

## Research Report

# Urbanization and food security in Buea: an appraisal of household food security situation and resilience in Bolifamba-Buea Cameroon

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**Abstract** - Cameroon, just like many other Sub-Saharan African countries, is faced with the challenges of rapid urbanization. In the face of these challenges is ensuring food security for many poor urban households. Using Bolifamba as a case study in the Buea Municipality, the aim of this work was to examine the techniques and methods used by urban dwellers in a rapidly urbanizing Buea in ensuring food security. The research gained a deeper appreciation and understanding of the actions, processes, and relationships that interplay in the urban household food environment and result in various food security outcomes by administering standardized questionnaire to household that have made above ten years in the area and carrying out six in-depth household interviews. The results indicated that food security situation in Bolifamba-Buea is complex and diverse. The majority of surveyed households indicated that they had what to eat but often not the kind of food they wanted and they could hardly maintain a steady supply of adequate food for all household members.

**Key Words:** Urbanization, Food security, Household resilience and Household food security

## Introduction

The issue of food security continues to attract wide attention among food policy researchers and those of international development. Contemporary literature on food security has focused on the rural areas, but the current context of rapid urbanization and rising urban poverty in Sub-Saharan Africa that has led to food insecurity warrants the attention of researchers and policy makers.

Ibrahim et al. (2009), affirms that urban areas are faced with the problem of increasing population and consequently inadequate supply of food items. In the years 2011-2013, an estimated 842 million people were suffering from chronic hunger; the United Nations (UN) recognized the right to food in the Declaration of Human Rights in 1948 and has since noted that it is vital for the enjoyment of all other rights. The Food and Agricultural Organization in 2012 estimated that global population is expected to reach over 9 billion by 2050 and as such, there is a continuous need to increase food production and buffer stocks (FAO, 2008).

The conceptualization of food security goals by Koc et al. (1999) however goes beyond the adequacy of food quantity and quality and extends to the four 'A's (availability, accessibility, acceptability and adequacy). Availability connotes the physical presence (supply) of food in large amounts; accessibility addresses the demand for the food and suggests sufficient purchasing power or ability to acquire quality food at all time. Hence food should be accessible to all equally. Acceptability addresses foods cultural and symbolic value that the food available with respect to individuals' cultural traditions. Adequacy is usually defined in terms of the long-term sustainability of food systems (FAO, 2008).

Each of the key aspects of food security can be analysed in the context of the urban environment as the population grows due to different factors of urban migration. The most visible effect of urban expansion in Buea is discernible in the peri-urban areas, especially in areas like Bolifamba, Muea, Bokwai, Bomaka which have witnessed rapid population growth. Food security incorporates a measure of resilience to future disruption or unavailability of critical food supply due to various risk factors, some of which are uncontrolled and rapid urbanization, poor farm to market roads, loss of land for residential

purposes, traditional farming techniques and rapid changing food habits which characterize Buea (Jonathan et al. 2011).

The world population is becoming increasingly urbanized. In 1950 30% of the world population lived in urban areas; by 2002, that figure had increased to 47%, in Sub-Saharan Africa, approximately 34% of the population currently live in urban areas; by 2020 it is predicted that nearly half (46.2%) of the population will be urban (UN-Habitat, 2011). With an urban growth rate of 5% per annum, it is expected that over 300 million new residents will be added to urban areas in the subcontinent between 2000 and 2030 (Kessides 2005). Such a high growth rate raises questions about urban household food security resilience.

Cameroon has witnessed a rapid and uncontrolled urban growth, especially at the peri-urban fringes. Between 1976 and 2006, the urbanization rate grew between 28.5% and 65.4% (Balgah 2007). With a constant rise in food prices, and no corresponding increase in income, urban dwellers are obliged to record a high household dependency ratio (MINPAT, 2009). In response, households in Buea have developed resilience techniques to cope with the rising food prices, loss of farms and low income to survive within the urban and semi-urban Buea. The situation is more challenging among the poor whose purchasing power has consistently been eroded by falling real wages, inflation and the rising cost of living despite attempts by the government to increase minimum wages (Bronhilda 2012).

Urban dwellers and households are generally net food buyers who rely on their income for food security, spend a large proportion of household budget on food, and have little access to other safety nets like agriculture or land to ensure food access at all times (NIS, 2016). Households in the urban areas were therefore generally deemed to be economically well-off, well-fed and more aware of nutritional issues.

Xuemei (2012) who has explored the crucial linkages between urbanisation and food security, argues that urbanisation leads to land use conversion from agricultural land to urban land use, such as for infrastructure, industrial, residential or commercial uses. Such land use conversion often reduces the most fertile land, and therefore the impact on agricultural production and food security is often larger than the absolute amount of land involved. In Buea and its peri-urban areas the conversion of fertile land for urban land use is preoccupying. Urban land use conversion is often driven by economic factors, with

positive feedback loops between urban land use expansion and economic growth in the city, as well as in the region.

Urban areas land use changes have not only impacted on food security but have equally resulted in the expansion of the consumption pattern of the middle class (Hester et al. 2007). It is important to note that there is a strong link between farming and increasing urbanization. Even the small farmers have a great part to play in the provision of food and if they are cut off from this chain it will lead to more poverty for the farmers.

Satterthwaite et al. (2011) discussed the influences on food and farming of an increasingly urbanized world and a declining ratio of food producers to food consumers. The three fundamental components of food security, that is availability, access and utilization, differ in urban and rural contexts and across urban socio-economic groups. A greater diversity of both local and imported food products is available in cities although, most of the food is not produced within city boundaries. Similarly, much of the available food is processed either locally or imported in a processed form (FAO, 2008). To cater to busy urban lifestyles, cities offer access to a wide variety of food prepared outside the home, including street food and food served in restaurants and kiosks. Access to food in urban areas is dependent on cash exchange, with few exceptions, where urban food production contributes directly to the household intake. Dependence on purchased food is a leading factor in household food insecurity of poor urban populations who lack a fixed income. Although a wider variety of food is available, the food consumed in urban areas is not necessarily of superior nutritional quality and food safety is a growing concern in many urban environments (National Institute of Statistics (NIS), 2012 and 2016).

### **Statement of the Problem**

The expansion of urban agglomerations in developing countries brings about challenges for assuring household food security among the urban dwellers. The Cameroon National Institute of Statistics (NIS) in its 2007 report, reveals that in the South West Region 38.7% of income is spent on feeding households, as such, there is need to address issues of food security in urban areas. Food security is presently challenged by rapidly growing and unplanned residential areas with serious ecological consequences, especially loss of farm lands which is needed to feed the ever-growing urban population.

The 2007/2008 food crisis in Cameroon and other Sub-Saharan African countries demonstrated the vulnerability of urban dwellers and the strong link between food and national security when prices for staple foods like wheat, maize, and rice started to rise at the end of 2007 (NIS). The urban population became increasingly vulnerable and this led to food-related riots. Very little study has been carried out to investigate urban poverty especially in the area of food security and household resilience strategies. This article seeks to examine the household food security situation and resilience techniques in Bolifamba-Buea. The central question of this article is to examine how vulnerable are the urban dwellers in ensuring food security in the context of rapid urbanization in Buea.

### **Theoretical Framework**

This article made use of theories centred on understanding poverty at all levels. According to the World Bank 2009 report, poverty policies have utilized a broad conceptualization of poverty associated with different dimensions of poverty. On the other hand, Schiller (2008) and Laderchi et al. (2003) have pointed out that the way we conceptualize and measure poverty influences the fundamentals of poverty policies and programs. Over the years, different perspectives regarding poverty have influenced government welfare policy toward poverty reduction. Rank (2001) notes that understanding the real causes of poverty enlightens our perspectives on the causes of poverty.

The concepts of the culture of poverty and social isolation provide frameworks that explain how poverty is created and maintained in some neighbourhoods or among some groups. The cultural and neighbourhood factors relate to the influence of people's residential environment that tends to shape poverty or success. Oscar Lewis first coined the term culture of poverty when he carried out a study on poverty in Mexico and Puerto Rico in 1961 and 1966 (Mandell and Schram 2003).

The functionalist theory of social stratification argues that poverty is an important social, economic and political function for society in general, and for the middle and wealthy classes in particular (Davis and Moores 1945). On the basis of labour wages, the functionalist theory accounts for the causes of poverty among certain people and groups in

society. In their thesis, Davis and Moore emphasized the functional importance of some categories of skills and knowledge in society.

Underlying the 'urbanization of poverty', this article argues that far from being an upwardly mobile strategy, migration to cities has become a rural coping strategy of last resort (Maxwell 1998). Evidence from Sub-Saharan Africa suggests that while earlier migrant movements to cities may have been solely attracted by rural and urban wage differentials, current migrations are also triggered by the need for migrants to diversify income sources by straddling both urban and rural sectors. The aim is to reduce the number of mouths to feed in the rural areas irrespective of whether the migrants will do better or worse in the city (World Bank, 2009).

## Study Area

Bolifamba can be described as a cosmopolitan village in Buea Subdivision. It is part of the gateway to Buea town from the nearby town of Mutengene. Bolifamba covers a vast area with a population of about 8205. The green vegetation and quiet atmosphere that make the locality beautiful and the small rivers flowing in different directions complement its attractiveness. The neighbourhood is divided into Upper and Lower Bolifamba, both having twelve quarters, each headed by a quarter head.

Being a cosmopolitan settlement, its residents come from various ethnic groups of Cameroon such as the Bassa from the Littoral Region, the Bamilekes from the West Region and about 42% come from the North West Region. The natives of Bolifamba are Bakweri. People of almost all walks of life reside in the locality: civil servants, businessmen, petit traders, technicians, farmers (NIS, 2012). It is worth noting that farmers constitute a considerable population of Bolifamba. This could be due to the high fertility of its soils which permits the growth of a wide variety of food crops, and the hospitality of the natives. The original inhabitants were subsistence farmers whose socio-economic activities changed when the area slowly became urbanized. After the creation of the University of Buea in 1993, the value of land in Buea increased drastically. Consequently, villages like Bolifamba which shares a boundary with Molyko where the University is centre attracted many who could not afford the high cost of land in the centre of Buea. Gradually, Bolifamba has grown in population size. The choice of Bolifamba is driven by the fact that the population

of the area comprises individuals and households from all social strata and so reflects a cross-section of urban dwellers, especially the urban poor (MINEPAT, 2011).

## Methodology

This article applied a descriptive study design and employed both qualitative and quantitative research methods, which involved the collection of information through a standardized household questionnaire and in-depth case study interview. The combining of qualitative and quantitative procedures in this study provided the research with rigor, breath and an in-depth understanding of urban household food security, which are multi-dimensional phenomena with complex linkages and variables. The sampling frame consisted of all the households in the area which have been located there for 10 years and above. This was to ensure that participants must have lived there for a long time and as such, are able to appreciate the changes that have taken place.

A sample size of 93 households from all the ten quarters of Bolifamba was selected and a structured household questionnaire administered. It was designed to capture diversity of household food security experiences, demographic characteristics, poverty data, income and expenditure patterns, dietary diversity information and coping mechanisms, single parenting and both parenting households were included, as well as households with different socio-economic statuses and varying lengths of residence in the city.

The absent of current literature to give sufficient attention to urban household food insecurity necessitated the use of the grounded theory approach to fill the information gap. A total of 6 in-depth case study interviews were carried out, the sample size was not specified at the start of the research as theoretical sampling does not allow the setting of a rigid sample size (Glazer 1978, Coyne 1997). Rather, the researchers decided how many additional interviews were relevant to fully understand the processes and develop the evolving conceptual categories that were emerging from the analysis. Sampling was therefore undertaken parallel to the analysis. After interviewing 6 households, it became clear that further collection and analysis of data would not yield any additional insights into how households in Bolifamba were surviving and coping with household food security situation. The researchers therefore decided that a 'theoretical saturation point' had been reached and terminated the interview process (Strauss and Corbin 1990).

## Presentation of Findings

The food security situation in Bolifamba-Buea is complex and diverse, the majority of surveyed households indicated that they had what to eat but often not the kind of food they wanted and they could hardly maintain a steady supply of adequate food for all household members. For most households, finding enough food for a single meal was a real challenge. When asked to explain their food security status, the greater proportion of these interviewed urban households offered statements such as: '*we are trying to manage the little we have*', '*we are lucky to have a farm/business to support us*' or '*we are struggling...it's by the grace of God that we still survive*'. Many factors do contribute to household food security, such as household income, family size, access to farmlands, thus consuming a huge part of household income.

### *Household food security situation at Bolifamba-Buea*

Without an income, access to food in the urban area is problematic as most of the foodstuffs have to be purchased. More than 17 percent of the 93 households interviewed said that they did not have enough to eat and the kind of food they wished to eat. This phenomenon is true looking at the income of inhabitants within the study area 46.2% of the households interviewed had an income level of 80.000 FCFA to 150.000 FCFA, with up to 50.5 percent of the 93 households having a family size of 5 to 8 persons. There were, however, some households 11.8% that had considerably higher incomes above 200.000 FCFA but still face some challenges sustaining the household. However, higher income unquestionably empowers households to make choices about where to get food, choices which may not be available to those with low incomes. That is why some households with enough money managed to buy in bulk and store. 26% of households interviewed bought goods in bulk and stored, thus reducing the stress of thinking what should be eaten on a daily basis.

The two most important sources of food for urban households were the informal market (69.9%), own production (5.4%) and accessing food from both market and own production (24.7%). Households were obtaining food more frequently from informal



sources rather than formal ones. The majority of these households dealing with the informal market are an indication that they were buying in small quantities that necessitated going back to the market more frequently. 49.5% of the 93 households interviewed went to the market between 3-4 times per week and close to 70% got food predominately from the market. Here they could negotiate whatever smaller amounts of food their money could buy. Informal food sources therefore are the main lifeline for the urban dwellers in Bolifamba-Buea.

Although 35% of the 93 surveyed households reported urban farming as a source of household food, less than 6% indicated that this was their major source of food. But 24.7% depended on farming and gardening, with complements from what is bought from the market. This may be because while most households reported growing both field and garden crops, the small plots of land that they utilize may not yield enough to sustain them throughout the year. Urban agriculture therefore plays a complementary role to food provisioning rather than being the main source of food for most households. It is only those who have access to large urban plots that can farm enough to provide for themselves throughout the year. Despite playing a supplementary role, urban agriculture has become an integral part and a coping mechanism for urban household's source of food and livelihood.

It is also very important to note that 68.8% could not clearly give what month they experienced food abundance but this could relate to the household seasonal strategy of food consumption as they are swift to consume what is readily available in the market and with the country being blessed with diverse crops that grow all year round, one can conclude that household food habits are greatly influenced by what food is available in the market. One will be tempted to ask what influences the decision of households to consume food and what months is more food secured. 79% of the 93 households revealed that their choice of what to eat is determined by the market price, leaving the researchers to ask why so.

Additionally, in a country like Cameroon where rural-urban linkages are strong, food flows from rural to urban areas considerably increasing food availability in the cities, thereby increasing the proportion of households that are well provisioned during this period. The finding confirmed that people go for foods which are in season because there are cheaper. It investigated and got the prices of food items in the period of abundance and scarcity. Between June and August, maize is abundant and cheap to the extent that about

eight are sold for 100 FCFA and the rest of the time, it is scarce and sold around 5 for 200 FCFA. For vegetable, a bundle during its peak season between May and September, will sell for between 100 and 200 FCFA, while during her period of scarcity a bundle can sell for between 300 and 500 FCFA. For plantain, during the rainy season between June and September, production is low due to heavy rain that does not favour its production and a small bunch could be sold between 3000 to 5000 FCFA. The availability of a food crop determines the price and so affects the choice of households in terms of what to consume.

### *Resilience and Coping Strategies adopted by households*

Coping strategies in food security are the activities that households use to offset threats to food security and economic resources in times of hardship and to stave off destitution with the hope of reversing the situation and the possibility of again attaining food and livelihood security in future (Adams et al. 1998). Coping is, therefore, a process in which households switch from their normal performance to survival strategies. The study discovered several coping strategies households have adopted to cope with the food security situation in Bolifamba-Buea.

Through the in-depth household interview, a number of observations can be made about diversification and survival of poor urban households in Bolifamba - Buea under conditions of increasing urbanization and constant loss of farmlands for residential purposes. It shows that the urban poor though seriously challenged by the prevailing conditions, have not taken the situation lying down rather, the inhabitants have displayed a remarkable degree of imagination and innovativeness in eking out an existence in the challenging urban environment. They have turned challenges into opportunities to diversify their income sources by engaging in multiple livelihood activities and have constructed their livelihood largely in the informal sector. 51% of the 93 households engaged in petit business and about 22 percent in farming as additional means of sustaining their households.

In the past, the established practice was for urban households to send money and food to the rural areas. Most respondents, however, pointed out that economic hardship in the city is now making it difficult for these flows to continue. Rather, urban households are increasingly getting more from the village, suggesting that the flow of resources between

the rural and the urban area may have reversed. It is this net urban-ward flow of resources, especially food, that this study argues is partly responsible for the resilience of urban households. A significant percentage of households in the survey indicated that they normally visit the rural area to get food and money that they use in the urban area for the sustenance of household members.

## Conclusion

The article shows that the greater proportion of the livelihoods of the poor are constructed in the informal sector, regardless of whether this sector seems saturated. The informal sector has become a key component of the livelihood strategies employed by stressed urban households to cope with food requirements, as well as another livelihood needs. Secondly, the transfer of resources from rural to urban households, particularly of food and money, has become an important coping strategy for poor urban households.

The situation is more challenging among the poor whose purchasing power has consistently been eroded by falling real wages, inflation and the rising cost of living despite attempts by the government to increase minimum wages. The residual deleterious effects of the structural adjustment programme of the 1990s, which resulted in massive retrenchments and the disintegration of the public welfare system, were compounded by the 2008 economic crisis which left the majority of the urban poor unable to provide for and feed themselves.

The article highlighted several important findings that have policy and programming implications in Cameroon.

Firstly, the study has shown that a significant proportion of households in Bolifamba-Buea are living in conditions of poverty where they are unable to meet their basic food requirements and other essential needs. The findings nevertheless help to bring home the point that a greater segment of the urban population is just equally, if not more, vulnerable to poverty and the resulting food insecurity as their rural counterparts. In 2007, close to 7.1 million people in Cameroon were considered to be poor (GESP, 2009), even though the document indicated a 5-point drop in poverty reduction particularly in urban cities, the reality on the ground as per this research found contrary views as to a drop-in poverty.

Secondly, the article has given some insights into factors that increase the vulnerability of the urban resident to food insecurity. These revolve mainly around issues of income and urban expenses as well as the lack of farmland in urban areas which depletes significant household resources that could be used to secure food. It is, therefore, imperative that in trying to resolve the urban food security crisis, attention should be focused not only on creating more urban employment opportunities, but also in making sure that such employments are sufficiently remunerated to enable workers to sustain their household food needs as well as other urban household expenses.

The population of Buea has increased tremendously over the years. This growth has mounted a lot of pressure on land value and the need for more land to accommodate the growing population. Feeding this growing number of people has become a challenge for many urban dwellers. At the same time, the situation of household food security has deteriorated as residential houses take over farmland, thus putting more stress on certain families.

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