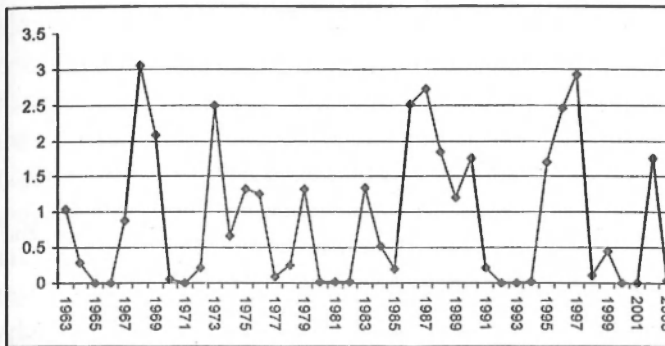
Maize exports and imports

Exports are usually an indication that there is a surplus. Therefore, in situations where a country is faced with a deficit, no exports are expected. However, an analysis of the volume and trend of maize exports in Kenya shows that the country has exported maize irrespective of the national food situation. What has, however, varied is the volume of these exports and in some instances, least exports are made during periods when the country is faced with general food shortages.

For instance, between 1963 and 1969, the trend of maize exports followed the same pattern as that of availability of maize on the market. Hence, in 1965 when Kenya faced severe food shortages, only about 2,000 bags of maize were exported as compared to over 3 million bags in 1968. However, we also

realise that in some years, notably 1984, when production was lower than normal, some maize was still exported. The general trend further suggests that maize exports from Kenya are irregular and therefore not a dependable source for countries that may be relying on Kenyan exports as a source of food (Figure 4).

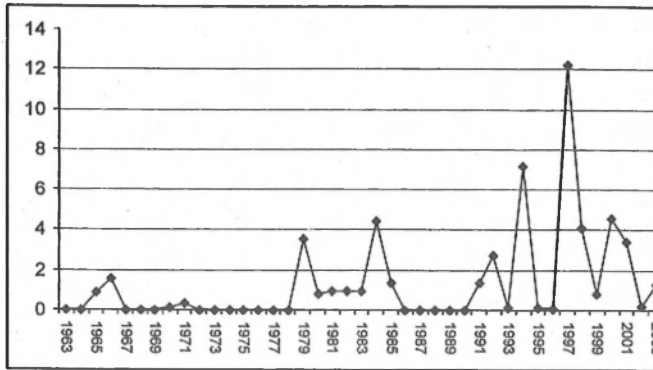
Figure 4: Maize exports ('000 '000 bags)



Source: Compiled from Statistical Abstracts, Economic Surveys and other National Records.

On the other hand, maize imports are, for a country that is pursuing food self-sufficiency, ideally only meant to meet a shortfall in harvest. However, the trend of maize import into Kenya suggests that this has also depended on other factors, mainly availability of foreign exchange. Hence, except for 1966 when there was a sizeable volume of maize imported into the country following the 1965 nation-wide food shortages, the purchase of maize from outside the country only became a notable feature after the 1980s. Major imports were undertaken in 1979, 1984, 1992, 1994, 1997, 1998, 2000 and 2001 (Figure 5).

Figure 5: Maize imports ('000 '000 bags)



Source: Compiled from Statistical Abstracts, Economic Surveys and other National Records.

The maize export-import interface suggests that Kenya is slowly moving away from its policy of national self-sufficiency but without acknowledging such a shift. The country is increasingly dependent on food imports with some of the proportions going as high as one third of national consumption. Whereas there is nothing wrong in opting to depend on food imports and purchases, there are certain key requirements that must go into making (external) markets a source of staple food. One, the country must work towards projecting its needs to the extent that imports are not taken up at the point of crisis. Secondly, it is necessary to get to know where the country's comparative advantage lies, and in particular, whether it is really possible to depend on markets as a source of staple food without making this the key determinant of who succeeds in obtaining food and

who must fail. Therefore, limitations in affordability and physical access to available supplies will continue to nurture food shortages at the household level and in particular, the co-existence between abundant supply and famine at the national level.

The Interplay Between Maize Production and National Food Self-sufficiency

On average, nationally, area under maize has been on the increase. However, it is also the case that area under maize has not corresponded with production levels or national food requirements. It is further observed that availability of maize on the local market, maize exports and maize imports are not necessarily a function of demand versus supply. Below, we look at the interplay between maize production and national food self-sufficiency. The aim is to bring to light some of the factors that come into play in determining a country's food security position, especially during critical periods of deficits in national production.

In 1965, Kenya experienced the first post-independence food shortages. These were attributed to a domestic production that was substantially below normal consumption requirements, primarily as a result of a drought that affected most parts of the country, compounded by a shortfall in the 1964 commercial maize crop and failure to move quickly enough to import adequate supplies from overseas (Kenya 1966, p.168). Although linked to drought and an alleged lower than normal harvest, the 1965 food shortages actually resulted from

restrictions in the movement of maize than a scarcity in supply. Available data shows that the 1965 maize harvest was 10,000 bags over the 1964 harvest and although there was a drop in area planted between 1963 and 1964, this improved in 1965 (Figures 1 and 2).

Similarly, despite having had a record area under maize for the decade with equally high sales and subsequent exports, food shortages were again reported in 1967. These were attributed to poor weather, mainly excessive rain and hailstones. This, however, changed dramatically the following year (1968) with considerable surpluses and, the amount of maize released on the market was estimated at 3,860,000 bags, compared to 2,740,000 bags in 1967 (Figure 3). This increase was attributed to the entry of African farmers into commercial farming, a research breakthrough at the Kitale Agricultural Research Station on a maize variety that did, under like conditions, improve yields by 30 percent, and the promotion of maize as a raw material for industry.

However, the bumper harvest of 1968 resulted in the lowering of producer prices, a decision that gave way to a decline in production levels during the 1969 season. Therefore, although maize output increased during the late 1960s and early 1970s, following the introduction of hybrid seed, government controls proved to be a disincentive to the producer.

Again, the 1973/74 drought gave way to severe food shortages in the country. The amount of maize on the market dropped by more than 17 percent while exports dropped by 73 percent (Figures 3 and 4). In spite of this, there was no significant increase in maize imports into the country during this period. In 1974 for instance, only 8,000 bags of maize were imported, and this was just 12 percent over the 1973 imports. This was largely because the 1974 world oil crisis hindered government intervention by making external purchases impossible.

However, maize production did not improve in subsequent years. This was because of the bumper crop of 1976/77 that left the NCPB with full stores and policy restrictions on the movement of maize that made it impossible for the private trade to absorb surpluses on-farm. Moreover, due to a shortage of fertilisers, the discontinuation of the Guaranteed Minimum Return credit scheme, and the adverse weather of 1979/80 reinforced a farther reduction in area planted (Kenya 1984). To counter the negative impact, 850,000 bags of maize were imported in 1980, in addition to 3.56 million bags in 1979 (Figure 5). Therefore, unlike the 1974 food shortages, this time round there was food on the market for those who had the economic means to access it.

The interval between national food shortages started narrowing for Kenya in the 1980s. For instance, in 1984, the country experienced what has been described as the worst drought in 50 years (Kenya 1994b, p.6; Drèze 1990, p.159). Maize output dropped from 24.2 million bags in 1983 to 15.8 million bags in

1984, and the country's overall growth in agriculture recorded a negative rate of 3.9 percent. In spite of this drought, the amount of maize released on the market did not vary much from that of previous years and, although some maize was exported, a substantial amount was also imported (Figures 5 and 6).

Drèze has, however, observed that, despite the fact that government involved private traders in the distribution of food for sale following the 1984 drought, restrictions in movement and price controls left some parts of the country poorly served (Drèze 1990, p.159). He gives the example of Samburu District where traders declined to stock maize for lack of profits between the cost of transportation and set price ceilings. And, whenever the food was available, the poor suffered disproportionately as they lacked the money with which to purchase in bulk.

According to the 1994 Sessional Paper No. 2 on National Food Policy, the 1990s were characterised by relatively low output, regular imports and publicly acknowledged threats of famine. This was attributed to poor weather, high costs of farm inputs following the devaluation of the Kenyan currency and associated reforms, some of which prompted considerable changes in the priority allocation of domestic resources. A freeze on donor aid further curtailed imports of farm inputs and food to replenish stocks (Kenya 1994b). Therefore, whereas maize output averaged about 22 million bags in the 1990s, annual demand stood at about 33 million bags (Kenya 1994a). Current estimates put the national deficit at more than 3 million bags (FEWS 2005).

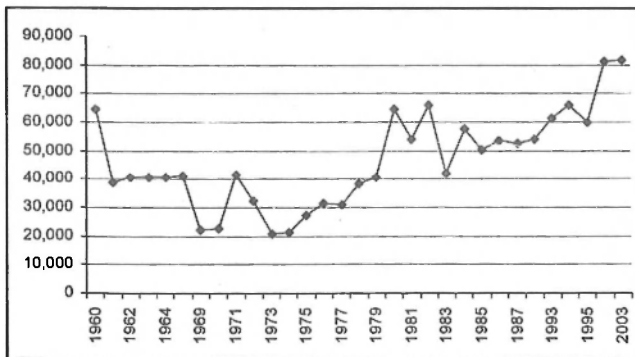
The foregoing suggests that the food security position at the national level is dependent on the interplay between area planted, unit output and the policy environment. In addition, climatic factors play a key role in determining a country's food position, especially in situations where food security is conceptualised in terms of self-sufficiency. However, without down playing some of the major challenges that have faced Kenya's food policy, there is evidence to suggest that even if this policy position were to be fully functional, making food available will not necessarily guarantee that this food is also accessible to all. The question then would be whether this scenario is bound to be different in regions that are assumed to be internally self-sufficient in food production. This issue is taken up below in respect of the food security position of the larger Gusii region comprising Kisii, Nyamira and Gucha Districts of Nyanza Province.

Food Supply-Demand Configuration in the Gusii Region

Among the Gusii, mixed farming is widely practised and crop production is based on multi-cropping. Over 56 percent of the 198,600 land holdings are small-scale farms, with sizes ranging between 0.5 and 4.5 acres. Maize is the staple food crop and it is widely cultivated, mainly twice a year. The amount of land under maize has, however, fluctuated from year to year with notable reductions in 1961 and 1982. For instance, although the area under maize improved between 1962 and 1968, rising to over 40,000 hectares in 1968, this reduced by almost one half (to just about 22,000 hectares) in the 1969 and 1970 seasons. Indeed, these fluctuations in area planted characterised much of the early 1970s and 1980s.

The unprecedented decline in area under maize after the mid 1960s was attributed to a decline in the demand for maize on the market and a desire to cultivate what were then seen as higher value crops, such as coffee and tea (cf. Omosa 2003). Other sharp declines were experienced in 1981, 1983 and 1995 (Figure 6).

Figure 6: Acreage under maize in the Gusii region between 1960 and 2003 (hectares)

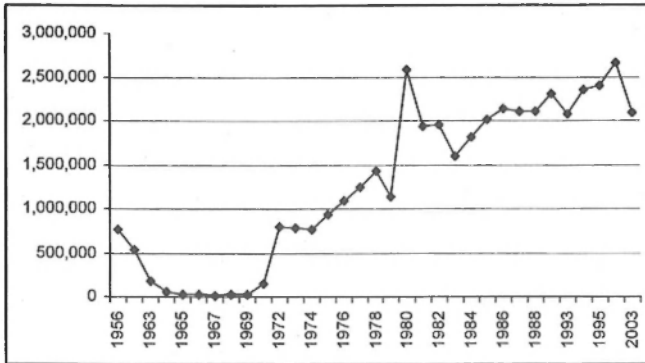


Source: Compiled from Agricultural Annual Reports, Kisii District. However, in general, the reductions in area under maize did not correspond with overall production. For example, in 1969, maize output rose by about 48 percent over the 1968 period. This upward trend was even more dramatic in 1970 and 1971 when the District almost quadrupled its maize output as compared to previous years.

The observed rise in output and at a time when there was a less significant increase in area under maize was mainly influenced by the national campaign to modernise agricultural production, resulting in improved agronomic practices, intensification and higher yields. In fact, although the area under maize suffered a downward trend during the famine years of 1972-74, this did not cause a corresponding and significant drop in output. But, in 1979, maize output fell by 20 percent due to adverse weather conditions, despite the fact that the area planted rose during the same period. And, whereas output rose again by 126 percent to reach an all time high in 1980, a downward trend emerged soon after, with sharp reductions in 1981 and 1983. Since then, maize output has been steady and generally on the rise except for the 1995 and 2003 seasons (Figure 7 below).

The above production trends suggest that despite the general drop in area under maize, there has been a relative rise in output (Figures 6 and 7). Nevertheless, area planted and subsequent production has been marked by fluctuations. Whereas some of these fluctuations have coincided with food shortages in the Gusii region, as was the case in 1965, others have not.

Figure 7: Maize harvest in the Gusii region between 1956 and 2003 (bags)



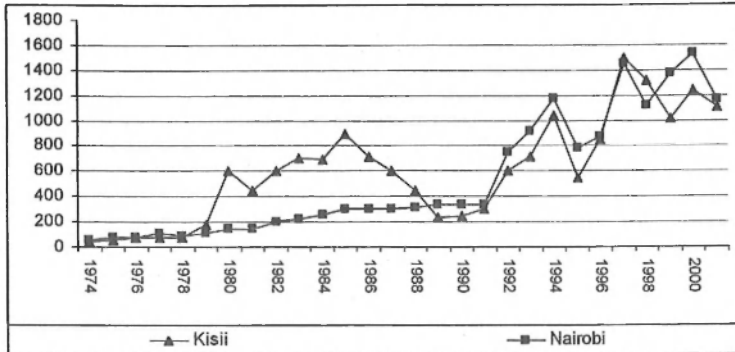
Source: Compiled from Agricultural Annual Reports, Kisii District.

For instance, much as 1980 was a famine year throughout the country, Gusii included, maize output in the region reached an all time high during the same period. Therefore, although the famines that occurred in 1965, 1972/74, 1979/80 and 1983/84 were attributed to ‘rainfall failure’, the quantity of maize harvested in the Gusii area during these periods was not conspicuously low, relative to other years, except for 1979. And, even where these famines may have resulted from a relative reduction in maize harvest, the expectation is that people turned elsewhere in an effort to meet their food needs. However, the option to take up markets fully or partially depends on whether these markets can be trusted. This mainly refers to the possibility that food supply will be constant and prices predictable.

Despite being a maize growing region, the consumer prices for maize in Kisii were (until about 1989 when the maize market in the country was liberalised) relatively higher compared to some of the non-maize growing regions in the country. For instance, in 1979, a 90 kilogramme bag of maize cost Kshs. 180 in Kisii whereas the same quantity went for Kshs. 117 in Nairobi. This difference was even more marked in 1980, the same year that the District attained a record output. A bag of maize cost Kshs. 600 in Kisii compared to Kshs. 148 in Nairobi. This trend continued through to 1989 when the maize market underwent liberalisation (Figure 8 below).

The above prices were largely as a result of a policy that deliberately aimed to subsidise the consumption needs of the urban labour-force for political and supposedly economic reasons. In so doing, however, this policy further reduced the possibility that markets could serve as a source of food in rural Kenya. While it might be assumed that farmers in Kisii benefited from these high prices, actual returns were still very low. Producer prices as set by government were often not commensurate with the cost of production and, given the high costs of transportation, among other expenses, the farm-gate price did not match the cost of production. This means that farmers often sold for less only to buy the same quantity of maize back but for more.

Figure 8: Average annual maize prices per 90 kilogramme bag, 1974-2001

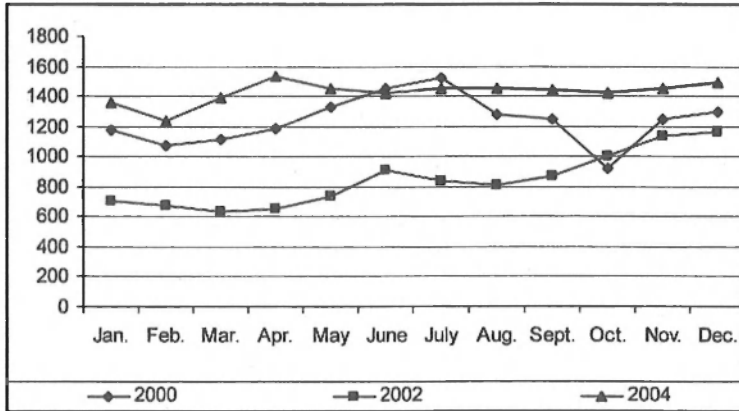


Source: National Cereals and Produce Board.

Maize prices in Kisii are also subjected to seasonality. While this could be assumed to result mainly from variations in supply versus demand, the periods in question are not always predictable and this only contributes towards making markets a less favourable option as a source of staple food. For example, in 2000, the price of maize fluctuated between Kshs. 1520 in July and Kshs. 925 three months later, in October.

Yet, two years later in 2002, maize in the district was cheapest in March (Kshs. 636) and most expensive in October (Kshs. 997). Indeed, a comparison of the price fluctuation between 2000 and 2004 suggests that the period of the so-called 'hunger season' is not uniform over the years and this only makes planning difficult for those who may wish to obtain their food on the market. The seasonal nature of pricing is equally challenging to farmers who choose to grow maize as a source of cash income (Figure 9).

Figure 9: A comparison of monthly maize prices over time (Kshs. per 90 kg bag)



Source: National Cereals and Produce Board.

A comparison of monthly maize prices overtime suggests that these prices are highest in certain months of the year and this often coincides with the ‘hunger season’ when there is a high demand for food and farm inputs, among other requirements. This then means that making purchases has to be subjected to several considerations, a process that may not enhance the possibility that markets will be found favourable as a source of food. In addition, the monthly price trends across years suggest that in spite of general seasonal variations, the period in question is not fixed. Hence, it is impossible to plan ahead of time, a constraint that will not therefore permit individual households to have control over their lives and livelihoods.

The maize market in Kisii can therefore be described as not favourable for households that might have to purchase food and on an instantaneous basis. Such households are not able to plan ahead even during the same year and especially when their incomes are not regular. Moreover, the decision to engage in purchasing depends on where one lives, relative to some of the markets that offer relatively better possibilities.

However, according to the District's Agricultural Reports, in general, except for the months of May, June and July when Kisii experiences what has come to be described as seasonal shortages, there is a sufficient supply of food during the rest of the year. It is argued that at the rate of 135 kilogrammes of maize per adult equivalent per year, the food that is available in the region is sufficient for each individual person. The underlying assumption therefore is that households that do not meet their food needs through cultivation can obtain additional supplies on the market. But, as we have observed, the food market is largely unreliable, especially for households who may need to turn to purchasing as the need arises and subject to the availability of cash money.

Below, we seek to understand what else comes into play during the search for adequate food at the household level, and how this comes to further determine who succeeds in obtaining required supplies and who fails. These discussions are based on a household survey conducted between 1995 and 1996 covering heads of households in Marani and Mosochi Divisions,

Kisii District. The survey sought to understand why some households become or remain food insecure while others succeed in obtaining required supplies. This information is complimented with field interviews and revisits made in 2002 and 2003 that aimed to bring out and hopefully explain the complexities that characterise the search for adequate food at the rural household level.

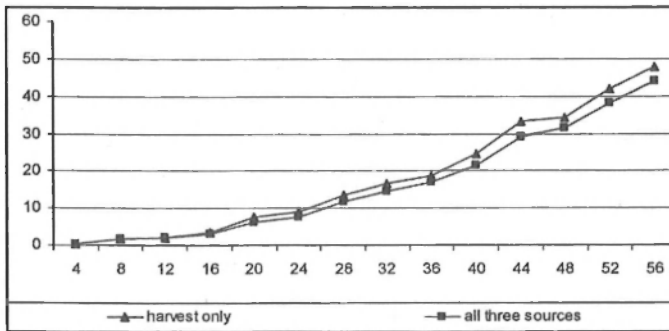
Household Level Differential Access to Food Supplies

Survey results show that close to 60 percent of households interviewed realised a harvest equivalent to their food needs, much of it because of combining supplies from the two rainfall seasons, in the absence of which, most households could experience shortfalls. However, despite the assumption that households grow only what they can with the intention of meeting shortfalls on the market, among other sources, this margin reduces only slightly when supplies from both purchases and seeking assistance are taken into account. As such, only a total of 63 percent of households interviewed were able to balance their food demand when supplies from harvests, purchases and seeking assistance are brought on board. Instead, 37 percent of the households interviewed were faced with a deficit, and for some of them, this set in within the first six months (26 weeks) of the year (Figure 10 below).

Therefore, broadly, two food security clusters are evident: households that manage to obtain adequate food supplies (63%) and another consisting of households that fail to do so (37%).

The fact that running out of stocks marks the beginning of a never ending search for adequate food calls for questions, among them, who succeeds and who fails to access required food and why.

Figure 10: Length of time that food supplies lasted over a period of 52 weeks (bags)



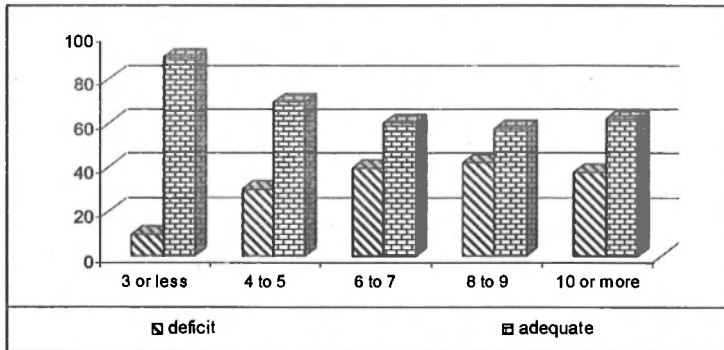
Source: Adapted from Omosa 1998, p.184.

The rest of this section is then a diagnostic account of the two food security clusters, namely, households with adequate supplies and those with apparent shortfalls. The aim is to seek to know whether there is a difference between households that succeed in obtaining adequate supplies and those that fail to do so, at any one time. Among the issues covered are, who has command over adequate food, what underlies this command, and who fails to gain command over food supplies and why.

Household size

Generally, command over required food varies with household size and smaller households have better access to required food. For example, whereas 90 percent of households with only three or fewer household members obtained adequate food, this was the case for 70 percent among households with a membership of 4 to 5 persons. The proportion of households with adequate supplies dropped to 60 percent among households with 6 to 7 members and this reduced even farther for households with eight members or more (Figure 11).

Figure 11: A comparison between household size and ability to obtain required food



The above pattern is in line with the general assumption that food shortages result from having more people to feed. It is, however, also suggested that household level food security does

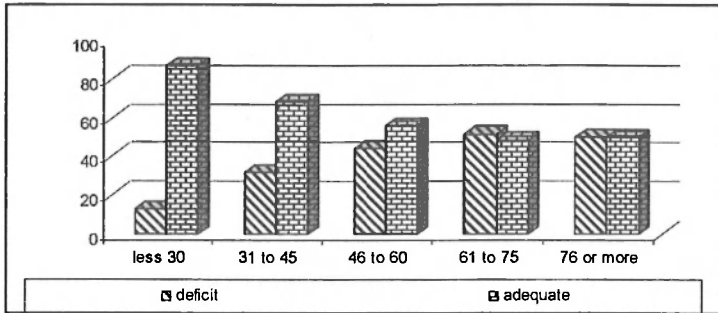
not necessarily improve with a reduction in the number of household members. Indeed, the fact that some fairly small households are not able to obtain adequate supplies of required food, when some of the larger households succeed, suggests that there are other factors that come into play in determining a household's food security position. This then brings to question the paradigm that food insecurity is a consequence of population growth (cf. Lappe & Collins 1977).

Life cycle

A comparison between the age distribution of household heads and the food security position of these households suggests that, in general, younger households enjoy a higher command over required food as compared to households headed by older persons. This was the case for 87 percent of households that were headed by persons aged 30 years and below, compared to 68 percent for households where the head was aged between 31 and 45 years, and only 56 percent for households where the head was aged between 46 and 60 years. Only about one half of households headed by persons in the sixties and beyond obtained required food supplies (Figure 12 below).

The general hypothesis that the elderly are most vulnerable to food insecurity is apparent. Households where the head is fairly young are likely to be better endowed with the resources that enable them obtain required food.

Figure 12: A comparison between the age of the household head and a household's food security position

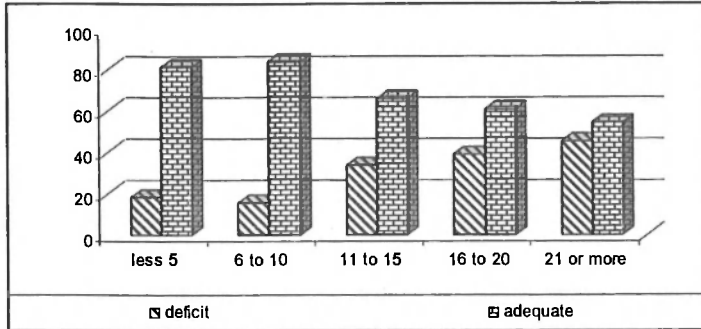


In a situation as the one that obtains in Kisii where most households endeavour to grow their own food, physical strength is just as important as access to land. The chances of younger households succeeding are further enhanced by the fact that most heads of such households are likely to have an off-farm income (cf. CBS 1999).

Dependency ratio

The general observation that households headed by younger persons have a relatively better command over required food derives from the fact that such households have fewer responsibilities and better opportunities. For example, whereas 82 percent of households with the oldest child aged five years or below obtained adequate food, this was the case for only 55 percent among households with the oldest child aged 21 years or more. In other words, households with relatively young dependants are less vulnerable to food insecurity (Figure 13).

Figure 13: A comparison between the age of the oldest child and the food security position of households



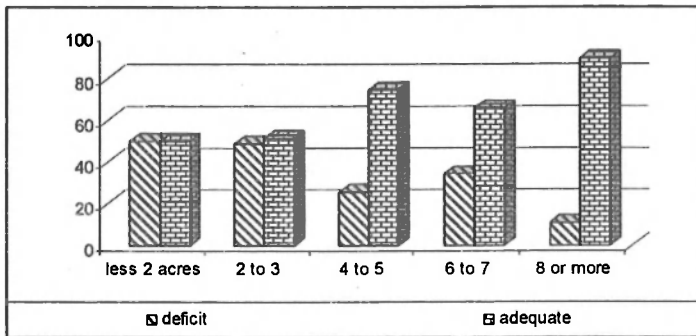
The above chart suggests that the food security position at the household level varies with the age and implicitly the number of dependants. Hence, a higher proportion of households with young children are food secure as compared to those with adult children. This particular scenario also points to the fact that a number of these adult children are not engaged in gainful employment and probably, cultivation, the only viable occupation is not feasible with dwindling land sizes. This stands in sharp contrast with traditional society where household with older dependants enjoyed higher levels of food security arising from the abundance in labour supply (cf. Uchendu & Anthony 1975).

Land size

A comparison between various land sizes and the food position of households shows a definite but fluctuating relationship between the amount of land available to households and their

ability to meet consumption needs. About one half of households with three acres of land or less obtained adequate supplies, and the proportion rose to 75 percent for households with 4 to 5 acres of land. Over 89 percent of households with 8 acres of land or more obtained adequate food supplies (Figure 14).

Figure 14: A comparison between land holdings and the food security position of households



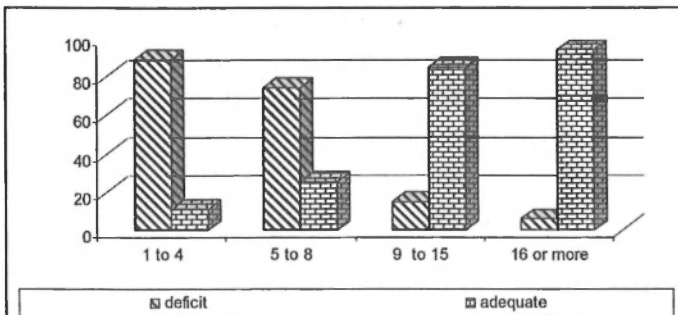
Indeed, the commonly applied proposition that food security is a function of access to the primary factors of production seems to hold true (cf. Hay 1976; Kitching 1980). Generally, the least food secure households are those with smaller parcels and the proportion of food secure households seems to rise with an increase in the amount of land owned. However, the fact that some of the households with relatively large parcels of land remain food insecure suggests that there are other intervening

factors. As argued by Amartya Sen, what matters most is how one utilizes the land in their possession and this varies from one individual to another, a position that is also advocated for by the actor-oriented approach (cf. Sen 1981; Long 1992).

Quantities harvested

A cross-tabulation of quantities of food harvested with the overall food situation shows that, success in meeting food needs depends on how much food is readily available at harvest. Only about 10 percent of households that harvested four bags of maize or less were able to meet their food needs, compared to 94 percent among those that harvested 16 bags of maize or more. Similarly, 85 percent of households that harvested between 9 and 15 bags were able to balance their overall food supply with demand, compared to about one quarter among households that harvested 5 to 8 bags of maize (Figure 15).

Figure 15: A comparison between quantity of harvest and household food security (bags)

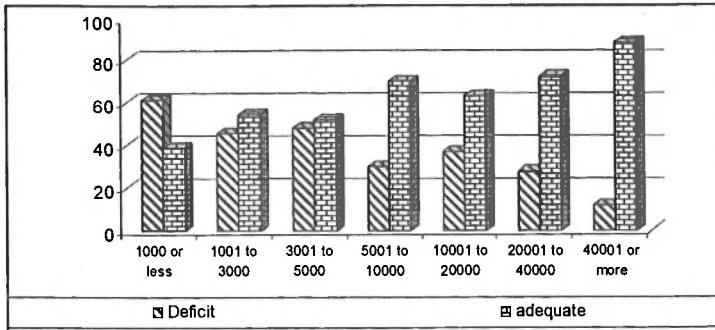


However, the fact that a few households succeed in meeting their food needs in spite of a seemingly low harvest and vice-versa suggests that whether one's harvest is able to translate into food security is in itself a process. It is noted that whereas some households with a relatively low harvest manage to meet their food needs, others with a comparatively high harvest fail to balance supply with demand.

Income levels

Generally, commanding adequate food is really about ability to pay, either by directly purchasing required food or, through acquiring the inputs necessary to make successful cultivation possible. Most households among the relatively high-income earners were able to obtain adequate food. For instance, over 88 percent of households with the highest annual income (Kshs. 40,000 or more), were able to obtain required food as compared to 52 percent among households with annual incomes of Kshs. 5000 and below (Figure 16). The observation that food security varies with income levels is consistent with arguments in much of the literature (cf. Raikes 1988; ECA 1980; Maxwell 1992).

Figure 16: A comparison between annual incomes and food security position



Nevertheless, some households fail to obtain adequate food irrespective of the amount of incomes earned. This means therefore that high incomes alone do not equate food security. But, because the proportion of the food insecure is smaller among the relatively high income earners is evidence that access to cash money does make a desirable difference in the search for adequate food.

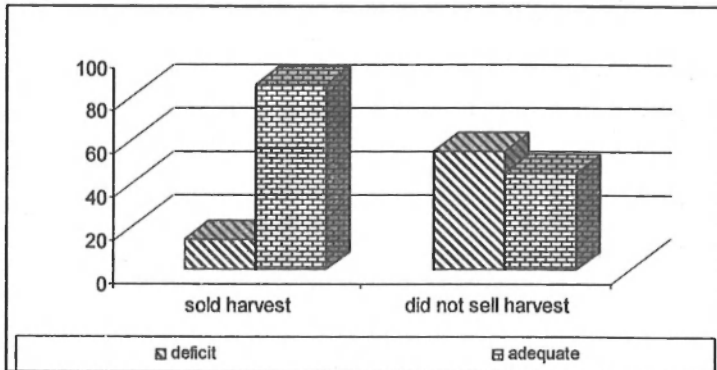
Management of supplies

Although nobody blamed shortfalls arising from harvests on the possibility that such households may have given out more than they could spare, there is a widespread belief that households that run out of food in spite of good harvests have engaged in selling what is obviously a non-surplus. The general perception among the Gusii is that households that sell a non-surplus are

irresponsible, ignorant of market conditions, illiterate, drunkards, poor planners, luxurious, stupid or lazy.

There is, however, a parallel opinion that is compassionate to people that sell, only run out of food. They are seen as persons that are in need of money for school fees, they are faced with unforeseen problems, they are less fortunate or they generally have no alternative but to sell food reserves. Some of them are, however, perceived as persons with another source of income, often salaried employment or cash crops and are therefore under no threat of inability to make purchases, should such a need arise (Field Interviews 1996; 2003). Interestingly, the food position of households that did not engage in selling part of their harvest was worse than that of those that sold some of their food harvest (Figure 17).

Figure 17: A comparison of the food position of households that sell their harvest with those that don't



The above pattern points to our general argument that the search for food security is a process and one that goes beyond the structural provisions to depend on the ingenuity of individual actors. The fact that most households that sold some of their harvest still remained food secure is a demonstration that food security is beyond the quantities harvested. This is because some of these households may be in a position to meet their shortfall on the market or, their harvest may be so big that selling creates no major challenge. It is also apparent that refusing to sell some of the harvest is in itself no guarantee that one will not be faced with shortages, mainly because the harvests may already be minimal.

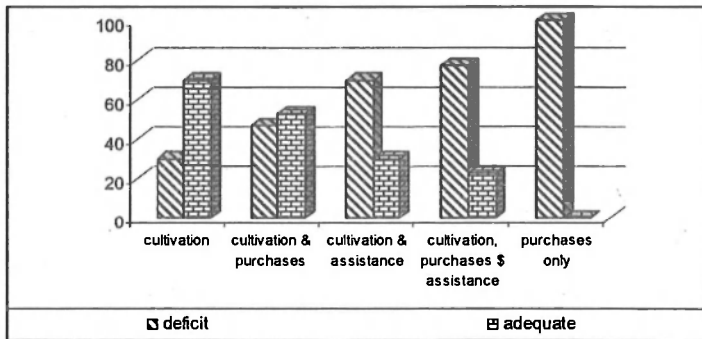
Food security strategies

Rural households depend on a diversity of food sources. In the study area, five different but inter-dependent food security strategies were pursued and some of the sources were assumed to offer better chances of success than others. For instance, 70 percent of the households that used cultivation only as a source of food obtained adequate supplies as compared to households that supplemented cultivation with purchases (53%), seeking assistance (30%), or those who relied on purchases combined with seeking assistance (23%). The one household that depended on purchasing only as a source of food was not able to balance food demand with supply (Figure 18 below).

Seemingly, at the rural household level, cultivation is the most dependable of the sources of food. It is also apparent that

purchasing and/or seeking assistance are not highly dependable sources of food. Indeed, the fear of markets as a source of food is clearly evidenced by the fact that the only household that chose to depend solely on markets failed to secure required supplies. A combination of factors comes into play to explain this situation, the most salient being that most households do not have a dependable source of cash income.

Figure 18: A comparison of food security strategies and the food position of households



Consequently, in the next section, we examine the complexities that go into determining the food security position of individual households. The aim is to understand the struggles that individuals and households undergo as they work towards obtaining their food needs. In particular, we aim to account for the contradictions that seem to emerge from the preceding discussion to the extent that whereas some succeed, others with similar characteristics fail to obtain required food supplies. These variations are largely

attributed to the individuality of actors, namely, their experiences, how they organise resources at hand, how they manipulate and thereby create space for themselves, how they define their world, and how all these in turn come to form part of their opportunities and challenges during the search for required food.

The Social Dimensions of Food Security at the Rural Household Level

The actor-oriented approach as advanced by Norman Long argues that even when conditions may appear relatively homogenous, there are differential responses to similar structural circumstances. These differential patterns arise, in part, as a creation of the actors themselves. Therefore, whereas Sen has argued that food security results from entitlements and a subsequent ability to command existing sources of food, we still need to understand how these entitlements come about, how command is mobilised successfully but only for some, and whether in fact we can talk about success and failure in absolute terms (Sen 1981, p.2). As such, we need to bring out the subtle (and often multiple) realities as understood by those who live and experience them, and also reveal the ‘backstage actors’ (often invisible to the structural observer but) who have a decisive influence on people’s day-to-day encounters and experiences.

This paper thus postulates that success or failure to obtain required food is couched in a network of commodity and non-commodity relations, but choices therein vary with how food

needs are conceptualised, and the possibilities that are available to individual households. Hence, the notion of social dimensions of food security is here used to refer to the larger framework within which households position their search for food and how these come to determine differential access to supplies. The central argument is that food security comprises more than balancing supply with demand, or the entitlement relations governing possession and use. This position is evidenced by the following narrative:

“Yobensia is a mother of five children, all boys aged between 16 and 28 years. She is 50 years old and married to a 56-year-old casual worker of a Farmers’ Cooperative Union. They both attained primary six level of education. This family lives in a corrugated iron roofed house (with earth walls and mud floor). There are three other structures in the home; a kitchen, a children’s house (*saiga*) and a goat shed. Yobensia’s husband inherited 2 acres of land in 1974, the year that he married and they have, since 1990, also leased in one more acre. Yobensia’s land use demonstrates a struggle to succeed at diverse but interrelated levels - food and cash crop production. With a total of only three acres of land in her hands and a multiplicity of crops, Yobensia could not possibly escape from resorting to several sources in her search for adequate food.

Yobensia perceives a food secure person as one who looks after her harvest well enough and does not therefore 'feed from the market'. Looking after food to her means seeing to the needs of her children and planning consumption needs so that a harvest lasts, preferably, for a whole season. This entails never selling maize, making good estimates by knowing when to cook and for whom. But, according to Yobensia, good management does not include cooking less. This is because, in Gusii customs, scratching a cooking pot (or clearing one's plate during meal time) amounts to inviting hunger. For this reason, mothers discourage children from doing so by cooking enough. Gusii eating habits therefore dictate that some food be left on the plate to show that the person is indeed satisfied. Anything else is an indication that the meal is insufficient. Yobensia explains that while she practises this with her children, she re-uses the leftovers instead of throwing them away, and in this way she does not find it wasteful. This of course presents a dilemma between what should be an adequate food intake and when to avoid that which could be excessive and therefore unnecessary. But in the absence of weights and measures, the most innovative thing is to eat to one's fill. This has actually continued to inform common reference to hunger, whereby anything other than feeling full is seen as only relieving the pangs of hunger, and this is viewed as being different from having adequate food.

Yobensia's main harvest (in the month of August) averages two bags of maize (about 12 *debes*). She finds her harvest low, a situation she attributes to the fact that she uses local seed and is unable to weed in time because she does it alone as there is no money to hire labour. She also reported that she does not apply top dressing as is the practice in the area. Yobensia, however, also relies on her second season's harvest (expected in February) with the hope that it will be better and if not, there is still room because, as she put it, '*you never can tell God's plans*'. She does not consider the market as a possible solution because two of her children are in secondary school, and she (and her husband) have first to attend to their school fees. Some of *God's plans* for Yobensia refer to decisions that she can only take at the appropriate moment. For example, from about the time that she first entered independent cultivation, Yobensia has frequently removed maize from the farm before it is ready for harvest, *ogotobora*. From this same period, she has also regularly sought assistance in the form of food aid from relatives (*ogosuma*). She also makes purchases with money earned from her *busaa* trade. Whenever she has to seek this assistance, Yobensia approaches her now aging mother and two sisters.

In spite of what looks like a generally food-needy household, Yobensia also participates in giving food aid.

She first gave assistance in 1982 when she sent one and a half *debes* of maize to her parents following a request from them. In 1994, she again gave one *debe* of maize to one of her sisters in Nyamira District. The sister sent word that she was ‘hungry’ and Yobensia had to assist her much as she herself did not have enough maize, and not too long after that, Yobensia took refuge in markets. Nevertheless, Yobensia’s life is not just full of miseries. She has also enjoyed some bumper harvests; mainly in 1976 and 1978. During each of these periods, she still had maize in the store at the time of the next harvest. She did not stop cultivating maize, although she actually reduced on area planted.”

What then does the future hold in store for those who, like Yobensia, must turn to several sources? The above narrative demonstrates that the search for food security is a process and a household could enjoy both success and failure during this process. In other words, food security or insecurity is not a permanent feature of any one household yet, how one attains a certain position varies from one household to another.

It is also evident that at the rural household level, food security is perceived as ability to manage one’s harvest well to the extent that those who ‘feed from the market’ are assumed to have failed in their search for food security. This narrative therefore brings

out the complexity of managing food supplies and the need to plan consumption without restricting the amounts to be cooked and served. The centrality of custom emerges suggesting further that the differentiation between the food secure and the food insecure goes beyond the calories consumed to include people's perceptions of what is adequate food.

Food security is about having hope and this is used to differentiate who is food secure and who is not. Households with dependable social networks such as able relatives feel less food insecure in the face of a shortfall than those with no one insight to assist. In other words, food security goes beyond physical stocks or ability to purchase. It encompasses having sufficient reason to be hopeful and hence dependable social networks.

On the other hand, much as markets are generally discredited, they are accepted as 'part of God's plans'. In other words, most households do not plan to utilise markets and therefore as soon as they resort to purchases, they already feel food insecure in their own eyes and those of the community. Yet, markets are embraced whenever this becomes necessary and financially possible to the extent that ability to afford also differentiates the food secure from the food insecure. However, the guiding principle here is custom: it is therefore not culturally acceptable that one plans to 'feed from the market' and in the event that they do, it is considered as a temporary measure, possibly accidental and therefore something that should be avoided.

Yobensiah's narrative further suggests that the flow of food assistance is two way and those who give such assistance are not necessarily any better in the long run. This explains why some households with fairly good harvests nevertheless turn food insecure. In other words, selling one's harvest is not the only 'cause' of sudden reductions in food reserves. As long as a section of the community is food insecure, several others are potentially vulnerable largely because they are bound so share even a non-surplus.

It is also evidenced that some of the households that are currently categorised as food insecure have once enjoyed food security status, largely having food stocks by the next harvest. Interestingly, instead of planning to dispose of this surplus, some households switch to the subsistence mode by reducing on the area planted (cf. Schultz 1964; Seavoy 1989). This, however, means that in the event of a reduction in productivity, such households turn food insecure. Therefore, the categorisation of food secure and insecure is only a temporary snapshot because the reality is highly dynamic.

Conclusions and Recommendations

The foregoing discussions on what differentiates households that are able to command adequate food from those that fail to obtain sufficient supplies suggests that, at one level, command over adequate food varies with household size, family life cycle, amount

of land under maize cultivation, quantity of food harvested and, how food supplies are managed. Nevertheless, some of the households that seem to fulfil these requirements still fail to obtain required food, a direct challenge to conventional assumptions (cf. World Bank 1988, p.3).

The complexity of defining one's food security status is demonstrated further by examining the daily lives of households. It is observed that categorisation is fluid and dynamic to the extent that people's definition of food security encompasses having the hope that assistance will be forthcoming. This is a pointer to the fact that rural households are capable of planning and they actually take precautionary measures with regard to their food security. The only challenge is that they sometimes invest in relations whose rules no longer accommodate their expectations, namely, the need to give food assistance when called upon.

A clear implication therefore is the need to redefine food security in the context of who faces regular and constant hunger and who does not. In other words, food security should be viewed from a wider perspective and this entails positioning conceptualisation of what is adequate food in the context of people's livelihoods. These livelihoods refer to, among other things, what people do for a living, their coping strategies, the opportunities that are open to them, and what informs their

choices, all of which come to determine who succeeds and who must fail in the search for adequate food.

Food security thus stands for the ability to juggle opportunities. As such, households facing an imminent food shortage will nevertheless go ahead and spend whatever money that there is in attending to concerns that they consider much more immediate than obtaining food, while those with sufficient food will sell available stocks to generate cash money for similar reasons. Although such households will ordinarily explain their actions with reference to views such as *impending hunger remains within 'God's Plans'*, the underlying wisdom is that by postponing one problem, they can generate the necessary *breathing space*.

Therefore, at the rural household level, a workable food policy would be one that addresses general livelihoods by paying attention to the realities and the diversity in how households interpret and experience the search for solutions to day-to-day problems, food security included. In other words, what constitutes food security among rural households should play a more central role in differentiating the food secure from the food insecure.

Emerging policy considerations must therefore take into account: how food security is conceptualised and practised at the rural household level; how the concept has changed over the years;

and what remains real in the meanings accorded to the search for food and what has ceased to be. By separating what is real and practised from what is imagined but nevertheless important, this country will better address itself to what constitutes food security and who therefore is likely to continue enjoying food security status and why some households must become vulnerable. This entails, among other things, focusing on how current macro level policies impact on the household, the dynamics that govern the flow and allocation of scarce resources, and how much government can delegate (and to whom), without jeopardising people's primary entitlement to adequate food, and government's own responsibility to safeguard national sovereignty.

References

Aboyade, O. (1994), Governance, Structural Adjustment and Transformation. *IDS Bulletin* Vol. 25 No. 3:9-15.

Africa, Organisation of Africa Unity (1980), *Africa's Priority Programme for Economic Recovery* (APPER), Economic Commission for Africa (ECA). Addis Ababa: OAU.

Braun, J. von, Teklu, T. and Webb, P. (1993), Famine as the Outcome of Political Production and Market Failures, *IDS Bulletin* Vol.24 No.4:73-79.

CBS (1999), *National Micro and Small Enterprise Baseline Survey*. Nairobi: Central Bureau of Statistics, Ministry of Planning and National Development. Government of Kenya.

Delgado, C. L. (1995), Agricultural Diversification and Export Promotion in Sub-Saharan Africa. *Food Policy Journal*. Vol. 20 (3):225-243.

Devereux, S. (1986), Entitlements, Availability and Famine: A Revisionist View of Wollo, 1972-74. *Food Policy*. Vol.13 (1):270-282.

Drèze, J. (1990), Famine Prevention in Africa: Some Experiences and Lessons in Drèze, J. & Sen, A. (eds.), *The Political Economy of Hunger* Volume 2: Famine Prevention. Oxford: Clarendon Press. pp.123-172.

Drèze, J. & Sen, A. (1989), *Hunger and Public Action*. New York: Oxford University Press.

ECA (1980), *Lagos Plan of Action for the Economic Recovery* (APPER). Economic Commission for Africa (ECA). Addis Ababa: Organisation of African Unity (OAU).

Engberg-Pedersen, P., Gibbon, P., Raikes, P. & Udsholt, L. (1996), *Limits of Adjustment in Africa*. Copenhagen: Centre for Development Research; Oxford: James Currey Ltd and Portsmouth: Heinemann.

FEWS (2005), Famine and Early Warning Systems Network. Kenya Centre. www.fews.net

Howe, J. E. (1991), *The Peasant Mode of Production*.
Tampere: University of Tampere.

Kenya, Republic of (1966), *National Development Plan 1966-70*. Nairobi: Government Printer.

Kenya, Republic of (1981), *Sessional Paper No. 4 of 1981 on National Food Policy*. Nairobi: Government Printer.

Kenya, Republic of (1986), *Sessional Paper No. 1 of 1986 on Economic Management for Renewed Growth*. Nairobi: Government Printer.

Kenya, Republic of (1994a), *National Development Plan 1994-96*. Nairobi: Government Printer.

Kenya, Republic of (1994b), *Sessional Paper No. 2 of 1994 on National Food Policy*. Nairobi: Government Printer.

Kitching, G. (1980), *Class and Economic Change in Kenya. The Making of an African Petite Bourgeoisie: 1905-1970*. New Haven & London: Yale University Press.

Lappe, F.M. & Collins, J. (1977), *Food First: Beyond the Myth of Scarcity*. New York: Ballantine Books.

Long, N. (1992), From Paradigm Lost to Paradigm Regained? The Case for an Actor-Oriented Sociology of Development in Long, N. and Long, A. (eds.), *Battlefields of Knowledge: The Interlocking of Theory and Practice*, in Social Research and Development. Routledge: London and New York. Pp. 16-43.

Mackintosh, M. (1990), Abstract Markets and Real Needs, in Bernstein, H., Crow, B., Mackintosh, M., & Martin, C. (eds.), *The Food Question*. London: Earthscan. pp.43-68.

McLaughlin, M. M. (1976), The Kenyan Economy in Heyer, J., Maitha, J. K., Senga, W. M. (eds.), *Agricultural Development in Kenya*. Nairobi: Oxford University Press. Pp.33-68.

Omosa, M. (1998), Re-Conceptualising Food Security: Interlocking Strategies, Unfolding Choices and Rural Livelihoods in Kenya. Wageningen: Wageningen Agricultural University, The Netherlands.

Omosa, M. (2003), *The Interplay between Commodity Markets and Rural Livelihoods: A Focus on the Tea*

Industry in Rural Kenya. IDS Working Paper No. 538. Nairobi: Institute for Development Studies, University of Nairobi.

Pingali, P. L. & Rosegrant, M. W. (1995), Agricultural Commercialisation and Diversification: Processes and Policies. *Food Policy* Vol.20. No.3:171-185.

Raikes, P. (1988), *Modernising Hunger*. Famine, Food Surplus and Farm Policy in the EEC and Africa. London: Heinemann.

Seavoy, R. E. (1989), *Famine in East Africa. Food Production and Food Policies*. New York, London: Greenwood Press.

Sen, A. (1981), *Poverty and Famines*. An Essay on Entitlement and Deprivation. Oxford: Clarendon Press.

Schultz, T. W. (1964), *Transforming Traditional Agriculture*. New Haven: Studies in Comparative Economics. No.3.

Uchendu, V. C. & Anthony, K. R. M (1975), *Agricultural Change in Kisii District, Kenya*. Nairobi, Kampala, Dar es Salaam: East African Literature Bureau.

Waal, A. de (1990), A Re-assessment of Entitlement Theory in the Light of the Recent Famines in Africa. *Development and Change*, Vol.21:469-490.

World Bank (1988), *The Challenge of Hunger in Africa*. Washington D.C: World Bank, July.