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Socio-cultural Determinants of Food Security and Consumption Patterns in Kisumu, Kenya

Fredrick Omondi Owino

School of Spatial Planning and Natural Resource Management, Jaramogi Oginga Odinga University of Science and Technology, Bondo, Kenya

Abstract Food security is an important measure of well-being of a household or community. It takes into consideration three dimensions namely availability, access and utilization. Even though it may not contain all dimensions of poverty, the inability of these households or communities to obtain access to enough food for a productive healthy life is an important component of their poverty. People from diverse backgrounds eat different types of food so as to retain their cultural identity. These communities living in Kisumu are defined by their own food culture. This study looked at production, distribution and storage of food among the communities living in Kisumu. It also examined the food habits, practices and beliefs associated with the households living in Kisumu. The research employed both qualitative and quantitative methods of data collection. Content analysis was also used in the study. The research revealed that there is a food culture which has rich cultural practices which defines the community. At the same time, different cultures interact with one another and thus interfering with some of these traditional practices and beliefs.

Keywords Food Security, Socio-cultural, Determinants, Nutrition

1. Introduction

Kenya Vision 2030 and its second Medium-Term Plan (MTP II) 2013-2017 outlines agriculture as a key driver of an anticipated 10 per cent annual economic growth. The Ministry of Agriculture and Irrigation emphasized that sustained agricultural growth is important in attaining the targets of Sustainable Development Goals (SDG) 2 as well as facilitating the attainment of the other SDGs. According to the Towards Zero Strategic Review which takes stock of the current status and trends in food, nutrition and agriculture in Kenya, food and nutrition insecurity is one of the major challenges currently affecting development in Kenya and is closely linked to the high level of poverty in the country in general and Kisumu city in particular (GoK, 2018). Food security is defined by the World Bank (1986) as 'access by all people at all times to enough food for an active healthy life'. The essential elements of food security were availability of food and the ability to acquire it. A more detailed definition used at the World Food Summit was 'all people at all times having physical and economic access to sufficient, safe and nutritious food to meet their dietary needs

and food preferences for an active and healthy life' (FAO, 1996). Food security in brief means 'access to food for a healthy life by all people at all times' (Barraclough, 1996; Mwale, 1998).

Food insecurity has been a global problem affecting much of the third world countries. Kenya, Tanzania and Uganda are especially in a region prone to debilitating and widespread effects of hunger and famine. The Lake Victoria basin is particularly characterized by entrenched poverty, recurrent droughts, crop failures and environmental degradation. These conditions are partly caused by declining land productivity, soil degradation, desertification, loss of biodiversity, livestock and crop diseases, declining fisheries, poor development and trade policies, among other problems. Kisumu City currently has no policy on agricultural production, harvesting, and storage (Hayombe, Owino and Otiende, 2019). As a result, it has become difficult to produce sufficient food, trapping people in a vicious downward cycle of food insecurity. Paradoxically, many of the local communities living around Lake Victoria whose main economic activity has been fishing (Owino, 2016) are among the poorest and most food insecure. Fishing as a resource has been declining over the years due to population and environmental pressures thus there is a need for alternative livelihood sources (Owino, Hayombe & Agong', 2014).

* Corresponding author:

fgowino@yahoo.co.uk (Fredrick Omondi Owino)

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2. Method

The study employed both qualitative and quantitative methods of data collection. Desktop research approach entailed an analysis of published literature. Content analysis was also used to draw general statements. Multistage sampling was used to randomly come up with 841 households to be interviewed. This sample size was based on the population of Kisumu City, which was 409,928 persons, with an average household size of 4.3 persons according to the 2009 population census. (KNBS/SID, 2013). The number of households was thus estimated to be 95,332. The 841 respondents were distributed proportionately across the city. This was done by dividing the city into three sectors. These were the western, eastern, southern and areas of residence which were classified as high, middle and low income and peri-urban were selected in each of the sectors. The households were selected in each residential area according to the population density of the neighbourhood. Sixty per cent of the respondents were selected from informal settlements because 60% of the population in Kisumu city resides in these settlements (UN-Habitat, 2005).

3. Results and Discussions

Cultural practices

Kisumu is a cosmopolitan city catering to different tastes, cultures and palates. The city is comprised of many tribes namely the Luo, Luhya, Kisii, Kikuyu and Kalenjin among others. Culture to a greater extent influences people to participate in food production, marketing and distribution. Different tribes for example the Luo's have preferences to some food e.g. what to give to children, women and men. Their culture also dictates what a person is supposed to eat. During festivals such as weddings and funerals, people usually serve different meals. For instance, when an in-law comes to visit, then a chicken has to be slaughtered. Animals such as sheep, goats, chicken and cows are used as food and for paying bride price. The Luo and Bantu communities for instance dictates that young women should not eat meat from sheep. This restriction was nonetheless not put on the elderly women as noted by Evans and Mara (2012).

Production systems are also dictated by cultural requirements. Food production among communities living in Kisumu has been a collective responsibility involving all members of the family. In the past, land was communally owned and as a result, all family members had to participate in cultivation. Among the Luo community, cultivation was also carried out based on seniority of the family members. This seniority was with respect to the wives in the case of polygamous families. The first wife had to cultivate first then followed by the second. This process also applied during harvesting of food. The household head for example had to eat maize first before any other member of the family. This ensured that there would be enough food for all members of the family during harvesting time. There were also granaries

for storage of food for future use and this ensured food security for the household.

Culture is dynamic and has been changing over time. The idea of growing food in the urban areas has been dictated by population dynamics. Agriculture for example has been practiced in urban areas to provide food security to protect against sudden food shortages as a result of urban growth and drought (Urban Design Lab, 2012). For the poor in society, food security is the main motivation for farming, though many sell their produce to buy basic household needs or subsidize their income. Hayombe, et. al. (2019) established that less than 15% of Kisumu City residents grow some of their own food. The production of vegetables and grains that does take place in Kisumu City is largely for subsistence purposes and involves minimal storage or processing. Observations from the field also indicate that commercial production of indigenous vegetables is increasing to meet the increased food demand of the city so as to curb food insecurity.

Land tenure

Land ownership in Kisumu is both freehold and leasehold. This means that control and management of land is according to ownership and tenure system and this affects productivity. Land tenure, therefore, has effect on food production. The amount and type of food will depend on whether the land is communally owned or belongs to an individual. Land ownership is also associated with status of an individual in society. Those who do not own land are deemed to be poor. Poor people typically do not have the financial means to produce enough food to sell, and usually the price of grain is too low to buy alternative foods. In any case, the main beneficiary from trade is not usually poor farmers but middlemen, who have the advantage of better information about market demand and prices. Land tenure also determines the socio-economic status of urban and rural households. This is more likely to influence food access and the nutritional status of children in urban and rural communities. This is because the main source of food for households which do not own land (mainly in urban areas) is through purchase compared to rural areas where food is more often home produced (Zuma & Ochola, 2010). Limited access to land ownership and other valuable assets by women contributes to list of factors responsible for food insecurity (Wambua, Omoke & Mutua (2014).

Food production and marketing

Kenya produces a lot of food. It is just that a lot of it get wasted and does not get to those who need it. The county governments should be able to support their people in dealing with the problem of food waste. There is need to help the farmers eliminate post harvest losses to bridge the gap from both ends that is production and accessibility. Kisumu's food system relies heavily on the regional and city transport systems, and the linkage between the city, processing sites and production sources of food (Opiyo & Ogindo, 2019). Promoting safe food production and distribution has faced

many challenges in Kisumu especially from those who are worried about the potential health risks of producing and distributing food within an urban area. The capacity to produce and store food is still critical, though not sufficient. This is to ensure food security. The access to food which is determined by the ability to buy or acquire food, control productive resources, or exchange other goods and services for food is another important index of food security. Food quantities which can be accessed must be sufficient enough to meet national, regional or household needs, as well as fulfilling nutritional needs of adequate energy, protein and micronutrients.

In the past, the global strategies to solve food problems have mainly aimed at increasing agricultural production at both the household and national levels and ensuring that a portion of the produced food was stored to last through to the next harvest (Brown and Kane, 1994). However, these strategies have not been successful in alleviating food problems especially in the third world, mostly because of declining land sizes, stagnated farming technology, poor infrastructure, the demand for cash money and ever-expanding population. More recently, there have been attempts to change focus, and place less emphasis on self-sufficiency. Instead, trade has come to be regarded as a more important tool of tackling food insecurity.

Women and men have different roles e.g. selling of food is more of female's work. Preparation of food involves who buys and who sells. Men are fewer in the food system but they have the power. Culture dictates that it is a male dominated society. In most cases, men are the officials and are given the role of making decisions and allocating space for selling of food. It also dictates who owns the means of production, marketing and deciding on what to be cooked. Food preference thus is a factor of food security.

Psychological preferences

Food plays a major role in the culture, traditions and daily life of communities living in Kisumu. Weddings, funerals, and religious celebrations which are important events are always accompanied by food specifically prepared for the occasion. Consumption of traditional food is largely associated with poverty and as a consequence, as people move to the city, they change their diet to a typical westernized diet with a high fat content and low carbohydrate intake (Bourne, 1996). This study found that different communities in Kisumu associate meat with high socio-economic standing and therefore try to consume it on a daily basis. These findings confirm those of Wong and Valencia (1984) who examined a relationship between household income, level and expense and consumption of food in urban marginal areas of Mexico.

Wong and Valencia (1984) found a marked tendency to increase consumption of high protein foods as family income increased. This trend was also reported by Belk (2000) who observed that new elite of Zimbabwe increased the frequency of meat consumption, as well as the quantity, but not the quality of their diet. It is a tendency that when people move to the city, they abandon traditional foods, which include grains, root plant, lentils, greens and edible insects such as termites, crickets, grasshoppers and lake flies. They usually adopt foods that are associated with status, such as meat, and fast foods. They perceive consumption of foods such as corn, beans, greens, and root plants as associated with poverty. This study confirms that once people get settled in the city, their expenses increase, leaving them with little money for food. They, thus, resort to cheap unhealthy food which is readily accessible in their environment. This has also led to high level of malnutrition mainly among children in the region.

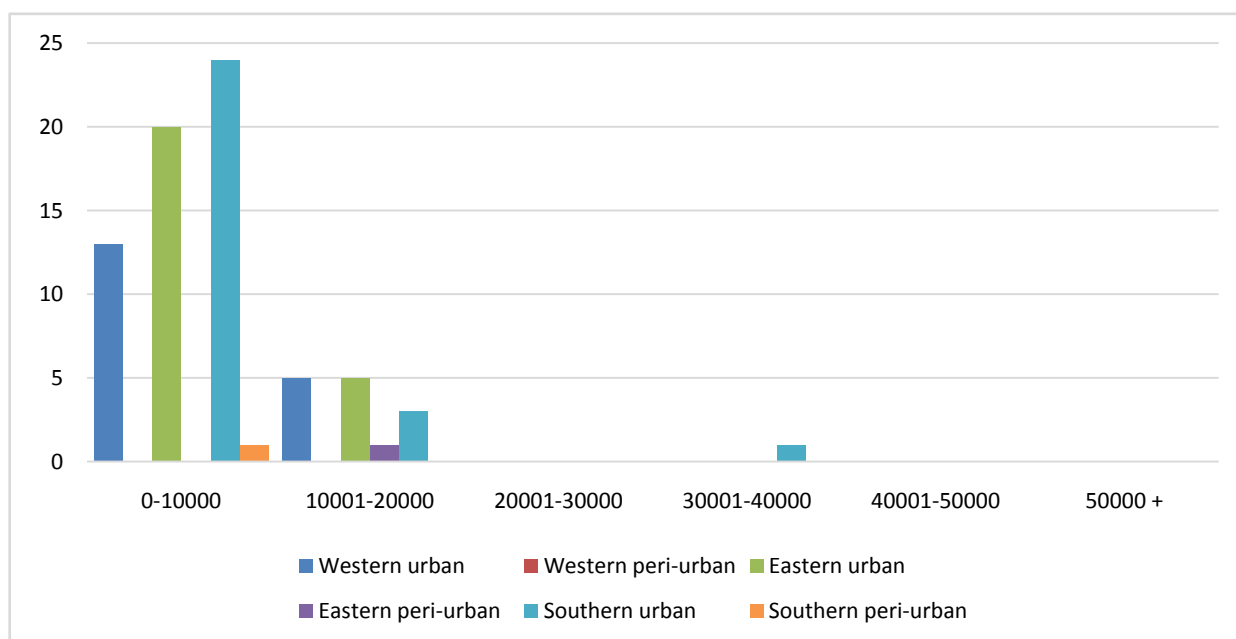


Figure 1. Household's expenditure on cash remittances to rural areas as established via 2017 field survey

Rural-urban linkage

People exchange and share food at will. This can be done between relatives and between urban and rural communities. There is also the issue of the culture of care giving to the young and widows. In most cases, when a child visits the grandmother or aunt in the rural areas, then they are given chicken to carry along with them from wherever they have come from as a sign of appreciation. On the other hand, those in the urban areas remit cash to their relatives in the rural areas (Figure 1). This strengthens the ties between relatives living in the rural and those in the urban areas.

Western, Southern and Eastern urban areas spend more than Ten Thousand shillings as remittances to rural areas. No support is received from Western peri-urban to rural areas indicating the level of poverty or weak linkages to the rural areas.

Religious practices

Conventionally, a religion is any cultural system of designated behaviours and practices, world views, texts, sanctified places, ethics, or organizations, that relate humanity to the supernatural or transcendental. It relate humanity to what anthropologist Clifford Geertz has referred to as a cosmic order of existence (Geertz, 1993).

Religious practices may include rituals, sermons, commemoration or veneration (of deities), sacrifices, festivals, feasts, initiations, funerary services, matrimonial services or other aspects of human culture (Morreal & Sonn, 2013). During these activities, various types of food is consumed by the members of the community. Animal sacrifice is mainly done by some (but not all) religions. Animal sacrifice is the ritual killing and offering of an animal to appease or maintain favour with a deity.

The population in Kisumu is affiliated with one of the five largest religions, namely Christianity, Islam, Hinduism, Buddhism or forms of folk religion. The type of religion that they belong to dictates what type of food to be eaten. The Catholics for example do not eat meat on Fridays. On the other hand, Muslims do not eat pork at all. Also among the Christians, the Seventh Day Adventist do not cook at all on Saturdays but eat cold food which had been prepared the previous day.

Marital status

Marriage as a cultural activity also affects food production and preparation. Since married people with families have higher food needs, they engage in food production to supplement other sources and to guard against food insecurity. Women usually cook food for the family. It is very rare to find a man cooking unless he is unmarried. Different meals are also prepared by all wives in the homestead and eaten at a central place. This ensures that at any given time, the food eaten comprises of various delicacies to ensure that there is a balanced diet. Eating is a collective affair where everyone around the homestead is expected to share what is available.

In a family, women and men have different roles in the food system. Gender plays a major role in this case. Selling of food crops for example is more associated with the female. Cattle according to culture can only be sold by a man and not a woman. In polygamous homes, the man can sell food without consulting the wives. Management of the food reserve will thus prove whether a man is a good manager or not. This is because he can decide to sell everything and leave the family hungry for the rest of the season. In order to meet the Sustainable Development Goal of Zero Hunger, food production will require to be inclusive in the spirit of leaving no one behind, including youth and women; sustainable by minimizing negative effects and maximizing the shrinking resources of land and water; and efficient quantities of nutritious foods while minimizing food loss and waste.

Festivals and events

The type of food to be eaten will depend on the events. When an in-law visits to pay dowry, then a chicken has to be slaughtered. Dowry is at the same time paid in terms of cattle e.g. cows and goats apart from cash. During funerals, it is believed that a cow has to be slaughtered to feed mourners. If this is not done, then it is assumed that the dead person has not been given due respect. Communities also hold various events including growing food, demonstrations and bee keeping to enhance social cohesion. Food production is practiced by people from all social classes (Sawio, 1993). In this case, these communities practicing agriculture and food production have normally higher levels of interaction and solidarity. As a result of these events, social equity of these households is also improved since productivity and health of the poor is improved through additional income from food production (Smit et al., 2001).

Dietary diversity

In determining whether dietary diversity meets the criteria of a good socio cultural indicator of food security requires that the meanings of food security and good indicator is defined. In this case, the United States Agency for International Development (USAID) concept of food security, namely that food security is when all people at all times have both the physical and economic access to sufficient to meet their dietary needs in order to lead a healthy and productive life is followed (USAID, 1992). There are three dimensions to this definition of food security. These are availability (a measure of food that is, and will be, physically available in the relevant vicinity of a population during a given period), access (a measure of the population's ability to acquire available food during a given period), and utilization (a measure of whether a population will be able to derive sufficient nutrition during a given period).

Dietary diversity is defined as the number of unique foods consumed over a given period of time and is a good measure of household food access (Kant et al., 1995). Kisumu being a cosmopolitan region is composed of different cultures. These cultures are associated with certain types of foods which are

unique to them. The Luhya community for example are associated with chicken and *ugali* whereas the Luo community are associated with fish and *ugali*. This has been the practice over time but the study observed that Western culture and modern science and technology are encroaching on traditional practices and eroding local knowledge. Modern times have brought new food habits and even several new crops. The spread of cultural elements from one culture to another through cultural contact and social and economic change usually results in alterations in food patterns and food security.

Social relations and coping strategies

Social networks include activities such as Mary go Round. It also involves putting reserves together and sharing later. Access to food should also be equitable for individuals in such groups. A community or group, therefore, will have food security if there is sufficient food available; they have the necessary purchasing power or means of exchange to acquire it; and their social relationships allow them access to it within the household. The purchasing power could be increased either through gifts or family support (Figure 2). Gifts and family support in this case is in the form of food.

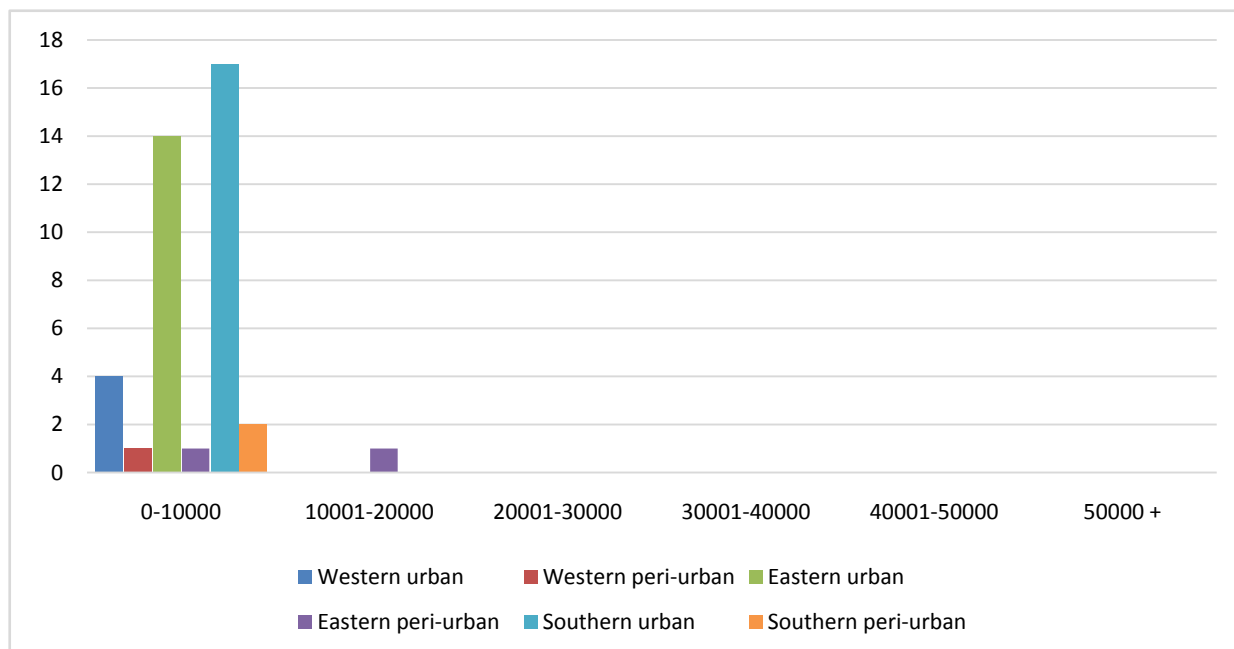


Figure 2. Household's expenditure on gifts and family support as established via 2017 field survey

It is evident that most gifts and family support are received by households living in the urban areas. Very little food support is received by families living in the peri-urban areas. These support is mainly monetary.

4. Conclusions

There are a number of factors which have been found to determine the dietary habits of people in Kisumu city. Food consumption pattern has changed as a result of sudden increase in income levels. Socio cultural factors such as religion, beliefs, food preferences, gender discrimination, education and women's employment have had a noticeable influence on food consumption patterns in Kisumu city. Mass media, especially televised food advertisements, play an important role in modifying the dietary habits. This study illustrates the strong social and cultural determinants of food security and eating patterns in this population. Information in this paper is a useful starting point for developing suitable interventions in this type of population. The issue of food insecurity is multi-dimensional. It is arising from a number of cultural causes that put constraints to food availability or

limits local people's access to it. Food forms part of any community's cultural life. They engage collectively in rituals such as are observed during crop production and storage for subsistence purposes. At times, it is observed that food crops are sold for monetary returns in market places as opposed to subsistence.

5. Recommendations

It is recommended that the Kisumu city administration should come up with an elaborate plan on how to preserve the diverse food cultures of the communities who are inhabitants of the city. This should take cognizance of the socio-cultural, economic and political inhabitants of Kisumu as well as the neighbouring communities. This could be done by holding annual cultural festivals organized by the County Government in conjunction with other partners such as the Kisumu Local Interaction Platform (KLIP) which has been in the forefront in organizing such events. In order to address the issue of food insecurity, there is need to strengthen cultural values and beliefs on issues to do with food preservation and farming practices. These practices include

the use of farm yard manure and leaving adequate land for farming as opposed to subdividing land into uneconomical sizes. This can be done through formulation of sectoral policies for example to regulate the use agricultural.

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