# Food insecurity status at household level in Kamukunji estate, Uasin Gishu County, Kenya

<sup>1</sup> Logiron Augustine Tioko <sup>1</sup>Lecturer, Moi University

<sup>1</sup>PhD in Sociology (Ongoing) <sup>1</sup>Masters Degree in Arts (Community Development option) <sup>1</sup>Bachelors Degree in Arts

**ABSTRACT:** The objective of the study was to establish food insecurity status at household levels in Kamkunji estate in Eldoret town. The researcher was interested in this study because food is a basic necessity of life. Its importance is seen in the fact that it is a basic means of sustenance and adequate food intake, in terms of quantity and quality, is a key to a healthy and productive life. The researcher employed explanatory research design. The target population of this study comprised of 160 household. The targeted area has a population of 15,000 households with an estimated population of about 120,000 persons. The researcher made use of stratified random and simple random sampling. Primary data were obtained using questionnaires, participant observation and key informants. Secondary sources used included: books, published materials, internet, census reports, newspapers, journals and research reports and was collected from library sources, government offices and internet data base. The study obtained both quantitative and qualitative data. SPSS version 18 software and Microsoft Excel were used for data analysis. The data were analyzed statistically using descriptive and inferential methods. The findings of the study established that, women wake up early in search of a day's work in order to get money for food. Some women found it necessary to work as bar maids in order to buy food and other essentials. The study recommended that, there is need to ensure food safety through government support of agriculture and regulation of food prices.

**KEY WORDS:** Food insecurity status, household levels

# **Background Information**

# I. INTRODUCTION

Approximately 10 percent of Kenya's population, or 3.8 million people, live in a chronic state of food insecurity (USDA, 2009), the most vulnerable of whom include women and children (Kimani-Murage, et al., 2011). Although women constitute 75 percent of Kenya's agricultural labour force, gender inequalities undermine their productivity, including limited access to essential resources (agricultural technologies, extension services and marketing facilities) and institutionalized barriers to credit and land ownership (Institute for Development Studies, 2006). Today, Kenya is East Africa's largest importer of food and agricultural products (USDA, 2009) and faces an alarming rate of food insecurity in the wake of rising food prices. According to the World Food Program (WFP), the average Kenyan family spends almost half of household income on food (WFP, 2011). While several factors have contributed to Kenya's high rate of food insecurity, International Financial Institutions (IFIs), including the World Bank (WB) and African Development Bank (AfDB), have undermined agricultural development, contributed to the drastic rise in food prices and exacerbated rates of hunger and malnutrition. Starting with the WB and International Monetary Fund (IMF)'s Structural Adjustment Policies in the 1980s, Kenya experienced a crippling "absence of sustained investment, limited scope for expanding into new lands and mismanagement of agricultural institutions" (Gitau, et al., 2008). Kenya's agricultural GDP plummeted as the WB and IMF "free market" policies and programs promoted privatization and deregulation of commercial functions, as well as a reduction of trade barriers and exchange rate adjustments (Gitau, et al., 2008). WB and IMF-imposed agricultural market liberalization ultimately benefited "medium and large-scale commercial farmers, large-scale private traders, wholesalers and processors, and transporters and other providers of market services" (Baden, 1998), the majority of whom are men. Meanwhile, these policies devastated small-scale farmers engaged in processing and trading, the vast majority of whom are women (Baden, 1998; FAO, 2011).

#### Statement of the Problem

Food is a basic necessity of life. Its importance is seen in the fact that it is a basic means of sustenance and an adequate food intake, in terms of quantity and quality, is a key for healthy and productive life. The importance of food is also shown in the fact that it accounts for a substantial part of a typical Kenyan household budget. The economic development of a nation is dependent on its factor endowment. However, here in Kenya, access to food is a grave concern and therefore, to a large extent, vulnerability and poverty are likely to be manifested in the form of food insecurity. The present study is motivated by the fact that there exist limited studies on food security status in less developed countries and especially Kenya. The study therefore intended to fill this gap by looking into household level food insecurity status at Kamkunji estate in Eldoret town.

## **Objective of the Study**

• To establish the food insecurity status at household level in Kamukunji estate

# **II. LITERATURE REVIEW**

### Household food security

Urban agriculture is already demonstrating enormous potential in enhancing the welfare of poor urban populations in some cities of certain African countries (Mwalukasa, 2000; Nugent, 2000). For example, a significant number of people in cities such as Accra and Dar es Salaam increasingly depend on crops grown in public spaces for food and income (de Zeeuw, et al., 2010). Urban agriculture contributes to improved food availability and nutritional status. Resources freed by self-production of food can be used utilized to compliment household diets by purchasing other nutritious food items such as fish, fruits and vegetables (Bryld, 2003). This suggests that urban agriculture contributes to food diversification through increased availability of household disposable income (Zezza and Tasciotti, 2010). With more diverse foods available, households become more food secure (Swindale and Bilinsky, 2006). Thus self-grown food can reduce well-known challenges that the urban poor face, especially the dangers of meeting their household food and nutrition security entirely via the market.

The ability of urban agriculture to supply fresh perishable products such as vegetables is in line with Von Thunen's agricultural land use model (de Bon et al. 2010). Vegetable supplies from within 30km of urban areas in African countries attributes 70% of the source of these foods to urban agriculture. The figures for the supply of vegetables are significantly higher in Asia (de Bon et al. 2010), signifying the potential for growth and expansion of this sector in African cities as it has been noted that consumption of these vegetables is a significant source of food for the urban poor.

# **Research Design**

# III. METHODOLOGY

While carrying out the study, the researcher employed explanatory research design. Explanatory study is referred to as studies that establish casual relationship between variables. Explanatory research most often preceded by explanatory and descriptive research and the emphasis is basically on studying a situation or a problem in order to explain the relationships between the variables. (Saunders, Lewis, Thornhill, 2007). Explanatory or a causal study is aimed at ascertaining causal relationship between variables i.e. the relationship between food insecurity and livelihood levels. Since the study involves collecting the opinions of respondents concerning a particular issue, given the above stated attributes, explanatory research design was adopted in this study in order to establish their relationship.

# **Target Population**

A population consists of all elements-individuals, items, or object-whose characteristics are being studied. The population that is being studied is also called the target population. The population refers to the group of people or study subjects who are similar in one or more ways and which forms the subject of the study in a particular survey (Kerlinger, 2003). The target population in this research covers all the low income groups. Due to the large population, 10 percent of the total households were considered. This ratio is considered appropriate in social sciences Polinsky (2009). A total of about 160 households were targeted since the area has a population of about 15,000 households with an estimated population of about 120,000 persons. The research targeted respondents who were between the ages of 19 to 64 years this is because within this age bracket the respondents are old enough to be household heads.

## Sampling Size and Techniques

Sampling is a procedure of selecting a part of population on which research can be conducted, which ensures that conclusions from the study can be generalized to the entire population. The sampling criteria for this study include the following: The selection of the households was done using stratified random sampling. The population in the study area was divided into strata and a simple random sample was selected from each stratum. This made reliable estimates for each stratum as well as for the population as a whole. The study area was divided into three stratum based on the location this was: Kambi, Teso, Bondeni and Market. The samples were equal in the three locations since they are relatively equal in population size and homogeneity. The respondent in every house was head of the household and in his/her absence the spouse was able to respond. To allow observation and accurate assessment, the household heads were interviewed in their houses. The local administration heads such as chiefs and village elders helped the researcher to randomly identify head of households and make the necessary appointments.

### **Data Collection Instrument**

The study data for the study were generated from both primary and secondary sources. Primary data were obtained using the participant observation method where information was sought by way of investigators own direct observation. This study method was used with other instruments e.g. questionnaire which were both closed-ended and open ended. Another method was through interviews with key informants. Secondary sources includes: books, published materials, internet, census reports, newspapers, journals and research reports and was collected from library sources, government offices and internet data base.

### Data collection procedure

The study was carried in four phases. The first phase involved a reconnaissance survey of the study area, covering identification households, testing of the questionnaires and modifying it where necessary. The second phase of the study involved administering of the questionnaire to the sampled respondents. The third phase involved interviews with key informants. These included the district statistics officer and local administration head such as village elders and chiefs. The last stage involved reviewing secondary data.

#### Validity and Reliability of the Instruments

In different areas of social science research, the accurate measurement of variables poses a challenge. In social sciences, undependable measurements of people's beliefs evidently hinder efforts to predict their behaviour. The issue of accurate measurement also comes up in applied research, whenever variables are difficult to examine. Based on this background, reliability of research instruments were used to construct reliable measurement scales, to improve existing scales, and to appraise the reliability of scales already in use. In particular, reliability aided in the design and assessment of sum scales, that is, scales that are made up of multiple individual measurements.

Reliability: Kothari (2005) defines reliability of the research tools as the ability of that test to consistently yield the same results when repeated measurements are taken of the same individual under the same conditions. According to the study reliability therefore implies the extent to which consistent results can be achieved through the use of the same instruments with the same respondents at different intervals.

#### Data Analysis

The data collected for the purpose of the study were adopted and coded for completeness and accuracy. SPSS version 18 software and Microsoft Excel were used for all the data analysis and interpretation. The data were analyzed statistically descriptive and percentage analysis methods. The analysis was undertaken to establish the degree of relationships between status of food insecurity and household levels.

# IV. FINDINGS AND DISCUSSIONS

#### Status of food insecurity

The food eaten in the household in the last 12 months and the ability to afford the food were described differently by the respondents as summarized in table 1 below. The respondents who were food secure comprised of 16.2%, while those who were food insecure comprised of 89.3%. This portrays how rampant the food insecurity was during the study.

Table 1: Foo	ble 1: Food item eaten		
	Frequency         Percent           25         16.2           ant.         41         27.1		
Enough kinds of food and nutritious	25	16.2	
Enough but not always the kind of food I want.	41	27.1	
Sometimes not enough	38	25.4	
Often not enough	48	31.4	
Total	151	100.0	

## **Causes of Food Insecurity**

The causes of food insecurity are summarized in table 4.4 below. The causes can be categorized into two first the reasons for not having enough food to eat and secondly the causes of food insecurity. Lack of enough money to buy food comprised of 79.2% of the respondents. Lack of enough time to cook was identified by 94.7% of the respondents, as not being a reason of food insecurity while only 5.3% households were on the contrary.

The inaccessibility of shops to buy food were not identified by 97.4% of the respondents to be a reason for not having enough food to eat, but only 2.6% view it as a reason for not having enough food to eat. Most of the shops are located in the same dwelling units as residential houses hence accessing the shops is not a problem. The lack of food were identified by 96% of the respondents to be a reason for not having enough food to eat and 4% did not view it as a reason for not having enough food to eat. Lack of food is attributed to lack of money to buy the food, though food is available in the market the means of accessing is the problem due to weak purchasing power. Poor hygiene were viewed by 76.6% of the respondents to be a reason for food insecurity and only 26.4% view it as a not reason for food insecurity.

The high food prices were identified by 93.4% of the households to cause food insecurity and only 6.6% were of the opinion that it doesn't cause food insecurity. The high fuel cost were identified by 96% to cause food insecurity, but only 4% respondents view it not as a cause food insecurity. House rent was not identified by 97.4% each to cause food insecurity and only 2.6% of them identify to cause food insecurity. The frequent reviews of school fees were viewed by 88.8% of the respondents not to cause food insecurity, while 11.2% identified it to cause food insecurity.

Reasons for not having enough food to eat	Yes		No		Don't know	
	F	%	F	%	F	%
Lack of enough money for food	120	79.2	31	20.8	0	0
Lack of enough time to cook	8	5.3	144	94.7	0	0
Lack of fuel	6	4.0	146	96.0	0	0
Inaccessibility of shops	4	2.6	147	97.4	0	0
Lack of food	145	96.0	6	4.0	0	0
Poor health	6	4.0	144	94.7	2	1.3
Causes of food insecurity						
Poor hygiene	36	23.4	116	76.6	0	0
High food price	141	93.4	10	6.6	0	0
High fuel cost	146	96.0	6	4.0	0	0
High house rent	4	2.6	147	97.4	0	0
Frequent review of fees	17	11.2	135	88.8	0	0

# Table 2: Causes of food insecurity

#### **Conclusion and Recommendation**

It is clear that a lot more attention needs to be given to the food insecurity situation among the urban poor in Kenya. There is need to strengthen the agricultural sector through price regulation so farm inputs and agricultural outputs.

# REFERENCES

- Baden, S. (1998). 'Gender Issues in Agricultural Liberalization.' http:// www.bridge.ids.ac.uk/reports/re41c.pdf. [1].
- Bryld, E., (2003). Potentials, problems, and policy implications for urban agriculture in developing countries. 20(1), pp. 79-86 [2].
- FAO, (2011). 'Food Insecurity in the Horn of Africa.' http://www.fao.org/DOCREP/003/X8530E/x8530e02.htm Gitau, R. et al.,( 2008). 'Agricultural Policy Making in Sub-Saharan Africa: Kenya's [3].
- Past Policies.' [4]. http://www.tegemeo.org/documents/work/Wp34-Agricultural-Policy-Making-Africa-Kenya-Past-Policies.pdf
- [5]. Kimani-Murage, E.W., et al., (2011). 'Food Security and Nutritional Outcomes among Poor Urban Orphans in Nairobi.' http://www.ncbi.nlm.nih.gov/pubmed/20945109.
- Kerlinger, F. (2003) Foundations of Behavioral Research. New Delhi: Sarjeet Publishers [6].
- Kothari C. R. (2003). Research Methodology. Method and Techniques. New Delhi: Wishwa Rakashani. [7].
- [8]. Mwalukasa, M., (2000). "Institutional aspects of urban agriculture in the city of Dar Es Salaam."
- In N. Bakker, M. Dubelling, S. Gundel, V. Sabel-Koschella, and A. Zeeuw (eds.), Growing Cities, Growing Food: Urban [9]. Agriculture on the Policy Agenda. Feldafing, Germany: Food and Agriculture Development Centre (ZEL).
- [10]. Saunders, M., Lewis, P. & Thornhill, A. (2007). Research methods for business for Students: 4th edition. Pearson Education Limited Artes Graficas. SME Solutions Center (SSC) (<u>http://www.ssc.co.ke/services.asp</u>). Swindale, A., & Bilinsky, P., (2006). "Development of a universally applicable
- [11]. food household insecurity measurement tool: Process, current status, and outstanding issues." Journal of Nutrition, 136(5), pp. 1449-1452.
- [12]. WFP, (2011). 'The Food Price Rollercoaster.' http:// www.wfp.org/stories/rising-food- prices-infographic? gclid=CN2tscnpaoCFcPe4Aodn2q7WA
- [13]. Zezza, A., & Tasciotti, L., (2010). "Urban agriculture, poverty, and food security: Empirical evidence from a sample of developing countries." Food Policy, 35(4), pp. 265-273.