

# Epitomizing the Socioeconomic Impacts of Urban Agriculture in Bamenda

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## Abstract

Contemporary data illustrate that more than half of the world's population now lives in urban areas (Ngoran et al., 2015). With surging population in the urban milieu, the quest for more food production is inevitable. This, therefore, substantiates the importance of agricultural practices in the urban milieu; a terminology called "urban agriculture" due to geospatial location. This article expatiates on the socioeconomic implications of urban agriculture in the city of Bamenda. It discusses employability, food security, education, health and women's role as interchangeably elements shaping life in Bamenda across all strata. It is however deduced that urban agriculture has ameliorated the living conditions of Bamenda city dwellers. Urban agriculture offers employment to about 11% of Bamenda's working population and the activity has also curtailed food expenses of civil servants. Food security, income generation, improve education and improve health are other aspects getting well-off due urban agriculture in Bamenda. Though urban agriculture in Bamenda appears to be a lucrative activity, it is still very daunting as it is done with rudimentary tools. When compared to the progress made by cities of emerging economies and those of the developed world, urban agriculture in Bamenda is far lagging behind. Therefore, the acquisition of advanced technology and availability of improved seedlings will reduce intense labour, keep the farmer in good health, maximize production and conserve farm outputs better. With the latter, farmers in Bamenda will not only notice a surge in their incomes, but will be at a vantage position of contributing in local developmental endeavours.

**Keywords:** Urban Agriculture, Employment, Food Security, Nutrition, Income, Gender Empowerment

## 1 Introduction

The role of urban agriculture in uplifting the living conditions of urban farmers in Bamenda cannot be underestimated. Urban agriculture in Bamenda offers employment to city dwellers, it ameliorates the diet of urban farmers and the income earned from the sale of agricultural produce. The income also permits urban farmers to be able to consume urban services. Such services include intra-urban transports, health services, leisure etc. Urban agriculture has ameliorated the living conditions of city dwellers in Bamenda. Several urban residents have adopted farming as a permanent livelihood strategy. This adoption is due to the benefits that urban agriculture procures.

In this article, the impact of urban agriculture in Bamenda is tackled from a socioeconomic point of view. These impacts range from improvement in education, health, food security and nutrition, income generation and its role in reducing unemployment.

## 2 Socioeconomic Implications

### 2.1 Employment

Urban agriculture in Bamenda has played a vital role in job provision. According to Ngoran & Ngoran, 2015, urban agriculture in Bamenda employs 11% of the towns' working population. Three forms of employment are offered by urban agriculture. This includes self-employment, wage employment and task work. Self-employment includes farmers working on their personal farms. Urban farmers in Bamenda view urban agriculture as rewarding and laudable ambition since they are at the helm of decision making in their niche. The creation of a farm can help farmers realize marvellous dreams. This also gives the farmer the latitude on how economic activity could improve upon. The farmer is self-employed when engaged areas such as poultry farming, piggery etc. It should be noted agriculture in Bamenda is one of the activities in which a greater proportion of the capital belongs the farmer.

Wage employment includes those who are permanently employed and are paid either on monthly or weekly bases. Task work involves those who usually do a piece of work for an instant pay. An example of task work include clearing glass in define farmland, making of ridges, building poultry farms and pig fences.

Urban agriculture also plays an important role in palliating street food vending as an important informal

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economic activity in Bamenda. Some of the food stuff that is cooked and commercialized comes from within and around Bamenda. Urban agriculture plays a vital role in the supply of chicken, ingredients and perishable food crops. Most often due to distance and inadequate conservation equipment, the food gets rot leaving other areas to this urban setting. This therefore enables street vendors to be regularly supplied with agricultural produce which in turn permits them to assure the continuity of their business.

Food vending is predominantly done by women in Bamenda (Fonchingong, 2005). These women are usually assisted by their children. Children assist their mothers after school hours, during week-ends and holidays. It is a home-based activity. Food preparation is done at home with the help of children when they are free as mentioned above. These activities take place in markets, motor parks, and populated streets of Nkwen and along the Commercial Avenue. Some street vendors operate in makeshift stalls situated along areas with a high concentration of customers. Others provide a door-to-door service. Mobile food vending is a labour-intensive and time consuming activity. The price per dish varies from 200 FCFA (0.4 USD) to 500 FCFA (1 USD). This economic activity is attractive to the poor because it requires little capital to begin the business. This is an indirect source of employment that urban agriculture offers in Bamenda.

The Multiple Modes of Livelihood (MML) approach captures the interplay between the formal and informal economy in Bamenda as it is the case in most cities of developing countries. It enables a better understanding of the livelihoods of individuals and households engaged in both the formal and informal economy in Bamenda. The MML approach is a framework which captures the diversified means of raising extra income through acquisition of additional jobs, not only on the part of the unemployed but also by those with fixed salaries (Ojong, 2011). In Bamenda, urban agriculture is an activity practice by the employed either in the formal or informal sector.

The basic argument of the MML approach is that macro level economic changes across Africa have created a favourable environment for people of all social and economic background to diversify their sources of income (Owusu, 2007). This has been largely due to the devastating effects of neoliberal economic reforms on the livelihoods strategies of various segments of the population including salaried employees (Kaseke, 1998). Also, the limited job creation potential of the private sector in Bamenda, coupled with employment interruptions, and retrenchment in the public sector reduced employment opportunities in the formal sector (Lourenco-Lindell, 2004). The prevalent practice in Bamenda city is for urban dwellers of different socioeconomic backgrounds to rely on multiple sources of income to ensure survival. Consequently, urban agriculture has become an avenue for 'part-time' employees in Bamenda and a source of additional income for many with full-time employment in the formal sector (Owusu, 2007). Multiple livelihood strategies have become a way of life amongst those employed in the formal sector in Bamenda, and therefore, the distinction between those who are employed in the formal and informal economy (Urban agriculture) has become more blurry and complex (Christian, 1997). The multi modes of livelihood in Bamenda brings out the role urban agriculture plays in reducing the food bills of citizens who have a permanent employment.

Urban agriculture plays an important role in employing dwellers of developing cities. Bamenda is not an exception as urban agriculture employs 11 percent of its total working population.

**Table 1: Distribution of population of Bamenda by branch of activity 2005**

| <b>Branch of activities</b>                 | <b>Bamenda I</b> | <b>Bamenda II</b> | <b>Bamenda III</b> |
|---|------------------|-------------------|--------------------|
| Food crop production                        | 314              | 4412              | 1844               |
| Livestock farming                           | 45               | 111               | 78                 |
| Livestock products                          | 20               | 26                | 80                 |
| Cash crop farming                           | 10               | 59                | 48                 |
| Informal food stuff vending and restoration | 675              | 6555              | 3501               |
| Non-agricultural sectors                    | 3076             | 26703             | 17469              |
| <b>Total</b>                                | <b>4140</b>      | <b>37866</b>      | <b>23020</b>       |

**Source:** BUCREP Yaoundé, 2005

**Fig. 1: Distribution of food crop and livestock producers in Bamenda**

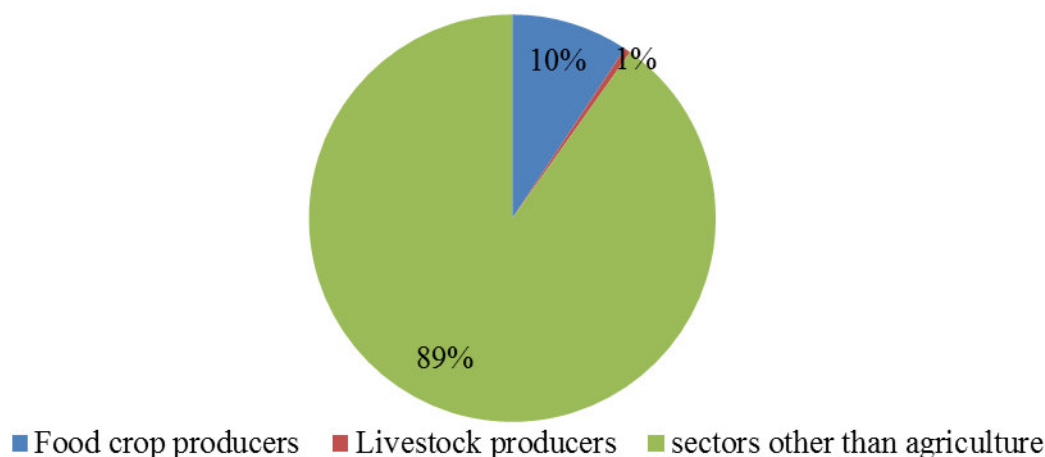


Figure 1 shows that urban farmers represent 11% of the total working population of Bamenda that is 7047 people out of the total working population which stands at 65026. This distribution represents people directly involved in the production process. Those involved in related agricultural activities such as food stuff vending and restaurants are not considered here. While 89% represent the percentage of people from other works of life (57979 persons out of 65026).

Figure 2 shows the percentage of people that are indirectly employed by urban agriculture. These activities include the sale of food crop and livestock products, informal food vending and restauration.

**Fig. 2: Percentage of urban farmers and urban related activities**

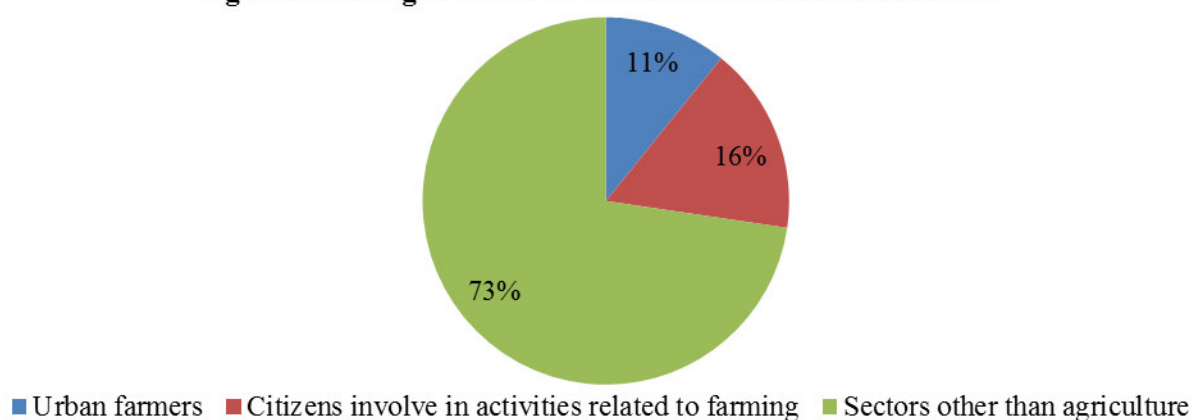


Figure 2 shows the proportion of urban farmers with related activities that arise from this practice such as informal food crop vending and restaurants. When these related activities are taken into consideration, that is combining them with those directly involved in the production process, the representation stands at 27%. While other sectors employ 73% of the total working population in the study area. These sectors include financial activities, restaurants and hotels, transport and communication, public works and commercial activities.

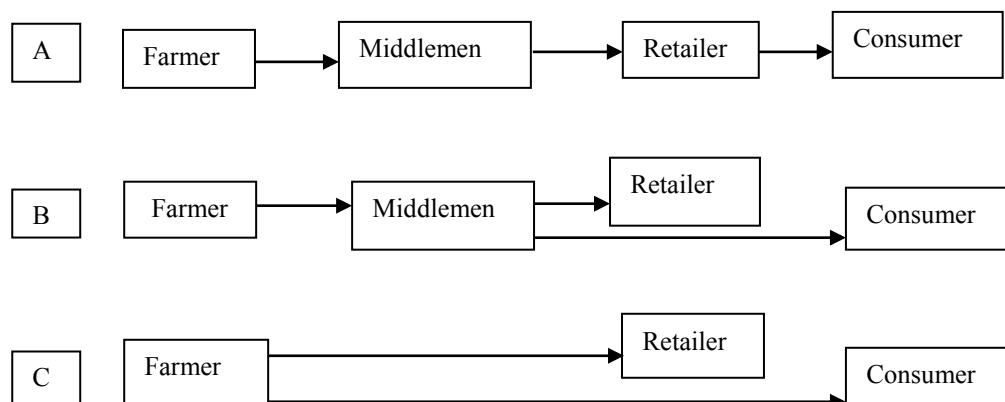
Farm areas and urban food markets are the major places where farm products are sold or made available for consumption. The biggest market in the area is the Mankon food market found in Commercial Avenue. Other markets exist such as the Azire food market, Ntarinkon market, Nkwen market and petit trading areas located along streets.

The marketing channels vary as shown on Fig. 3. There are middle men (buyam sellam) who buy from producers at the farm gate and resell to retailers. Others take the produce to markets out of Bamenda. Examples are poultry farmers involve in the sale of fowls and eggs. There are also situations where the producers carry their produce directly to the markets. These different chains of activities equally offer employment to people not involved in the production cycle.

In situation “A” producers sell to middle men who in turn sell to retailers; who then retail to consumers.

In situation “B” the middle men sell to retailers and also directly to the consumer probably to maximize profit.

In situation “C” the producer conveys his produce to the weekly market and sells some to retailers and consumers. These different channels of marketing go a long way to provide occupations to the inhabitants of this city.



**Fig. 3: Marketing channels of farm products in Bamenda**

## 2.2 Food Security and Nutrition

Urban agriculture has contributed in ensuring food security and healthy nutrition in Bamenda. Food production in Bamenda is in many cases a response of the urban poor to inadequate, unreliable and irregular access to food, and the lack of purchasing power. Badmus and Olufolaji (2012) estimate that approximately 50% of the poor live in urban areas (25% in 1988). In urban settings, lack of income translates more directly into lack of food than in a rural setting. The costs of supplying and distributing food from rural areas around Bamenda to its urban perimeter or imported food for the vulnerable class are rising continuously and it is expected that urban food insecurity will increase in cities of developing countries. In such situations, urban agriculture plays a major role for the continuous stay of the disfavoured dwellers in this urban setting. According to Berry (2003) “once a farmer can eat and have a place to sleep then life is still thinkable”. This citation goes a long way to show the important role that cultivating their own food plays prior to the economic and social hurdles in which most of the farmers find themselves in.

“Jude dze” one of the interviewee in this study who works in the delegation of agriculture revealed that he no longer spent money on foodstuff such as huckleberry, a leafy vegetable which is boiled, mixed with palm oil, salt and pepper and eaten with boiled corn. The latter is a popular dish in North West Region of Cameroon. “I hardly go to the market today to buy huckleberry ” he said”. My farm provides huckleberry throughout the year for my household and some of my friends also come to harvest from my farm” he said.

Root crops such as Colocacia and Taro which are very expensive are used in the preparation of “achu”. This traditional meal is very popular among the Mankons. Some farmers have a high vitamin and protein in-take compared to workers employed in the formal sector. This is because food crops and livestock products have witness considerable price hikes during the last two decades. So it becomes easier for the farmers to be well fed since some of them produce food crops with the primary aim of feeding their households. Some civil servants find it difficult to consume certain food crops due to low salaries earned. Table 2 shows the contribution of food crop production to household consumption in Bamenda.

**Table 2: Distribution of farm household sampled by food consumption**

| Household sampled (N <sup>o</sup> ) | Food consumption (%) |
|-------------------------------------|----------------------|
| 33                                  | >75                  |
| 24                                  | 65-70                |
| 23                                  | 60-65                |
| 13                                  | 55-60                |
| 14                                  | 50-55                |
| 13                                  | 45-50                |
| 12                                  | 40-45                |
| 11                                  | 35-40                |
| 12                                  | 30-35                |
| 9                                   | 25-30                |
| 8                                   | 20-25                |
| 6                                   | 15-20                |
| 5                                   | 10-15                |
| 6                                   | <10                  |

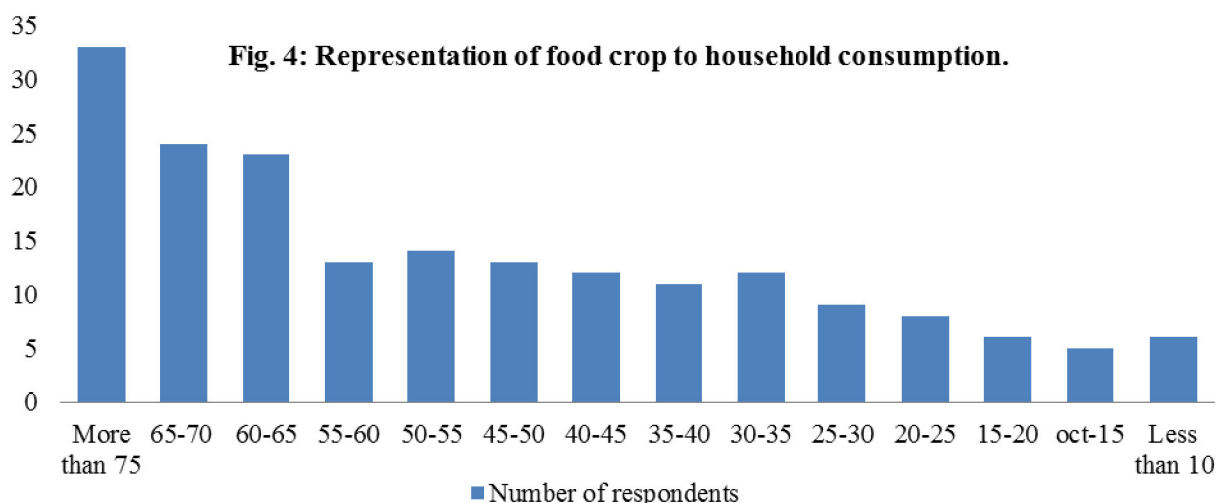


Figure 4 shows that food crop production is primordial destined for household consumption. This is substantiated by the fact that all the food crop producers had a certain percentage representation in household consumption of what they produce. Most Civil servants are engaged in farming in order to cut down rising food bills. Food crop production contributes more than 75% of food consumed in 33 households, 65-70% in 24 households and represents less than 10% in 6 houses. Such houses with a low percentage are those of civil servants, rich and middle class business men or those who consider agriculture as a supplement. Urban agriculture improves food intake (improved access to a cheap source of proteins). The quality of the food is improved. Poor urban families involved in farming eat more fresh vegetables than other families in the same income category.

In addition to production for their own consumption needs, urban farmers in Bamenda produce large quantities of food for other categories of the population. It is estimated that 200 million urban residents provide food for the market and 800 million urban dwellers are actively engaged in urban agriculture in one way or another in the world (Korir & Rotich, 2015). These urban farmers produce substantial quantities of food for urban consumers. A global estimate shows that 15-20% of the world's food is produced in urban areas (de Zeeuw, 2004). Urban agriculture also plays important roles in African cities such as Harare and Kampala. In **Harare**, sixty percent of food consumed by low-income groups was self-produced (Cofie, 2003). In **Kampala**, children aged five years or less in low-income farming households were found to be significantly better-off nutritionally (less stunted) than counterparts in non-farming households ((Mwangi, (1995). Urban producers obtained 40 to 60 percent or more of their household food needs from their own urban garden (Armar-Klimesu, 2000).

Urban agriculture to a large extent complements rural agriculture in Bamenda and increases the efficiency of the national food system in that it provides products that rural agriculture cannot supply easily (e.g. perishable products, products that require rapid delivery upon harvest).

### 2.3 Income Generation

Growing food and raising animals save household expenditures on food. Poor people in urban settings of developing countries generally spend a substantial part of their income (50 – 70%) on food (Banerjee & Duflo, 2007). Growing expensive vegetables and other food stuff therefore saves money. Farmers in Bamenda cultivate food crops and breed livestock so as to save money which is used to procure other urban services.

Some urban farmers in Bamenda cultivate crops and raise animals with the purpose of making money which will permit them to enjoy certain urban functions and cater for their families. The aim of making and maximising profit from farming is reinforced by the nearness of the farmers to the market. Bamenda is the biggest agglomeration in the North West Region and harbours the greatest market in the region. The city of Bamenda has a high demand for agricultural products with its ever growing population. Most people in the city buy food stuff and so provide a permanent outlet for agricultural produce.

Urban farming in Bamenda is lucrative. Not only is it a ready market for the agricultural produce but the cost of production is relatively low. The nearness of farmers in Bamenda to farm inputs is an added advantage. Most of the improved seeds and animal species distributed or sold to farmers come from government institutions or NGOs; mostly based in Bamenda. While people leave the villages to come and purchase farm inputs from Bamenda, the farmers in the city have easy access and do not need to pay transport fare which brings down the cost of production and consequently giving a high profit margin. Farmers in Bamenda do not so much face the

farm-to-market road problems as most of the farms are nearer the markets and buyers can even buy from the farm which also increases the profit made by the farmers.

Some urban dwellers in Bamenda have made urban agriculture their permanent livelihood strategy. It can be seen on Table 3 that certain urban farmers make more than three hundred thousand francs a year. Such dwellers consider urban agriculture as their principal source of livelihood. Some dwellers are showing more concern in urban agricultural activities due to the constant increase in prices of agricultural produce as time passes. The yearly earnings derive from agriculture by respondents is shown in Table 3.

**Table 3: Yearly income realise from urban agriculture**

| Yearly income (FCFA) | Respondents    |            |
|----------------------|----------------|------------|
|                      | N <sup>o</sup> | %          |
| < 50000              | 74             | 24.50      |
| 50-100000            | 69             | 22.84      |
| 100-150000           | 64             | 21.19      |
| 150-200000           | 61             | 20.19      |
| > 200000             | 34             | 11.28      |
| <b>Total</b>         | <b>302</b>     | <b>100</b> |

From Table 3, it is noticed that 74 farmers representing 24.50% make less than 50000 FCFA a year. This is because most of the farmers have a high house hold consumption rate for the crops and animals they breed. Furthermore, 69 farmers sampled representing 22.84% earn between 50-100000 FCFA. The third group which consists of 64 farmers represents 21.19%. After commercialization of agricultural products this third group generate between 100-150000 FCFA per year. The fourth group represents 20.19% and realizes a sum that varies between 150-200000 FCFA and lastly 34 farmers representing 11.28% realize more than 200000 FCFA. In some situation, some poultry farmers generate as much as 5 million FCFA a year. This was the case of WAN poultry in Bamenda.

Besides the economic benefits for the urban agricultural producers, urban agriculture stimulates the development of related micro-enterprises. These include the production of necessary agricultural inputs, processing, packaging and marketing of outputs. The activities or services rendered by these enterprises partly or wholly owe their existence to urban agriculture. Other services rendered by independent families and groups include animal health services, transportation). Input production and delivery, we have activities like the collection and composting of urban wastes, production of organic pesticides, fabrication of tools, delivery of water, buying and bringing of chemical fertilisers, etc. This also permits dwellers engage in different sectors to generate income and assure their livelihood.

**Fig 5: Marketing of farm produce along the Ntarikon streets and farm input store in Nkwe**



*A: A woman displaying vegetables and spices for sale in Ntarinkon. B shows the displaying of phytosanitary products and sprayer in Farmers house Nkwen. Note (A1) sprayer, (A11) pesticides and (A111) herbicides.*

Urban farming in Bamenda has given birth to the proliferation of numerous economic operators to supply the needs of farmers. These actors do not only employ workers but generate much profit from the sales of farm inputs such as fertilizers, pesticides, insecticide, herbicide, cutlasses, hoes and animal feed to urban farmers. These operators include, Farmers house and NOWEFOR located at mile 3, BVCS found at old treasury street, Phyto-grain found at Savanna Street, phyto-plus located at ring way street and NWCA.

Another income generating activity is the production and sale of waste resulting from poultry and piggery. There has been increasing demand for this type of manure because it is organic in nature. During an interview with misses Christina of MINADER<sup>1</sup> Mezam, it was revealed that the use of fowl droppings on crop

<sup>1</sup> Ministry of Agriculture and Rural Development

production has little or no effects to man. But the use of certain chemical fertilizers to grow vegetables such as huckleberry results to dysentery when consumed. Another reason which explains farmers' interest in fowl droppings and pig waste is the fact that chemical fertilizers have known tremendous hikes in prices. Farmers prefer pig and fowl waste because it is cheaper especially for farmers who are partially engaged in crop and animal production. Moreover, farmers employ animal waste on their farms because they are encouraged by agricultural and environmental technicians.

**Fig. 6: Fowl and pig waste at Sisia Quarter**



*A: shows fowl dropping collected in a bag (A1) and photo B shows pig dung dried near a house (B1).*

The increase in the demand for this organic manure has also lead to increase in their prices as seen on Table 4.

**Table 4: Evolution in the prices of fowl dropping from 1999-2012 in Bamenda**

| Year | Price per 50kg (FCFA) |
|------|-----------------------|
| 1999 | 750                   |
| 2003 | 1500                  |
| 2012 | 2500                  |

Studies carried out in other areas like in Bamenda have shown that urban agriculture also contributes a lot in ameliorating living conditions of urban dwellers in African cities. In **Dar es Salaam**, urban agriculture represents at least 60% of the informal sector and urban agriculture is the second largest urban employer (20 percent of those employed) (Lanjouw et al., 2001). In 1993, urban fresh milk production was worth an estimated USD 7 million in 1993 (Cofie et al., 2003). The annual gross output of over ten thousand UA enterprises in the city of Dar es Salaam totalled 27.4 million USD, with an annual value added amounting to 11.1 million USD. In 1991, the individual urban farmer's annual average profit was estimated at 1.6 times the annual minimum salary (Von Grebmer et al., 2012).

In **Nairobi**, in the early 1990s, agriculture provided the highest self-employment earnings among small-scale enterprises and the third highest earnings in all of urban Kenya (Freeman et al., 2004).

In **Mexico City** production of swine brings in 10-40% of household earnings. Urban cowshed-based milk can supply up to 100% of household income and in sub and urban areas maize production provides 10-30%, vegetable and legume production even up to 80% of the household income (Torres-Lima & Rodríguez-Sánchez, 2008). In Bamenda, more than 20% of poultry products consume is produce within its urban perimeters (Prain & Lee-Smith, 2010).

## 2.4 Education Improvement

Urban agriculture has contributes to upgrade the educational level of children belonging to farmers in Bamenda. Field findings revealed that urban agriculture in Bamenda contributes in sending children to school in one way or the other. Farmers who cultivate crops mainly for consumption save money which could have been used in buying foodstuff. This money that is saved plays an important role in paying tuition fees, buying of books and transport fair of children to and from school.

In Bamenda, the educational level of the farmers very low but this is not reflected on the educational level of their children. Conscious of the importance and the imperative of formal education as a strategy to accede to better employment opportunities especially in the public and private sectors, these farmers are investing heavily to enable their children acquire a high educational level. Interview with farmers permanently indulged in urban agriculture revealed that the dreams they nurse for their children is that they should become

engineers, medical doctors, teachers and respected people from other works of life. According to some urban farmers, their greatest wish is never to see their children indulge in crop cultivation as a definite source of livelihood. Based on field analyses, 54.33% of urban farmers' children were in primary schools, 40.15% were in secondary schools and 5.52% had attended higher institutions.

Beside their children, some farmers have also ameliorated their educational level through classical education. Seminars and training programs in the domain of agriculture have also broadened certain farmer's notion. According to field findings most farmers involve in this category were livestock breeders.

## 2.5 Health Improvement

According to Johnson et al. (2006) health is life. For farmers to optimise production, they need to be in good health. This is because most food crop producers observed still depend on very archaic methods of cultivation which are essentially labour intensive. Income generated from urban agriculture empowers some farmers to afford good health. According to field observations over 70% of urban farmers visit clinics, health centres and hospitals when ill. The income derived from agriculture helps to pay for this expenditure. Some farmers base on cultural attributes visit herbal houses when ill. Such farmers believe that diseases such as fungal infections, typhoid fever, irregular menses, amoebiasis, warts, diarrhoea, anti-erosive hedges common among them are better handled by herbal homes in Bamenda. Some of the herbal homes include Moherbs Clinic, Navti and Monastery Herbal Clinic. The revenue obtained from farming has facilitated their treatment in these health structures.

## 2.6 Women Empowerment

Poverty, food insecurity and malnutrition are critical urban problem in Bamenda. Meeting these challenges, women play a crucial role in household food production in Bamenda. Women in Bamenda grow vegetables in gardens and vacant urban spaces. They raise animals and trade in fresh and cooked foods. Female farmers in Bamenda boost household nutrition as well as generate income and build social inclusion among the urban poor. Urban agriculture in Bamenda has permitted women to assume certain responsibilities. This is so glaring for those women who are widows. Single handedly, they give a befitting up bringing to their children be it economically or socially. An informant told the researcher that her husband died when her first child was only 8 years and today he is 27 years with a university degree thanks to her production of "Njama njama"<sup>1</sup>. Urban agriculture has made some women to head financial and social oriented associations such as "Njangi" houses<sup>2</sup>.

During field work, it was observed that many urban farmers were proud of their achievements. It is reported that it is thanks to urban agriculture that the children of some women are able to obtain formal education. Some brag that due to urban agriculture, they can enjoy hospital services and certain amenities participate in problem solving and even earned a lot of respect from their family members. Urban agriculture has also permitted some female farmers to invest in other sectors of economic and social life which goes a long way to reduce the unemployment rate in Bamenda (Table 5).

NGOs such as INADES<sup>3</sup> and CIGs such as Helping Hands have initiated urban agricultural projects that involve disadvantaged groups such as orphans, disabled people, women or elderly people in Bamenda. The aim is to integrate them more strongly into the urban network and provide them with a decent livelihood. The participants in the projects feel enriched by the possibility of working constructively, building their community, working together and in addition producing food and other products for consumption and for sale. These initiatives have contributed to empower women in Bamenda benefitting from such services.

In developed cities, studies have shown that urban agriculture may be undertaken for the physical and/or psychological relaxation it provides, rather than for food production per se. Also, urban farms play a role in providing recreational opportunities for citizens. Farmers in Bamenda have benefitted from these advantages. This include recreational routes, food, commerce visiting for leisure, gardening, educational functions such as bringing youth in contact with animals and environmental education etc.

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<sup>1</sup> Local name for huckleberry

<sup>2</sup> Meeting houses where people gather to discuss local developmental issues.

<sup>3</sup> The African Institute for Economic and Social Development



**Table 5: Added value activities undertaken by urban farmers**

| Activities                             | Respondents    |            |
|--|----------------|------------|
|  | N <sup>o</sup> | Employment |
| Mini-boutique                          | 7              | -          |
| Motor bike transport                   | 8              | 8          |
| Intra-urban transport by taxi          | 5              | 5          |
| Tele-communication services (Call box) | 18             | 18         |
| Restaurant services                    | 6              | 13         |
| Food crop shop                         | 2              | 4          |
| Hair dressing saloon                   | 3              | 7          |
| <b>Total</b>                           | <b>49</b>      | <b>55</b>  |

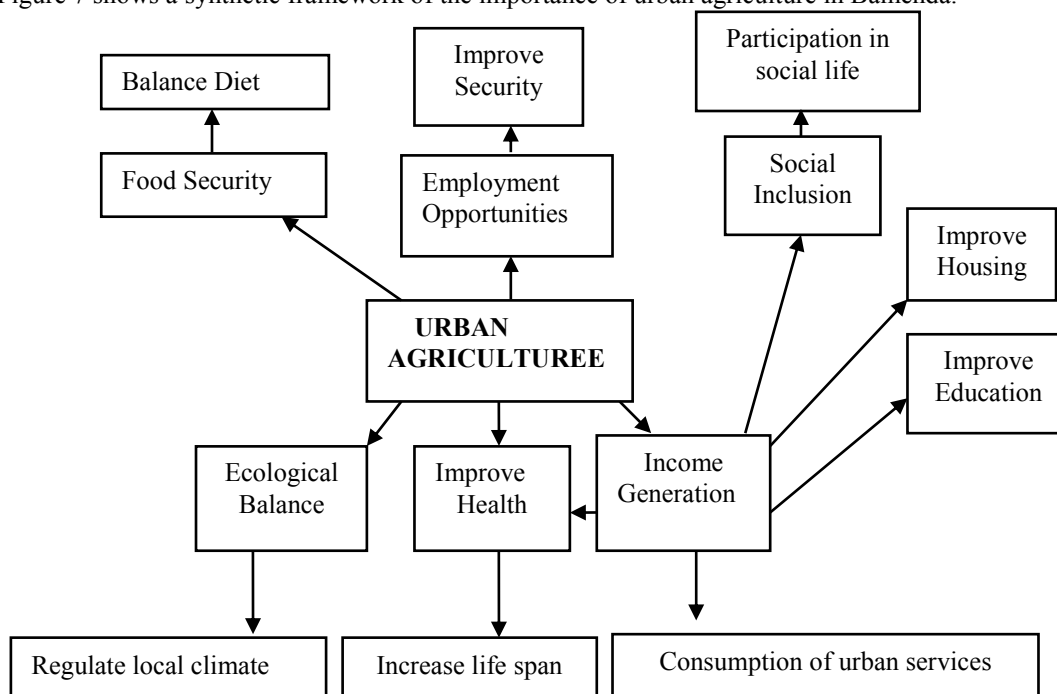
### 2.7 Improvement on Housing

Urban agriculture has improved on the housing conditions of certain farmers be it directly or indirectly through savings made from the reduction of food expenditures.

**Table 6: Nature of houses of urban farmers**

| Nature of building material | Respondents    |            |
|-----------------------------|----------------|------------|
|                             | N <sup>o</sup> | %          |
| Modern self-contain         | 17             | 5.62       |
| Block house                 | 55             | 18.21      |
| Brick plastered with cement | 45             | 48.01      |
| Brick                       | 85             | 28.14      |
| <b>Total</b>                | <b>302</b>     | <b>100</b> |

The types of houses listed above reflect the degree of comfort enjoyed by each farmer. The modern self-contain houses were those with maximum comfort. Most of such houses had TV sets, modern furniture, refrigerators, internal toilets, gas cookers. Houses constructed with simple brick were those with the lowest comfort. Some of such houses hardly possess refrigerators, internal toilets and other accessories considered as luxury. Figure 7 shows a synthetic framework of the importance of urban agriculture in Bamenda.



**Fig. 7: Importance of urban agriculture in Bamenda**

### 3 Conclusion

From the analyses, it can be deduced that urban agriculture has ameliorated the living conditions of Bamenda city dwellers. Urban agriculture offers employment to about 11% of Bamenda's working population and the activity has also curtailed food expenditure of civil servants. Food security, income generation, improve education and improve health are other aspects getting well-off due urban agriculture in Bamenda. Though urban

agriculture in Bamenda appears to be a lucrative activity, it is still very daunting as it is done with rudimentary tools. When compared to the progress made by cities of emerging economies and those of the developed world, urban agriculture in Bamenda is far lagging behind. Therefore, the acquisition of technology and availability of improved seedlings will reduce intense labour, keep the farmer in good health, maximize production and conserve farm outputs better. With the latter, farmers in Bamenda will not only notice a surge in their incomes, but will be at a vantage position of contributing in local developmental endeavours.

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