

Urban Agriculture for Sustainable Livelihood: A Case Study of Migrant Women from the Cameroon living in Johannesburg

Njenyuei Gideon Agho* and Janet Cherry

Department of Development Studies, Faculty of Business and Economic Sciences, Nelson Mandela Metropolitan University, North Campus, Summerstrand, South Africa

*Corresponding Author: Njenyuei Gideon Agho, Department of Development Studies, Faculty of Business and Economic Sciences, Nelson Mandela Metropolitan University, North Campus, Summerstrand, South Africa.

Received: February 09, 2023; Published: March 27, 2023

Abstract

This research examines how urban agriculture contributes to the sustainable livelihood of migrant women living in the inner city of Johannesburg, South Africa. The study focuses on the Cameroonian women's community living in Turffontein. It explores the significant process of migration into the Republic of South Africa and the inspiration behind the choice of urban agriculture in the inner city of Johannesburg by women. This research assesses the impact of urban agriculture on sustainable livelihood in the lives of Cameroonian women living in this suburb. It also examines the constraints these women encountered in urban agriculture practice for sustainable level study is based on a purposeful sample of Cameroonian migrant women living in the inner city of Johannesburg practicing urban agriculture. It uses a mixed methods methodology. This involved a transect walk through the area where women practice urban agriculture. It also included an in-deface face-face face-to-face interview and review of written sources (journals, books and research reports), all of which were us gather-comb relevant data. Thematic content analysis was used to analyse the data. The findings of this study reveal that urban agriculture is used as a strategy for sustainable livelihood among several Cameroonian migrant women in Turffontein.

Keyword: Urban Agriculture; Cameroonian Migrant Women; Food Sustainability; Johannesburg South Africa; Food Security; Community Development; Livelihood

Introduction

To survive is indeed thousands of African immigrants to South Africa, urban agriculture has become an increasingly important including displaced peoples and refugees, being able to source of livelihood a significant challenge under circumstances where there are only a few opportunities to make money. Thus, growing food in urban settings is an important means of supporting For hundreds of. For immigrants, migrant families with their basic food need at low cost. The early 1st century has been accompanied by a proliferation of research dedicated to studying human migration. Migrants always dream of moving to the USA or some other western countries where there are many more opportunities to improve standards of living and where it is considered safer with more prospects for the futures of children. Still, stringent regulations put in place by immigration officials in these countries make it difficult for migrants to enter them, especially

those wanting to migrate from Africa. As a result of these restrictions placed by developed countries, many African immigrants see South Africa as a preferred destination. Some of these migrants have settled in the inner city of Johannesburg.

Migrants living in urban settlements are unlikely to receive the level of monetary or nutritional assistance given by the home government to their citizens. Most of them are faced with serious living challenges. As Landau and Jacobsen (2003) have pointed out some of these challenges, which include inter alia the prohibition on employment, lack of identity documents or papers demonstrating professional qualifications, as well as discriminatory hiring practices coupled with the inability to access banking services, either by savings or by credit. Migrant women in Johannesburg for example, are immersed in the cash economy but have limited opportunities for earning cash. The income that they earn is low, erratic and unreliable [1]. They are forced to prioritize their basic needs, and food is normally one of them. Due to restrictions on, and difficulties in, finding formal employment, many migrant women in Johannesburg have turned to urban agriculture as a livelihood strategy. With such difficulties associated with urban living, most migrants who do not receive such forms of assistance or subsidies rely on other forms of income generation to sustain livelihood [2].

Migration

Unemployment, poverty and wars in many African countries have made the city of Johannesburg attractive for many people in search of safety and a better life mostly across the Southern Africa region [1]. Home to over two million migrants from across Africa, the city of Johannesburg has seen the level of unemployment steadily increase [3]. The high influx of migrants into the city of Johannesburg has had a great impact on service delivery, the housing environment and access to opportunities. These are the challenges faced by people living in most urban cities in Africa. Not only do these issues affect migrants but also local communities. This situation has resulted in many migrants struggling to create a livelihood. Most of these migrants, particular women, do not possess the skills or education to enable them to secure well-paid jobs in the formal sector.

In order to overcome these challenges, urban agriculture played an important role in the lives of these migrants. It involves the production of food and rearing of domestic livestock, within, or immediately adjacent to a built-up settlement. Urban agriculture has the potential to ensure that a supply of fresh food is consistently available to urban households, thus providing these migrant women with a meagre livelihood [4]. However, this could not be done without some serious challenges faced by these women as were examined as part of this research.

Challenges such as access to land, seed procurement, and where, how and when to market their output where observed during the study. Also, there are other challenges, such as language barriers. In their pursuit of earning a living in South Africa as minority peoples, where many of these migrant women can barely speak English, this is a severe disadvantage. To fully understand the role of urban agriculture as a strategy for livelihood among these migrant women the following were taken into consideration. The impact of urban agriculture on sustainable livelihood in the area of study; examination of urban agriculture in the area in relation to its capacity to ensuring household food security; identifying the constraints encountered in the process of urban agriculture; and making recommendations that can enhance urban agriculture for a sustainable livelihood and food security for all, as Ban Ki-Moon suggested in 2012.

"In a world of plenty, no one, not a single person, should go hungry. But almost 1 billion still do not have enough to eat. I want to see an end to hunger everywhere within my lifetime" (Ban Ki-moon, 2012).

The rapid increase in population in many regions of the world, has caused so many to wonder if truly there can be a world free of hunger, as an increase in the population has led to an increase in the level of poverty and food insecurity. Grain [5] tells us that there are over one billion people permanently hungry worldwide. People will normally want to migrate to other areas as a response to experiencing socio-economic, political and demographic problems such as poverty and food insecurity. The migrant women in Johannesburg are some of these people. Nancy and Birdstall (2004) explained how in the past 30 years the number of international migrants have increased ev-

erywhere. It is estimated that about 190 million people have left their countries of origin for other countries in search of safety and a sustainable livelihood. These migrants form a kind of network that incorporates all forms of social capital that Portes and Sensenbrenner [6] identified. They function by engaging in reciprocity exchanges in which favours are extended as part of a generalized system of exchange. This is where migrants help friends and relatives; they help each other. Migrants in their network bring a bonded solidarity to reinforce the ties of kingship, friendship, and common community origin [7]. They are also characterized by enforcing trust, since migrants who refuse to help friends or family may be ostracized or punished by relatives and friends at home and abroad [8].

Urban agriculture and livelihood

In a quest to survive in the inner city of Johannesburg most migrant women have turned to urban agriculture because they are living in built-up areas of the city. Urban agriculture is a recent phenomenon compared to rural farming. Bryld [9] stipulates that any agricultural activity that is practised in a city is considered as urban agriculture and that activities related to urban agriculture are rarely isolated from rural areas. Activities in rural and urban areas are often interlinked across space and sectors. City borders are fluent, which is further emphasized by the active rural-urban interaction taking place in peri-urban areas. Therefore, it is important that urban agriculture be seen as a dynamic concept [10].

A comprehensive definition of urban agriculture is that given by Premat [11] in which he expands on Mougeot's [12] definition. Premat defines and explains urban agriculture as including "all activities located within (intra-urban) or on the outskirts (peri-urban) of a settlement, city or metropolis, independently or collectively developed by people for self-consumption or commercialization purposes; involving cultivation or raising, processing and distribution of a diversity of products whether edible or not, but via the reutilization of human and material resources, products and services located in and around the urban area in question, and in turn contributing considerable material and human resources to that area" [11, pp. 153-185].

It is indisputable that growing crops on open and undeveloped spaces within urban zones in most African cities has become an important source for providing food security [9]. In most African countries, the urban population is expanding rapidly without a corresponding increase in economic opportunity for employment [9]. And the result of this is that vulnerable households have resorted to urban agriculture to sustain a livelihood (Godfrey, 2006).

The increasing urbanization and growing poverty trends in most African cities has caused many families living within a city to consider alternative means to supplement their diet and income (Landon-lane, 2004). Kekana [13] reiterates that farming in an urban environment has been found to benefit poor households through direct savings on food purchases, the income generation through the sale of produce, and the provision of a varied range of nutritious products. Reuther and Dewar (2005) propose that the greatest part of urban agriculture is undertaken as a means of survival by individual households, generally in backyards, to augment household real income. Other authors, such as Barton [14], have maintained that urban agriculture is not a luxury but a necessity which usually arises from the need for solutions to a wide range of solving life problems.

A livelihood is only sustainable if people can cope with and recover from stress and shock, maintain or enhance the capabilities and assets that lead to sustainable livelihood opportunities for the next generation and which enhances the net benefits to another livelihood at the local and global levels and in the long term [15]. Urban agriculture is being identified among many respondents in research studies as a livelihood strategy [16].

Urban agriculture is by no means a new concept or invention as seen earlier. This practice has been in place in different forms in many different parts of the world as one of the livelihood strategies to support human population growth and the need for maintaining food security. Urban agriculture is one livelihood strategy and remains one of the alternative source of income for those who cannot secure

formal income generating opportunities. It allows especially women to realize their role in securing family food security and nutrition while being subjected less to issues of market fluctuation [17].

Women are accounted for by most researchers as being more likely than men to engage in urban agriculture both at home and in community gardens to supplement the home's food supply [18]. In Kampala, Uganda, it has been found that there is an even distribution of male and female urban agricultural practitioners [19]. And in Ethiopia because of the traditional system of household membership and headship, women are largely responsible for the needs of the household [20]. In contrast, Foeken and Mwangi [21] explain that low-income single women in Kenya practise cultivation only as a last resort. Their report shows that with the lack of employment opportunities, 56% of urban agriculturalists in Kenya are women while in the capital city of Nairobi alone the figure is 62%. This of course has provided valid reasons for most researchers in this field of study to focus on urban agriculture as a strategy that is assisting women to protect and supplement their sources of income [19].

In order to understand the process by which Cameroonian migrant women became so strongly involved in urban agriculture in the inner city of Johannesburg, it was important to first of all identify the reasons that prompted their moving into South Africa. I am concentrating here on women migrants from Cameroon who were involved in urban agriculture.

Most migrants settle at their first port of entry with the idea of maintaining a closer link with their country of origin [17]. This research study was conducted in the inner city of Johannesburg among women migrants living in Turffontein. The local government of Johannesburg has been decentralized into 11 regions. Each region is operationally responsible for health, housing, sports and recreation, libraries, social development and other local community-based services. The population of this study was Cameroonian women living in Turffontein. The choice of Johannesburg and the Cameroonian community in Turffontein is justified by the fact that, despite the absence of a refugee camp in Johannesburg, the city provides economic opportunities for migrants since it is the largest single metropolitan contributor to the national economic product. Johannesburg was also chosen because of its high economic activity and community solidarity and because it is inhabited by the largest number of Cameroonian migrants in the country. Besides this, the researcher chose the Cameroonian migrants community because he too is a member of that community.

Below, I have provided some accounts from my fieldwork as to why migrant women left Cameroon and are now living in South Africa: My initial plan was not to come to South Africa. I had planned to go to America to further my studies, but when I got married and my husband at the time was living in South Africa, I had no option but to join him.

While another migrant woman alluded to the fact that she came to South Africa to join her brother who was running his business. She had this to say: "It has always been my dream to come to South Africa to stay with my only brother after the death of our parents. So, when my brother finally decided that I should come to meet him, I knew at once that my dreams had been fulfilled".

However, some of the women explained that a South African visa was easier to obtain than visas to travel and enter Western countries and also added that the presence of relatives in the inner city of Johannesburg also encouraged them and in some cases even assisted them.

When asked how long they had been living in South Africa, most migrants from the ages of 40 and above indicated that they have been living in the country for more than seven years at the time of the study. Most of the women also indicate that contacts had played a very vital role both during their time of arriving in South Africa and staying in South Africa. The support that they received from a member of the cultural association that they belonged to has been of great assistance as reiterated by one of the migrant women.

"My cultural association that is the "ngie" people which is a cultural group from Cameroon has established a branch in South Africa. This branch has been very helpful to some of us as it supports us sometimes with basics, such as food and shelter".

In the course of this research it was discover that most of the migrant women practicing urban agriculture in the inner city had done this in their childhood days; one respondent also had this to say when she was asked why she practises urban agriculture: "Agriculture has been part of our upbringing. In my father's house, we grew up doing agriculture, because it was our main source of income. In fact, it is through agriculture that our parents were able to send us to school. So, it has become part of our lives".

With their experience of what urban agriculture contributed in their lives back in Cameroon, most of the migrant women could easily turn to urban agriculture as a livelihood strategy. About 20% of the migrant women practising urban agriculture stipulated that it is a cultural practice that they follow right from childhood and another 60% of the women interviewed explained that they became involved in urban agriculture because they had no job and wanted to make money to support their family back home and abroad. However, another important factor that was looked at is the issue of land on which they could grow food or raise livestock.

Access to land for urban agriculture

Access to land has always been one of the most difficult factors as far as urban agriculture is concerned. This situation is prevalent because of government policies that put many restraining orders on the practice of urban agriculture in most towns or cities of the world (Bengwi, 2009). This author further explains that land for urban agriculture is accessed in many different ways. The majority (60%) of the migrant women indicated that the land they use for urban agriculture consists of open areas of land given to them by caretakers of flats renting. Meanwhile, 5% of these women have borrowed money from their "stokvels" or 'Django, as it is called among the Cameroonians, to buy the small piece of land that they farm on, while 35% have acquired their farmland through begging space from friends or neighbours to sustain a livelihood.

Most women involved in urban agriculture confirm that, having the land is easy, but acquiring seeds for planting is a problem. Hence in the next section, I will take a closer look at the type of seed these migrant women are planting and the acquisition thereof.

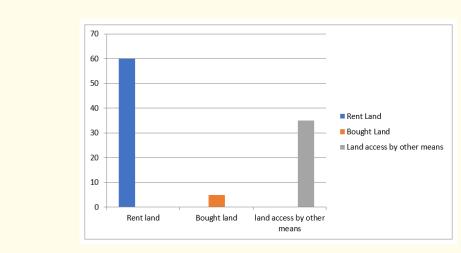


Figure 1: Access of land by Cameroonian migrant women for urban agriculture.

Rent land	Bought land	Land access by other means
60%	5%	35%

Table 1: Land access by percentage.

This figure show the percentage of land access for urban agriculture by Cameroonian migrant women in the inner city of Johannesburg. The study show that 60% of the women interview that are practicing urban agriculture to sustain their livelihood can only rent the land used and 5% of them have the capacity to buy the land used while 35% of them can only have access to land through other means which is be giving to them by local community elders with no compensation for a period of time.

Seed acquisition and crop seed

The majority of the migrant women interviewed (95%) indicated that acquiring the seed that they plant is not easy, while the remaining 5% do find it easy to access seeds and in a more satisfactory manner. The difficulty that arises is because the majority get their seeds sent from Cameroon. This happens because the Cameroonian community and migrants from other west and central African nations such as Nigeria, Gabon and the Central African Republic are their target market. From the interview, 95% of the migrant women plant seed such as okra, maize, beans and different vegetables, such as huckleberry which is commonly known as "country njamajama" among the Cameroonian community. Most of these women confirmed having received the seeds they plant from a parent or close relatives from Cameroon whenever an opportunity comes for somebody to travel to South Africa from Cameroon, besides maize seeds, which they get from South Africa, almost all the other seeds come from Cameroon. At this point, it is also of great significance to note that most of the seeds are all-natural seeds because genetically modified seeds are sometimes very expensive (Bengwi, 2009). However, with these migrant women involved in urban agriculture, their livelihood is more bearable than before. It is on this note that the next section elaborates on the role that urban agriculture plays in the lives of these migrant women's families both here in South Africa and in Cameroon.



Figure 2: This figure show the percentage of seed bought.

Role of urban agriculture

Urban agriculture, has been of great importance many families involved in the process [20]. During the observation and interactive interviews with the migrant farmers, 90% of the respondents confirmed the above statement to be true. For their survival, urban agriculture has been the key essential in the livelihood of the respondents. Responses from the interview show that most of the most women have depended on harvested vegetables and other crops from their gardens for their survival. Respondent 13 had this to say: "After several attempts to find formal employment failed, I had to switch to urban agriculture in order to raise money for my upkeep and family wellbeing. And for the past five years, I have been coping as I could sell the majority of my produce and raise some money and buy other things that I cannot plant, pay school fees for my two kids and also sent some money abroad to Cameroon for my parents' upkeep".

However, even though the majority of the respondents of this study did not intend in the first place to engage in urban agriculture, the results indicate that over 90% of them are really benefiting from the practice, as can be seen from the above statements. Some of these women not only grow crops for food consumption, but also sell a portion to local inhabitants in the area. They also have no option but to immerse themselves in the practice of urban agriculture which was the only thing they had in mind at that time and that has so far been lucrative, ensuring that they and their families have an adequate livelihood. Respondent 18 explained as follows: "To have sufficient food that you and your family can feed on is the most important thing that could happen in a family. With urban agriculture I have been able to help and support my husband to eat and pay the house rent for the family, while the small money that my husband brings home from his small trading we saved for precaution motive in case someone from my house falls ill or for an emergency that might arise".

About 5% of the respondents informed me that their main intention was not to do urban agriculture for the rest of their stay in Johannesburg, but to raise capital and engage in other businesses. Respondent 23 said she had been a saloon owner in Cameroon; she has been involved in urban agriculture to make money that will enable her to operate her saloon business in Johannesburg. This indicates that urban agriculture for some of the respondents has been a strategy to raise money in order to sustain a livelihood. With the income generated from urban agriculture, these women are able to cater for their family especially in times of sickness. That is to say, that of the small earnings they make from selling their crops, a part is saved. They also use the income they generate to help many other people in Cameroon. All the respondents in this study informed me that they had remitted money back home to support their family members in Cameroon. The amounts range from 50,000 cfa to 100,000 cfa which is R1, 250 and R2, 500 equivalent to 94.75 and 189.49 USD respectively. This is an indication showing that urban agricultural practice has a vital role in the lives of the migrant women living in the inner city of Johannesburg. It ensures food security and generates income from the sales of food cultivated. The issues of insufficient household food have for some time now been a serious problem in most African nations [20]. However, as mentioned earlier, the study shows that the majority of the migrant respondents who are engaged in urban agriculture in the inner city of Johannesburg are guaranteed food security. Several respondents made statements similar to that of Respondent 11: "It is through urban agriculture that I have been able to put food on the table that I and my family could eat and be satisfied. The vegetables that I produce; I sell part of it and eat the rest. With the money that I make from the small sales, it enables me to buy other food items that I cannot produce, items such as meat, salt, cooking oil, spices and many others".

It is also important to mention that the issue of poverty alleviation is of great concern in the life of the migrant women. Their involvement in urban agriculture has alleviated their poverty situation to a certain extent. The majority of them also indicated that with the liquid cash that they make from their sales of produce from their gardens, the issue of poverty is now a thing of the past. Most of them explained that they now have money to pay their rent by themselves and that they now live a comfortable life compared to what they were living in Cameroon even though the price of other commodities that they do not produce is still high. For instance, respondent 24 said: "My life situation has much improved unlike in the past when I just came into South Africa, all thanks to urban agriculture".

However, it has not always been easy with urban agriculture as the majority of the respondents mentioned. There have been numerous challenges faced by these migrant women as they are involved in the process of urban agriculture in the inner city of Johannesburg.

Age of migrant women practicing urban agriculture	% of remittance sent back home
20 - 25 years old	50%
30 - 35 years old	20%
36 - 39 years old	15%
40 years old and above	15%

Table 2: % of remittance back home according to age group.

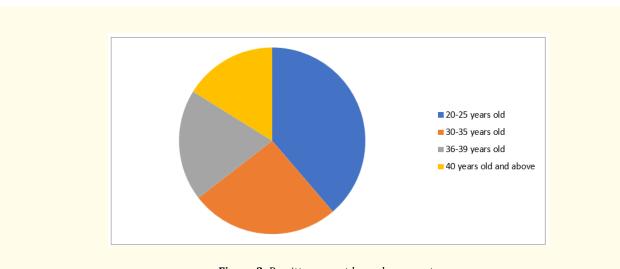


Figure 3: Remittance sent home by percentage.

This figure show the percentage of money remitted home by Cameroonian migrant women practising urban agriculture according to their age groups. The figures indicates that more remittance is made home by the young farmers as compare to the older ones as we can see from the table above. 20 - 25 years old sent 50% of the income back home while 30 - 35, 36 - 39, and 40 years and above sent 20%, 15% and 15% respectively back home.

Before explaining some of the challenges faced by these Cameroonian women as they continue to practise urban agriculture in Turfontein, it is necessary at this point to mention where they market the surplus food produced on their farms. A lot of them sell at the local market in Turfontein to both local and foreign inhabitants, while a few of them go as far as the Yeoville market to sell foreign vegetables, that is vegetables not commonly consumed or grown in South Africa. The reason is that many foreigners who usually buy these commodities live in and around the Yeoville neighbourhood.

Challenges

Access to land has always been one of the most difficult factors as far as urban agriculture is concerned. This situation is prevalent because of government policies that put many restraining orders on the practice of urban agriculture in most towns or cities of the world (Bengwi, 2009). The greater population of migrant women indicated that the land they use for urban agriculture is open areas, land given to them by caretakers of flats and owners of single-standing houses where they are renting accommodation. Others have borrowed money from their "stokvels" or 'njangi, as it is commonly referred to among the Cameroonian community, to buy the small piece of land that they farm on. While others have acquired their farmland through begging space from friends or neighbours to be allowed to farm in order to sustain a livelihood.

Acquiring seed for planting is a problem and a big challenge for these women. The difficulty that arises is because the majority get their seeds from Cameroon. This they say is because the Cameroonian community and migrants from other west and central African countries such as Nigeria, Gabon and the Central African Republic are their target market. The migrant women plant okra, maize, beans and different vegetables, such as huckleberry which is commonly known as "country njamajama" among the Cameroonian community. The seed for growing these crops and vegetables are not easily found in South Africa since they are mostly not genetically modified.

The issue of lack of appropriate financial support to enable the sustainability of the urban agricultural practice is a big concern. This includes the need to buy seeds from Cameroon and also to have enough financial capability to rent land. Limited financial resources are a constraint on their ability to grow food, look for workers to work on their farms or gardens and also in making improvements on their farms [20]. This also can be related to the fact that most of the migrant women do not have proper documentation to take up a bank loan as a means of financial assistance. A handful of migrant women practising urban agriculture in the inner city of Johannesburg stated that because of the time they spend at the Department of Home Affairs to adjust their permit or temporary visa, their farms are left unattended as the process can take close to two weeks to settle everything with Home Affairs.

Another challenge comes from some of the landlords who own the land on which these migrant women cultivate their gardens in the inner city of Johannesburg. A few of the landlords have for some reason been harsh towards these migrants. During the interactive interview, about 15% of the migrant women revealed that their landlord was a big problem to them, as they always want to control what is planted in their yard and take command of what ought to be planted. Because of this, the seed brought from Cameroon is sometimes spoilt. Some migrant women even mentioned that their landlord are afraid that they might plant dangerous or illegal seeds, such as marijuana, instead of planting vegetables.

Theft is another issue that was raised by these migrant women as one of their major challenges. The high rate of unemployment in the inner city of Johannesburg and the high influx of migrants, both national and international, has resulted in the commission of far too many crimes in and around the city (Deelstra., et al. 2000]. This issue of crime has been a serious problem to the migrant women as it affects the supply of some of their produce to their customers. Because of insufficient finance the migrant women are unable to hire security personnel. This challenge and those mentioned earlier sometimes cause migrant women to want to quit. But the big problem is: If they quit, how will they survive? Their livelihood depends almost solely on urban agriculture [22-25].

The Way Forward

The main purpose of this study was to look at urban agriculture as a sustainable livelihood strategy among migrant women in the inner city of Johannesburg. I have concentrated my study on Cameroonian migrant women in examining the role urban Agriculture plays in their lives as well as the different challenges that they encounter during the agricultural process. The research provides a clearer understanding, albeit on the basis of a small sample, of the lives of Cameroonian migrant women in the inner city of Johannesburg who are practising urban agriculture as a strategy for livelihood. The research highlighted how and what prompted some of these migrant women to travel to South Africa. It has also has explained how some of the migrant women originally had no intention of engaging in urban agriculture. However, because they could not find paid employment they were forced to attempt urban agriculture as a means of doing a job, since to them it was the only livelihood strategy that could enable them to support their family or a husband aside from many others who needed food in the community. Like any other livelihood strategy, urban agriculture has been a source of survival for Cameroonian women. The research show how these women, through urban agriculture, raise income to support their households.

In light of the above findings, it can be said that urban agriculture is playing a very important role in the lives of Cameroonian migrants in the inner city of Johannesburg in terms of enhancing food security and household income. Through their urban agricultural practise, they are able to ensure food security for their household and contribute to community wellbeing. Despite the number of challenges facing these women as they carry on with the process of urban agriculture, such as the issue of adequate water which sometimes can determine productivity and hence the supply of produce to their customers. Nevertheless, even with such shortcomings they still press on because it is their livelihood. Limited space to plant is also an issue as these migrant women find it difficult to increase food production on available land. Lack of capital is also identified as a challenge; it is for this reason that they could not diversify their products and could plant only those seeds they are able to purchase. One of the biggest challenge facing these women is theft of some of their produce. Most of the area

where they practise their farming is not well protected either by a fence or by security guards. And such theft can also be related to the high level of unemployment in the area of Turfontein.

These women say that government and non-government organisations should assist them with their agricultural practise. The government should encourage and support urban farming; it should be embedded in its policies and planning frameworks and strongly emphasised. However, because of the role that urban agriculture plays in the lives of many city dwellers in poverty reduction and food security, it should not be excluded from urban development planning but rather an attempt should be made to understand and optimize its role in the urban system of Johannesburg. There is a need to facilitate a proactive programme that will support low-income urban residents to get involved in urban agriculture. This can be done mostly through government policies and also through the municipal city's review processes. The government should support the provisional use of urban farm projects and also encourage gardening in small spaces in the inner city of Johannesburg. It should also make land available for urban farming, assist with water by providing tanks and by digging gutters that will direct water to farmyards and also assist them in harvesting. The government must also develop an improved strategy for the infrastructure for food distribution such as local markets. Legal and institutional support should be afforded to the urban agricultural sector, so that it will systematically integrate into the urban farmers' regular requirements.

The concept of an urban area in which agriculture has an important role really does matter. It should be one of integrating development based on a structure emanating from the needs of urban residents themselves. Urban agriculture can be used by the South African government as a strategy for poverty alleviation in order to improve people's livelihoods, create employment and for income generation.

Bibliography

- 1. Jonathan Crush. "The Global Raiders: Nationalism, Globalisation and South Africa Brain Drain". *Journal of international Affairs* (2002): 56.
- Gardner K and Osella F. Migration, modernity and social transformation in South Asia: An overview contribution to Indian society (2003).
- 3. Wade Pendleton and Jonathan Crush. Regionalizing xenophobia? Attitude to Immigration and Refugees in SADC Southern African Migration project policy serial No 30 (2004).
- 4. DOA. "The integrated food strategy for South Africa". Pretoria: Department of Agriculture (2002).
- 5. Grain. "The other pandemic. Editorial in seedling: Biodiversity, rights and livelihood". Climate Crisis Special Issue (2009).
- 6. Portes A and Sensenbrenner J. "Embeddedness and immigration: Notes on the social determinants of economic action". *American Journal of Sociology* 98.6 (1993).
- 7. Schweight F. Solidarity and Subsidiarity: Complementary principles of community in journal of social philosophy (2002): 33.
- 8. Goldring L. "Diversity and communities in transnational migration: A comparative study of two Mexico/US migrant communities" (1992).
- 9. Bryld E. "Potentials, problem and policy implications for urban agriculture in developing countries". *Agriculture and Human Value* (2003): 20.
- 10. Mireri C., *et al.* "Urban agriculture in the East Africa: Practice, challenge and opportunity for city farmers". *Canada Office of Urban Agriculture* (2007).

- 11. Premat A. "Moving between the plant and the ground: Shifting perspectives on urban agriculture in Havana, Cuba". International Development Centre Ottawa (2005): 153-183.
- 12. Mougeot JA. "Agro polis. The social, political and environmental dimension of urban agriculture". London: Earthscan (2005).
- 13. Kekana DS. "A socio-economic analysis of urban agriculture: The Soshanguve project. Case study". Unpublished MA thesis University of Pretoria (2006).
- 14. Barton H. "Sustainable communities: The potential for eco-neighbourhoods". London: Earthscan (2000).
- 15. Krantz L. "The sustainable livelihood approach to poverty reduction: An introduction". Stockolm: Swedish International Development Cooperation Agency (2001).
- 16. Scoones I. Sustainable livelihood: A framework for analysis. IDS working paper 72, discussion held in 1997 during the preparation for field-phase of DFID ESCOR (2009): 72.
- 17. Rogerson CM. "Urban cultivation and urban reconstruction in South Africa". Geographical Journal of Zimbabwe (1997).
- 18. Maxwell DG and Zziwa S. "Urban agriculture in Kampala: Indigenous adaptive response to the economy crisis". *Ecology of Food Nutrition* (1995).
- 19. Maxwell DG. "Alternative food security strategy: A household analysis of urban agriculture in Kampala". World Development, International Food Policy Research Institute 23 (1996).
- 20. Egziabher. "Urban farming, cooperatives and the urban poor in Addis Ababa". IDRC Ottawa (1994).
- 21. Foeken D. "Urban agriculture and the poor in East Africa". Does policy matter? Critical development on pro poor policies, Leiden/Boston: Brill Academic publisher (2008).
- 22. De Zeeuw H and Dubbeling M. Cities, Food and Agriculture: Challenges and the way forward 1.5: Ruaf foundation (2009).
- 23. Eberhard R. "Urban agriculture: The potential in Cape Town". Unpublished working paper. EI.ES Cape Town, South Africa: Town planning branch city's planning department (1989).
- 24. Hovorka A., et al. "Women feeding cities: Mainstreaming gender in urban agriculture and food security". London: Practical Actions (2009).
- 25. Kandel W. "The culture of Mexican migration: A theoretical and empirical analysis". Social Forces 80.3 (2002).

Volume 18 Issue 3 March 2023

©All rights reserved by Njenyuei Gideon Agho and Janet Cherry.