

LIVELIHOOD STRATEGIES FOR STREET AND HIGHWAY FOOD VENDORS AND CONSUMERS IN KAMPALA AND KISUMU CITIES, EAST AFRICA

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ABSTRACT

Food safety is an increasingly important public health concern worldwide. Street foods play an important socioeconomic role in meeting the food and nutritional requirements of urban consumers at affordable prices to the lower and middle-income groups. It is also documented that street food vendors are often poor, uneducated, and lack knowledge in safe food handling, environment, sanitation and hygiene, mode of food display, foodservice, and hand washing, sources of raw materials, and use of potable water. Consequently, street foods are perceived to be a major public health risk. The purpose of the study was to examine the types of livelihood strategies for street and highway food vendors and consumers in Kampala and Kisumu cities, East Africa. The study adopted cross-cultural and evaluation research designs. The sample size comprised of four hundred and twenty-two (422) respondents and was sampled using stratified random sampling and purposive sampling to ensure proportional representation. Study findings indicated that the key variables were significantly ($p < 0.05$) influenced by gender, marital status, age, level of education, and work experience. The study noted that the level of livelihood of consumers in Kampala city was fairly adequate with a mean of 2.68 and ($\chi^2 = 175.526$, $p < 0.01$). While in Kisumu city, it was adequate with a mean of 2.45 and ($\chi^2 = 48.800$, $p < 0.01$). The livelihood of vendors in Kampala city was fairly adequate with a mean of 2.74 and ($\chi^2 = 49.442$, $p < 0.01$). In Kisumu city, it was lowly adequate with a mean of 2.35. ($\chi^2 = 6.000$, $p < 0.01$). The study recommends that all livelihood strategies including human, social, physical, financial, natural and political assets should be mainstreamed in food safety agenda for food security, wellbeing and income to be efficiently achieved at all levels.

Keywords: *Livelihoods Strategies, Household Food Security, Wellbeing, Vendors, Consumers, Street and Highway Foods.*

INTRODUCTION

As the world's population becomes increasingly urbanized, the focus of humanitarian action is shifting to urban settings. The street foods play an essential socio-economic role in meeting food and nutritional requirements of city consumers at affordable prices to the lower and middle-income groups and are appreciated for their unique flavours and convenience (Ackah *et al.*, 2011). These

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foods provide urban dwellers with a wide variety of fast and cheap, ready-to-eat foods both day and night. Further, the preparation and selling of street foods employ large numbers of women and men. Both the economic contribution and the food service aspect of this sector to the total are significant (Nicolò, 2012). Nonetheless, the government officials in the developing world are hostile toward street foods. They regard them as an unattractive and unsanitary nuisance. Consequently, street food vendors are considered to be part of an illegal or extra-legal sector that should be abolished (Bhowmik, 2013).

Urbanization and population growth is an incident that has enhanced the increase of street and highway food vending. Whereas street and highway food vending is appreciated for their convenience and assurance of food security for low-income urban populations, it is acknowledged that these informal food outlets are operated by people who lack commitment for safe food handling practice. Consequently, street foods are perceived to be a major public health risk (Henson, 2003). Due to the migration from rural areas and foreign countries and the resulting living conditions, many working people want to eat outside their homes. The street food industry is, therefore, an essential first job-provider for many people and prevents vulnerable social groups from falling into poverty (Rahman *et al.*, 2012). Despite this, the role of street foods in supplying the nutritional needs of urban populations has received little governance attention (Global Forum, 2011). Besides, because of the lack of an effective food safety system, local and international food trade opportunities are reduced (WHO, 2001).

There is an insufficiency of research to prove that there is a lack of street food safety in Kenya, especially among the food-based providers. However, most research suggests that there might be high levels of contamination among food consumed by the multitudes that may potentially pose a health risk (Githiri *et al.*, 2009). Little attention has been devoted to consumers and their eating habits, behaviours and awareness. According to Ejalu (2008), there is a need for a more organized system that is responsible for the safety of food. The security of street food in the third world and developing countries is still a significant concern (Muinde and Kuria, 2005). Therefore, this research sought to examine the types of livelihood strategies for street and highway food vendors and consumers in Kampala and Kisumu cities, East Africa.

LITERATURE REVIEW

Livelihood Strategies

Livelihood strategies are the variety and amalgamation of activities and choices that people make to achieve their livelihood goals. Based on their personal goals, their resource base, and their understanding of the options available, different categories of households – poor and less poor – develop and pursue diverse livelihood strategies. Livelihood strategies can be positive, helping families become more resilient and less vulnerable, or harmful when they result in further erosion and decrease of the asset base. When considering livelihood outcomes, it is important to understand not only the aims of a particular group, consumers, or vendors but also the extent to which these livelihoods are already being achieved. Or it may be because they do not have the means (assets) to meet them (DFID, 2004). Poor households in Africa usually lack storage or refrigeration and therefore buy food regularly from nearby informal providers (Skinner 2016). However, female food vendors naturally sell less-profitable items than their male counterparts (Battersby *et al.*, 2017).

Income level

Although income measures of poverty have been much criticized, people certainly continue to seek a simple increase in net returns to the activities they undertake and overall increases in the amount of money coming into the household (or their own pocket). Increased income also relates to the idea of the economic sustainability of livelihoods (Sally, 2016). Many earn subsistence incomes or even less, but there are also vendors who accumulate capital and, considering their daily earnings, can be classified as people of middle income. Street vending is not a survival strategy but, rather, an alternative income-generating activity leading to economic mobility (Nirathron, 2005).

Household Food Security

Food security is a condition related to the supply of food and individuals' access to it. The World Food Summit (October 1996) define food security as "Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life." Hamelin *et al.*, (1999) noted that a household is food secure when it has access to the food needed for a healthy life for all its members (adequate in terms of quality, quantity, and safety and culturally acceptable) and when it is not at undue risk of losing such access.

Well-being

Well-being is a legal population outcome measure beyond morbidity, mortality, and economic status that articulates how people perceive their life from their perspective. It is a state of being healthy, happy, welfare, or prosperous (ROC, 2010). A livelihood is the means that a household uses to achieve that well-being and sustain it (Messer and Townsley, 2003). As food safety is linked to health, in terms of risk from foodborne illness, it was hypothesized that higher well-being might also be linked to the extent to which people undertake activities relating to food safety. Preparing and cooking food for others can also be thought of as a pro-social behaviour, which is associated with the eudemonic dimension of well-being (relating to the sense of engagement and fulfillment in life); hence different dimensions of well-being and their relationship with food safety explored (Blachflower *et al.*, 2012).

Vulnerabilities

Vulnerability analysis involves identifying not only risks or threats but also resilience in resisting or recovering from the harmful effects of a changing environment. The means of resistance are the assets and entitlements that individuals, households, and communities mobilize in facing hardship (Moser 1998). The ability to manage the risks associated with shocks is determined largely on household and community characteristics, especially their asset base, livelihood, and food security strategies they pursue (Krishna, 2000).

Food vendors play a significant role in nourishing residents in informal settlements by offering ready access to fruits, vegetables, snacks, and cooked foods. But unlike food vendors in markets or streets and highways, vendors in informal settlements are often hidden and overlooked by policymakers (Ahmed *et al.*, 2015). Consequently, there has been a marked increase in the morbidity of consumers of street foods and street food vendors are thought to be the source, if not the cause of the increase in foodborne disease outbreaks, (Falkenstein, 2010).

RESEARCH METHODOLOGY

The researcher used cross-cultural research design and evaluation research design whereby both quantitative and qualitative approaches of research were applicable. A cross-cultural research design was used to reveal variations existing across different groups of people, and it involved surveys, direct observation, and participant observation methods of research. The quantitative method involved the calculation of frequencies and mean differences, while the qualitative approach included interviews, focus group discussion, secondary data, and documentary analysis. The target population was 422, which was composed of consumers and vendors. The units of observation were based on the plates (photos). The secondary data collection involved documentary evidence of what has been collected and readily available from other sources. The self-administered questionnaire helped in data collection. A stratified random selection procedure was used to ensure that the consumers and vendors are partitioned into non-overlapping groups, called strata, and a sample was selected by a design within each stratum. Focus group discussion members were selected by quota sampling. Key informant interviews (KI, $n = 16$) and focus group discussions (FGD, $n = 32$) were conducted with leaders who are knowledgeable on food safety in the area and alternative livelihood passageways undertaken in the region.

Data Analyses and presentation

Raw data (information) was coded, categorized, and analyzed according to the purpose of the study objective through descriptive frequency and percentages, and mean and standard deviation. Statistical Package for Social Sciences (SPSS V.20) was the primary software used and results presented through tabulations.

RESULTS AND DISCUSSION

Vendors and consumers in Kampala city and Kisumu city were sampled based on their location at the time of data collection (Figure 1). Male consumers were ranked majority 99(57%) in Kampala city while in Kisumu city, 70(58%). Therefore, males were ranked higher among the consumers of street and highway foods both in Kampala and Kisumu cities. In Kampala city, female vendors formed the majority (65.0%) while in Kisumu city 19(79%). Therefore, in both cities, female vendors ranked highly than males. The finding showed that the majority of the consumers in Kampala prefer street foods, while the majority of the consumers in Kisumu does not prefer street foods. The majority [101(58%)] of the consumers were married, in Kampala city, and Kisumu city [75(62%)]. The majority of the vendors in Kampala city were married 22(65%), and 20(83%) in Kisumu city. Therefore, marital status formed one of the reasons for establishing the household's livelihood strategies of the consumers and vendors. In Kampala city, most of the consumers had a university level of education with 109(63%), and 63(53%) in Kisumu city. Vendors with secondary level education in Kampala city 14(41%) and 13(54%) in Kisumu city, were primary level education. The finding revealed that males traveled more often and formed the greatest of the consumers, and most of the street food vendors were females. It was noted that the socio-economic situation is particularly harsh for women who are the traditional supporters of family survival. As income decline and prices rise, women and children must work for long hours inside and outside the home, hence form the

majority of street food vendors. The study also revealed that vendors in both Kampala city and Kisumu city had low education. The findings show that many consumers are most of the time concerned about the types of food they get from the street in Kampala city and Kisumu city. The significant risk bearers of the consequences of street food safety are consumers. The attitude of consumers to the protection of street food varied and was dependent on some socio-economic factors.

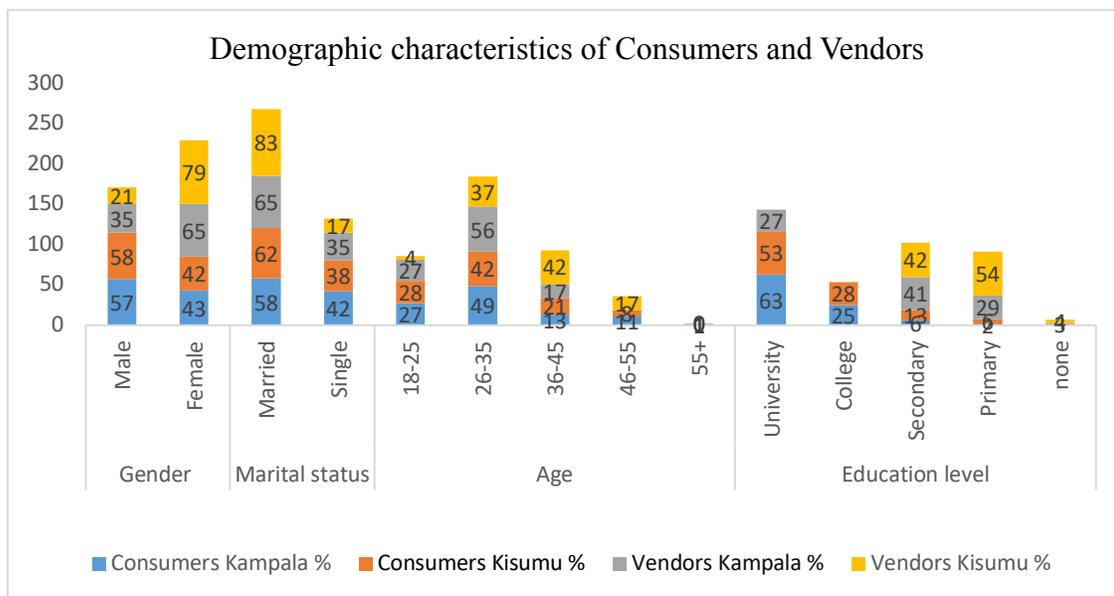


Figure 1. Demographic characteristics of Consumers and vendors on food safety in Kampala and Kisumu cities, East Africa

Livelihood Strategies for Consumers in Kampala City

All the key factors involved in the study were ranked as follows; food security 2.97(.967), wellbeing 2.66(.995), and income 2.31(1.065) formed the livelihood strategies for consumers in Kampala city (Table 1), with a mean of ($\mu=2.68$, $SD=0.729$). Chi-square test conducted on livelihood strategies for consumers ($\chi^2 =175.526$, $df=4$, $p=0.01$) showed that there was a highly significant variation ($p<0.01$). The findings were more positively skewed to financial capital, and yet there were many other strategies adopted to enhance food safety. For food security, wellbeing and income to be achieved; human, social, physical, financial, natural, and political assets should be mainstreamed in food safety agenda.

Table 1. Types of livelihood strategies for consumers in Kampala city

	Mean	Std. Dev'n	Chi-square	P-value	N
Income	2.31	1.065	1.265	0.000	173
Wellbeing	2.66	.995	62.32	0.000	174
Food security	2.97	.967	89.563	0.000	174
Valid N (listwise)					173

The types of Livelihood strategies of Consumers in Kisumu City

The types of livelihood strategies reveal that all the key factors were the basis of livelihood strategies of consumers in Kisumu was adequate. The Chi-square test ($\chi^2 = 48.800$, $df=2$, $p=0.01$) showed that the livelihood level for consumers had a highly significant variation ($p<0.01$). The findings showed that for food security, wellbeing, and income to be achieved; human, social, physical, financial, natural, and political assets should be mainstreamed in food safety agenda.

The types of Livelihood strategies for Vendors in Kampala City

The findings show that under income, most of the vendors (68.0%) agreed that they face a lack of infrastructure. More than half (51.0%) of the vendors in Kampala city, noted that eviction practices like destroying and confiscating property are common. Most of the vendors (65.0%) stated that street food provides both an economic opportunity for men and women. More than half of vendors (54.0%) disagreed that they are careful about what they sell and that they usually sell balanced nutritious meals. Most of the vendors (65.0%) disagreed that food is accessible by individuals with adequate resources for acquiring appropriate foods for a nutritious diet. Therefore, the livelihood strategies for vendors in Kampala city is fairly adequate. Chi-square test ($\chi^2 = 19.412$, $df=3$, $p=0.01$) showed that there was a highly significant variation ($p<0.01$).

The types of Livelihood strategies for Vendors in Kisumu City, Kenya

The findings under income strategy, show that the majority of the vendors (96.0%) agreed that street vendors face a lack of infrastructure. Many street food vendors (75.0%) disagreed that eviction practices like destroying and confiscating property and arresting vendors are a common practice in Kisumu. For wellbeing, all sampled street food vendors (100%) agreed that they are careful about what they sell. Many vendors (79.0%) disagreed that they usually sell balanced nutritious meals. The majority of the household (88.0%) have access to adequate food at all times for food security. Therefore, the livelihood strategies of vendors in Kisumu city is adequate. Chi-square test ($\chi^2 = 6.000$, $df=1$, $p=0.01$) showed that there was a highly significant variation ($p < 0.01$). It was observed (Plate 1) that the majority of the vendors handled food with bare hands which takes money at the same time. Cooked street food should not be handled with bare hands. Table 2. is a comparison for types of livelihood strategies for consumers in Kampala and Kisumu cities, East Africa.



Plate 1: Highway food

Table 2. Types of livelihood strategies for consumers in Kampala and Kisumu cities

	Kampala city	Kisumu city
Consumers	<p>Income level</p> <ul style="list-style-type: none"> Street vendors face lack of infrastructure. Income does not depend solely on the price of the food. Street food provides both an economic opportunity for men and women. <p>Wellbeing</p> <ul style="list-style-type: none"> They are careful about what they eat when travelling. Not usually eat balanced nutritious meals. Don't like experimenting and trying exotic foods. <p>Household food security</p> <ul style="list-style-type: none"> Don't get sufficient quantities and appropriate quality of food from the street. Household don't have access to adequate food at all times. Nutritious food is accessible by individuals with adequate resources 	<p>Income level</p> <ul style="list-style-type: none"> Street vendors face lack of infrastructure. Income depends solely on the price of the food. Street food provides both an economic opportunity for men and women. <p>Wellbeing</p> <ul style="list-style-type: none"> They are careful about what they eat when travelling. Moderately eat balanced nutritious meals. Don't like experimenting and trying exotic foods. <p>Household food security</p> <ul style="list-style-type: none"> Don't get sufficient quantities and appropriate quality of food from the street. Household don't have access to adequate food at all times. Nutritious food is accessible by individuals with adequate resources
Vendors	<p>Income level</p> <ul style="list-style-type: none"> Street vendors face lack of infrastructure Eviction practices like destroying and arresting is common Street food provide economic opportunity for both men and women. <p>Wellbeing</p> <ul style="list-style-type: none"> Not careful about what they sell. Don't usually sell balanced nutritious meals. <p>Household food security</p> <ul style="list-style-type: none"> Household have access to adequate food at all times. Nutritious diet is not accessible by individuals with adequate resources 	<p>Income level</p> <ul style="list-style-type: none"> Street vendors face lack of infrastructure Eviction practices like destroying and arresting vendors is not common Street food provides economic opportunity for both men and women. <p>Wellbeing</p> <ul style="list-style-type: none"> They are careful about what they sell. Don't usually sell balanced nutritious meals. <p>Household food security</p> <ul style="list-style-type: none"> Household have access to adequate food at all times. Nutritious diet is accessible by individuals with adequate resources

DISCUSSIONS AND CONCLUSION

The study established six (6) types of livelihood strategies for consumers and vendors in Kampala and Kisumu city. Female food vendors had a low level of education, especially secondary

level. The role of food safety actors was influenced by demographic characteristics such as gender, marital status, level of education, age, work experience, and level of income. This finding suggests that most of the vendors have families to take care of and find it easier to venture into street food. The results, according to Acho-Chi, (2002) revealed that the foodservice providers establish a basis for action to ensure that the travel distances reduce operational costs. Rahman *et al.* (2012) also stated that the potential income profits are appealing for newcomers to the cities. Due to the migration from rural areas and foreign countries, and the resulting living conditions, many employed and unemployed people want to eat outside their homes. The finding reveals that most of the consumers were educated and many vendors in both Kampala city and Kisumu city had low education. Education is fundamental to the capability approach and necessary to all other capabilities. The low education levels of vendors are probably connected to poor hygiene practices during handling and storage of foods which can increase the risk of street food contamination as reported by Kitagwa, *et al.*, (2006).

The findings also revealed that all the key factors were the basis of livelihood strategies of consumers in Kisumu was adequate, and Kampala city was reasonably appropriate. Street and Highway food vendors in Kampala and Kisumu city adopt various livelihood strategies to generate high-income level, food security, and wellbeing. Sen (2001) revealed that food-related problems are influenced not only by food production and agricultural activities but also by the structure and processes governing entire economies and societies. Hence, food insecurity has been caused not only by scarcity but also by institutional failures that led to unfavorable food distribution. Therefore, the findings show that financial capital was highly ranked among many other strategies adopted to enhance food safety. The study recommends that all livelihood strategies including human, social, physical, financial, natural and political assets should be mainstreamed in food safety agenda for food security, wellbeing and income to be efficiently achieved at all levels.

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