

UNIVERSITY OF THE WITWATERSRAND



**FOOD SURVIVAL STRATEGIES IN CONGOLESE
REFUGEES AND ASYLUM SEEKERS COMMUNITIES IN
JOHANNESBURG**

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Declaration

I hereby declare that this submission is my own work and that, from my knowledge and belief, it does not contain any material that has been published or written by any other person. This submission is not the work of another person who has worked to obtain any degree from a certain university, except in cases where the corresponding recognition has been mentioned in the text.



Signature

Date 28/11/2018

Jacques Mupenda

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Dedication

To my father, Gratien Mupenda – Spiritual and moral advisor

To my mother, Jacquie Kigome – An undeniable protector

To my brother, Jerome Mupenda – Confidant and partial financier

To my wife, Natacha Binene – For agreeing to plan the future with me and for believing that nothing is impossible for two people who unite to live together

To my children, Kigoma Mupenda and Lupepe Mupenda – For being the reason for my efforts, now and forever. May the hand of the eternal accompany you forever!

Abstract

In recent decades, several studies on food insecurity have been conducted in developing countries to understand how poor households develop livelihood strategies for accessing food and other basic needs. In Johannesburg, there are studies that have attempted to assess how poor households, including households of cross-border migrants, are adopting coping strategies to access food. However, it still seems difficult to find any study that has focused particularly on the food survival strategies of Congolese forced migrants living in Johannesburg. Yet, Congolese refugees and asylum seekers living in Johannesburg are part of the forced migrants who face serious difficulties in developing sustainable livelihoods and are often victims of discrimination, exclusion and xenophobia. Therefore, it was essential to carry out this study to evaluate the food survival strategies of Congolese refugees and asylum seekers living in Johannesburg.

A cross-sectional household-based study was conducted in a sample of 76 households, of which 36 households were in Rosettenville and 40 households were in Yeoville. The snowball sampling technique was used to select potential households. Participation in the survey was free and voluntary. The face-to-face paper interviews were conducted between the interviewer and the participants. The interviews with the respondents were based on the socio-demographic and socio-economic profiles of households, livelihoods, food sources, coping strategies, and food survival strategies. The collected data were analysed through the thematic method.

The results of this study revealed that the vast majority of households were headed by men, and most households were made up of related members. In some households, there were married people who lived as household members. Most household members had immigrated to South Africa to improve their living conditions and only a limited number of household members held a refugee status. Several household members also had a good level of education. The unemployment rate was also considerable in sampled households, and it was found that women constituted the largest proportion of the unemployed. These women were more active in the informal economy. It was noted that government grants and social assistance for the reduction of poverty and income inequality were exclusively granted to household members who held refugee status. There were also women who rely on

prostitution to improve the household income, and some households used their children, who were under the age of 18 years, to generate household income.

It is evident that most households have the socio-demographic and socio-economic profiles of households that are experiencing serious difficulties in accessing healthy and sufficient food. Similarly, most households did not have the resources to buy food of their choice. In addition, a significant number of households were adopting severe food survival strategies to have access to food.

Nevertheless, it is important to note that government grants and social assistance are available to Congolese refugees and asylum seekers in Johannesburg. Similarly, it is necessary to help female members to access formal credit. In addition, it is important that the South African government makes an effort to combat discriminatory patterns of exclusion and xenophobia, which most Congolese refugees and asylum seekers face. This is to help reduce poverty and income inequality for Congolese refugees and asylum seekers in Johannesburg. This will in turn allow them to have access to safe and adequate food.

Keywords: rapid urbanisation, food security, household food security, livelihood, coping strategies, Congolese refugee and asylum seekers, Johannesburg, food survival strategies, poverty, discrimination, exclusion, xenophobia

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Abbreviations

DRC	Democratic Republic of Congo
HTNS	Household using Traditional Food Source non-sustainable
HTDS	Household using Traditional Food Source Sustainable
HTS	Household using Traditional Food Source
FAO	Food and Agriculture Organization
UNHCR	United Nations High Commissioner for Refugees
NGO	Non-governmental organisations
JRS	Jesuit Refugee Service

Glossary of terms

Household using Traditional Food Source (HTN): Household get food from (Supermarket, Informal market, Butchery, Grocers, Small Shop, borrow food from others, Food provide by neighbours/relatives, food aid and communities food kitchen).

Household using Traditional Food Source Non-sustainable (HTNS): Household get food from (Supermarket, Informal market, Butchery, Grocers, Small Shop, borrow food from others, Food provide by neighbours/relatives, food aid and communities food kitchen).

Household using Traditional Food Source Sustainable (HTDS): Household get food from (Supermarket, Informal market, Butchery, Grocers, Small Shop, grown it, Seller of food imported from Congo and remittance food).

CHAPTER 1: INTRODOCTION

1.1 Introduction

The first chapter of this study is composed a background of the study, problem statement, aim and objectives, rationale of the study, and structure. The background of the study provides a brief overview of food security in the context of Johannesburg's rapid urbanisation and the forced migration of the Congolese. The problem statement provides the elements on food security issues faced by Congolese refugees and asylum seekers in Johannesburg. Thereafter, the aim of the study and the objectives to achieve the aim is presented. The rationale of the study is based on the interest of the subject, academically, scientifically, practically and socially. The last subsection of this chapter illustrates a brief structure of the study.

1.2 Background of the study

Since the advent of the 1974 World Food Conference, food security has become a major global concern (Bruinsma, 2017; Halloran et al., 2015; Maxwell, 1996; Maxwell and Smith, 1992). At that time, the concept of food security was identified in terms of food availability in national and international markets, and it was one-dimensional in nature (Bruinsma, 2017; Ellis, 1998; Maxwell and Smith, 1992).

However, in the 1980s, it was found that the global food supply did not necessarily promote access to food in households (Pinstrup-Andersen and Watson II, 2011; Sen, 1982). In most cases, although food availability was effective in local and international markets, some poor households had serious difficulties accessing it (Pingali, 2012; Sen, 1982; Tacoli et al., 2015). This has proved that poverty and deprivation of fundamental rights also had a negative impact on access to food for many households (Pingali, 2012; Sen, 1982). Contrary to the idea of the 1970s, in the 1980s, it was found that the nature of food security was a multidimensional concept (Pingali, 2012; Sen, 1982). In addition, in 1996, participants in the 1996 World Food Summit reaffirmed the multidimensional nature of food security by giving it three key new concepts. These new concepts are, access to food, the stability of food, and the use of food (FAO, 1996a; Heidhues et al., 2004).

In this study, it was necessary to focus on the concept of access to food. This is because food security and livelihood interventions are essential for enabling households to access adequate

food during and after crisis situations when household livelihoods are unsustainable (Davies, 2016; Gladwin et al., 2001). According to Chambers and Conway (1992), livelihoods include all productive capital (both physical and social capital) and all the activities a household needs to live. A household's livelihood is considered safe when it can manage and recover from stress, or maintain or improve its productive capacities and assets (Frankenberger and McCaston, 1998; Rakodi, 2014). When livelihoods are partially disrupted by an unexpected situation, households develop coping strategies to mitigate the shock (Akampumuza and Matsuda, 2017; Frankenberger and McCaston, 1998). It is noted that it is possible for livelihoods to be disrupted even further and in such a situation, households are forced to develop coping strategies that may have a short-term or long-term negative impacts on their living conditions (Akampumuza and Matsuda, 2017).

While in most developing countries, poor urban households do not have sustainable livelihoods (Akampumuza and Matsuda, 2017; Saunders, 2011), previous studies have ignored evaluating food security strategies for Congolese refugees and asylum seekers in Johannesburg. Yet, Congolese refugees and asylum seekers seem to be deliberately crossing several borders in the hope of leading a peaceful life in Johannesburg (Crush, 2017; Grant and Thompson, 2015; Hunter and Posel, 2012; Lakika et al., 2015). Although previous studies have also shown that poor urban households usually rely on their livelihoods for access to food and basic needs (Akampumuza and Matsuda, 2017; Read, 2016; Turok and Borel-Saladin, 2014), there is no reason to believe that the nature of Johannesburg's rapid urbanisation can be conducive to sustainable livelihoods for Congolese refugees and asylum seekers.

It is noted that, firstly, most forced migrants arrive in Johannesburg in a state of poverty and vulnerability (Lakika et al., 2015; Read, 2016; Tacoli et al., 2015). Secondly, the rapid urbanisation of Johannesburg is particularly characterized by socio-demographic growth than socio-economic development (Bhorat et al., 2017; Murray, 2011). Lastly, although the post-apartheid government has set up social assistance and public subsidy programs to reduce poverty and income inequality (Mohlakoana et al., 2017; Patel and Hochfeld, 2011; Proudlock et al., 2014), some South African citizens are demonstrating discriminatory and xenophobic attitudes against forced migrants (Crush, 2017; Grant and Thompson, 2015; Lakika et al., 2015; Matsinhe, 2016; Tomlinson, 2017), including against Congolese refugees and asylum seekers (De Jager, 2015; Lakika et al., 2015).

From the foregoing, it seems likely that the nature of Johannesburg's rapid urbanisation, as discussed in the previous section of this study, may force some Congolese refugees and asylum seekers to develop sustainable livelihoods. Therefore, the need to study the constraints faced by Congolese refugees and asylum seekers in Johannesburg in developing sustainable livelihoods that can access healthy and adequate food is essential.

1.3 Problem statement

During the apartheid period, migration to South African cities was largely limited (Crush, 2001; Seekings, 2000; Tacoli et al., 2015; Tomlinson, 2017). At the same time, the apartheid authorities had not put in place any policies on the protection of the fundamental rights of refugees (Landau, 2006; Seekings, 2000; Tomlinson, 2017). However, since the end of apartheid, the trend of migration in South African cities has changed significantly (Landau, 2006; Tomlinson, 2017). Even people who previously had no chance of immigrating to South African cities, such as forced migrants from African countries, took advantage of the new migration policy to immigrate to Johannesburg (Crush et al., 2015; Landau, 2006; Mohlakoana et al., 2017; Segatti and Landau, 2011; Tomlinson, 2017). Among the forced migrants listed in South Africa, there are Congolese refugees and asylum seekers fleeing armed conflict and political persecution in the Democratic Republic of Congo (DRC) (Lakika et al., 2015). According to previous studies, most of these Congolese refugees and asylum seekers are deliberately crossing several borders to seek asylum in South Africa (Lakika et al., 2015; Smit and Rugunanan, 2015).

According to statistical data from the Office of the United Nations High Commissioner for Refugees, the number of Congolese refugees and asylum seekers in South Africa increased from 1200 in 2006 to 13000 in 2011 (UNHCR, 2011, 2007). Similarly, between 2013 and 2015, the Office of the United Nations High Commissioner for Refugees revealed that the number of Congolese refugees and asylum seekers increased from 15000 to 25000 (UNHCR, 2015, 2014). In 2016, approximately 30125 Congolese refugees and asylum seekers were officially listed in South Africa (UNHCR, 2016).

While the results of previous studies have revealed that in South Africa, majority of the forced migrants live in Johannesburg (Homer-Dixon and Percival, 2018; Lakika et al., 2015; Makandwa and Vearey, 2017), previous research has made little or no attempt to assess the food survival strategies of Congolese refugees and asylum seekers. Similarly, the

phenomenon of rapid urbanisation in Johannesburg may force some forced migrants to find better paying jobs (Tomlinson, 2017). However, it is also possible to find forced migrants who are employed in better paying jobs and living in Johannesburg (Crush et al., 2015; De Jager, 2015; Misago, 2016; Mohlakoana et al., 2017; Patel and Hochfeld, 2011).

In addition, the discriminatory and xenophobic behaviour of some South African citizens against cross-border migrants can have a negative impact on the livelihoods of forced migrants (Lakika et al., 2015; Matsinhe, 2016). While most cross-border migrants are generally victims of discrimination and xenophobia (Christopher, 2001; Lakika et al., 2015), some forced migrants living in Johannesburg access welfare and government subsidy programmes to reduce poverty and income inequality (De Jager, 2015; Patel and Hochfeld, 2011; Zihindula et al., 2015). From the foregoing, it is likely that some Congolese refugees and asylum seekers in Johannesburg may be forced to develop less sustainable livelihoods and adopt food survival strategies that may have a positive impact on their future lives.

Therefore, it seems necessary to seek to understand how Congolese refugees and asylum seekers from Johannesburg, who immigrate to a city where job opportunities are limited, and who are often victims of discrimination, exclusion and xenophobia, adopt food survival strategies. In other words, this study seeks to assess whether Congolese refugees and asylum seekers adopt food survival strategies that can save them from mortgaging the survival of their members in the short and long term.

The main research question of this project is: what are the food survival strategies of Congolese refugee and asylum seeker communities in Johannesburg, in the context of their liminal legal and social status? To answer the previous question, it was necessary to focus on the following sub-questions:

- i. What is the socio-demographic profile of Congolese refugee and asylum seeker communities in Johannesburg?
- ii. What are the main forms of livelihood for these communities?
- iii. During periods of food shortages, what coping strategies do these communities rely upon to access food and basic needs?

1.4 Aim and objectives of the study

The aim of this study is to assess the food survival strategies within Congolese refugee and asylum seekers communities in Johannesburg.

The objectives which are essential for achieving the aim are to:

- i. Examine the social and demographic profile of the Congolese refugee and asylum seeker community in Johannesburg.
- ii. Identify the income and livelihood profile of Congolese refugees and asylum seekers in Johannesburg.
- iii. Explore the coping strategies of community members during periods of income and food scarcity, with a specific focus on intra-group support structures.

1.5 Rationale of the study

Since South Africa adopted a migration policy to protect the human rights of forced migrants, the South African authorities and representatives of the Office of the United Nations High Commissioner for Refugees (UNHCR) have made many efforts in promoting the integration of forced migrants into the local community (De Jager, 2015; Dodson and Crush, 2015; Kavuro, 2015; Tomlinson, 2017). Act No. 130 of 1998, which guarantees the fundamental rights of refugees in South Africa, has provisions that guarantee refugees and asylum seekers the right to work, study and access basic food (Crush and Ramachandran, 2015; De Jager, 2015; Kavuro, 2015). The South African government has also set up social assistance and government subsidy programmes to reduce the levels of poverty and income inequality (Crush and Ramachandran, 2015; De Jager, 2015; Landau, 2006; Zihindula et al., 2015). This promotes access to food for poor households because in South Africa poverty and income inequality are the most responsible factors for food insecurity (Clover, 2003; Dos Santos et al., 2017).

In the post-apartheid period, the population growth of Johannesburg is proportional to job opportunities (Crush and Ramachandran, 2015; Matsinhe, 2016; Nattrass, 2002). This seems, to delay the reduction of poverty and income inequality. It also amplifies the antagonisms between some South African citizens and cross-border migrants (Bulbulia, 2015; Crush and Ramachandran, 2015; Lakika et al., 2015; Segatti and Landau, 2011). The antagonisms between these different communities may have a negative impact on the livelihoods of

Congolese refugees and asylum seekers in Johannesburg, and force them to adopt harsh strategies for accessing food.

Households that adopt less severe food survival strategies can avoid relying on strategies that may have a negative impact on the lives of their members (Dos Santos et al., 2017; Patel and Hochfeld, 2011; Rakodi, 2014). For example, some Congolese refugees and asylum seekers who adopt severe food survival strategies may agree to occupy the jobs of indigenous people and expose themselves to xenophobia. Similarly, other households may be expected to consider exposing their young girls to prostitution. This has the potential to jeopardize their health as it exposes them to sexually transmitted diseases.

Therefore, the realisation of this study was part of the academic requirements for obtaining the Degree of Master of Science. The results of this study may also provide other researchers with reliable information on the food survival strategies of Congolese refugees and asylum seekers in Johannesburg. Similarly, the South African authorities and representatives of the United Nations High Commissioner for Refugees (UNHCR), who theoretically advocate for the socio-economic integration of forced migrants into the local community (De Jager, 2015; Zihindula et al., 2015), will be able to use the results of this study to find adequate solutions to the problem of access to food for Congolese refugees and asylum seekers in Johannesburg. In addition, according to previous studies, Congolese refugees and asylum seekers who have a good level of education (Lakika et al., 2015; Rugunanan and Smit, 2011; Smit and Rugunanan, 2014), which can also constitute an alternative workforce to occupy jobs deserted by skilled emigrants.

1.6 Thesis Structure

This study on food adjustment strategies for Congolese refugees and asylum seekers in Johannesburg has been divided into seven chapters, namely, Introduction, Literature review, Methodology, Socio-demographic profiles, Sources of income and livelihoods, Food sources and coping strategies during food shortages, and General conclusions.

The background of the study, the problem statement, the aim and objectives, the rationale of the study and the thesis structure, were presented in Chapter 1. The theoretical approach on Congolese forced migrants in Johannesburg and the concepts of food security and sustainable livelihoods are presented in Chapter 2. The methodology used in this study is presented in Chapter 3. In this section, several points are reported, namely, key tasks, study areas, study

population, sampling, data collection and analysis techniques, significance of the study, limitations of the study, and ethical. The socio-demographic profiles of sampled household members were developed in Chapter 4. In this section, it was necessary to explore the socio-demographic profiles of sampled households, such as the household size, household structure, age, marital status, legal status and the educational level of household members. Chapter 5 focuses on livelihoods and household incomes. It was necessary to present and analyse the main occupations of household members, alternative livelihood strategies of households, and the monthly household income. Food sources and coping strategies used by households during food shortages have been developed in Chapter 6. Finally, the conclusions on the different chapters of the study are presented in Chapter 7.

1.7 Conclusion

The different parts of the context of the study, the problem statement, the purpose and objectives, the rationale of the study and the structure, were briefly presented in this chapter. Therefore, in the subsequent chapter, the literature review of the study is presented.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

The study aimed to understand the food survival strategies of Congolese refugees and asylum seekers living in Johannesburg. To achieve the objectives of the study, it was necessary to consult existing studies from secondary sources that are consistent with the purpose of the study. As a result, a number of secondary sources were consulted to maximize knowledge of the food survival strategies of Congolese refugees and asylum seekers. Firstly, several previous studies on food security, livelihoods, and coping strategies were carefully researched to deepen the understanding of food survival strategies of poor and vulnerable urban households (Gladwin et al., 2001; Rakodi, 2014). Secondly, existing literature on migration in South Africa was also consulted to gain information on migration policy developments in South Africa and Congolese forced migration in Johannesburg.

2.2 Food security, livelihood and coping strategies

2.2.1 Generality on the concept of food security

Since the 1970s, various definitions related to food have been developed in parallel with the evolution of the concept of food security (Bruinsma, 2017; Maxwell and Smith, 1992). At the 1974 World Food Summit, the concept of food security was defined as “the ability to regularly supply the world with staple foods, to ensure food consumption, while controlling food price instability” (Bruinsma, 2017; Maxwell, 1996). At that time, most people felt that the concept of food security was unidimensional (Maxwell, 1996; Maxwell and Smith, 1992), and that it was derived from a lack of food at national and international levels (Maxwell, 1996; Maxwell and Smith, 1992; Sen, 1982). As a result, several projects have been set up, particularly in rural areas of developing countries, to promote food supply at national and international levels (Battersby, 2016; Maxwell, 1996; Maxwell and Smith, 1992).

However, the concept of access to food was redefined for the first time after the 1981 study by an Indian economist, Amartya Sen (Maxwell, 1996; Rakodi, 2014). Sen revealed that food availability in any location does not necessarily promote access to food (Rakodi, 2014). In other words, although food was available in the markets, some households had difficulty accessing it. According to Sen (1982), poverty and deprivation of rights were also responsible

for household food insecurity. Firstly, Sen's (1982) study shed light on the importance of considering households and individuals in food security studies, and secondly, it showed that food security is a multidimensional concept (Carolan, 2016; Tacoli et al., 2015).

In 1983, FAO conducted studies on the concept of food access by analysing the impact of market balance (food supply and demand) and food security (Maxwell, 1996). This led to the definition that "food security is the regular provision of physical and economic access to food for all people" (FAO, 2002).

Then, in 1986, the World Bank conducted a study on poverty and hunger to understand the temporary dynamics of food insecurity in households and among individuals (World Bank, 1986). This study established the difference between chronic food insecurity and transient food insecurity (Maxwell, 1996). According to the results of this 1986 World Bank study, chronic food insecurity, which the individual or households can overcome, is derived from problems of permanent or structural poverty and low income (World Bank, 1986). Whereas, temporary food insecurity, which individuals or households cannot control, is due to critical circumstances such as natural disasters, political instability or armed conflict (Davies, 2016; Maxwell et al., 2003).

It was at the 1996 FAO World Food Summit that the concept of food security was formally endowed with a multidimensional nature (Bruinsma, 2017; FAO, 1996; Frankenberger and McCaston, 1998). As a result, three key concepts were reinforced to the concept of food security. These include, access to food, food stability, and the utilisation of food (Burchi and De Muro, 2016; FAO, 1996). Thus, it was revealed that "food security exists when all individuals, at all times, have physical, economic and social access to sufficient, reassuring and nutritious food that meets their nutritional needs and dietary preferences in order to achieve an active and healthy life " (FAO, 1996).

In the consensus that led to the acceptance of these key differences in food security concepts, there were four revelations. Firstly, food availability is the provision of sufficient quantities and appropriate quality of food through domestic production or imports and food aid (Bruinsma, 2017; Carolan, 2016; FAO, 1996b). Secondly, access to food is to ensure access to all to adequate resources that promote the acquisition of adequate and nutritious food (FAO, 1996b). This is because, normally, households or individuals access food through a combination of domestic production, stocks, purchases, barter, gifts, donations, loans or food

aid (Ellis, 1998; FAO, 1996b; Heidhues et al., 2004). Thirdly, the food stability of households or individuals is to ensure permanent access to adequate food (FAO, 1996b). Generally, food stability can be threatened by factors such as economic crises, climate change or cyclical events (FAO, 1996b; Heidhues et al., 2004). Finally, the utilisation of food is the way in which people use food, stock and prepare it, as well as the state of health of those who consume it (Burchi and De Muro, 2016; FAO, 1996b). Utilisation of food is often limited by endemic diseases, poor hygiene conditions, traditional prohibitions and a lack of knowledge of nutritional principles (Burchi and De Muro, 2016).

In principle, all of these key concepts mentioned above are needed to ensure food security for individuals, households, at national and international levels (Bruinsma, 2017; FAO, 2002, 1996b, 1996a). However, if, for example, one of the key concepts fails, the individual or household is immediately considered to be food insecure (Bruinsma, 2017). Therefore, food insecurity exists when an individual or household does not have enough resources to access healthy and sufficient food (Bruinsma, 2017; FAO, 1996b; Knoll et al., 2017). As a result, vulnerability to food insecurity may be derived from limited availability of food at both national and international levels, limited access to food at the household level, and inadequate utilisation of food at an individual level (Burchi and De Muro, 2016; Knoll et al., 2017). However, the realisation of the study, which aims to evaluate the food survival strategies of Congolese refugees and asylum seekers in Johannesburg, focuses particularly on the concept of access to food.

2.2.2 Urban food security

In the early 1990s, national and local concerns on food security were focused on the access to food for rural households. At that time, majority of poor households lived in rural areas (Devereux and Maxwell, 2001). However, since the late 1990s, the urbanisation of rural and cross-border households in South African cities has increased exponentially (Kimani-Murage et al., 2014). According to Tacoli (2017), the phenomenon of urbanisation of the rural poor and forced migrants, coupled with a general decline in socio-economic performance and poor governance has increased the level of poverty and income inequalities by exposing some of the poor and vulnerable households to food insecurity. Unfortunately, until 1999, urban food insecurity was invisible and neglected by policymakers in developing countries (Szabo, 2016). According to Maxwell (1999), the invisibility of food security in African cities is justified by several reasons. Firstly, African cities are faced with more pressing problems that

stifle urban food security (Battersby, 2016; Tacoli et al., 2015). These problems include rapid urbanisation, unemployment, income inequality, migration, the increase of the informal sector, population growth, health, deterioration of infrastructure, HIV/AIDS, the decline of basic services and crime (Bruinsma, 2017; Clover, 2003; Seekings, 2000). Secondly, policymakers tend to believe that the problem of food insecurity is a concern regarding rural residents (Eigenbrod and Gruda, 2015; Sonnino, 2016). Thirdly, policymakers do not assist poor urban households in finding an adequate solution to the food insecurity problems they are facing (Barthel et al., 2015; Smit, 2016; Sonnino, 2016).

In urban areas of developing countries, it is difficult to accurately assess the trend of poverty (Brouillet et al., 2007; World Bank, 2017, 2007). Nevertheless, according to the World Bank (2007), the urban poor are people who earn less than \$ 1 and \$ 2 a day. However, the \$ 1 threshold is more characteristic in low-income countries (Brouillet et al., 2007). The \$ 2 threshold, on the other hand, is more relevant to middle-income countries (Brouillet et al., 2007; World Bank, 2007).

Generally, urban poverty appears to be caused by the rural exodus of poor people fleeing difficult socio-economic conditions, the deterioration of livelihoods in rural areas, and urbanisation forced migrants fleeing armed conflict and political persecution (Mitlin and Satterthwaite, 2013). At the regional conference of the 2008 FAO for Africa, it was revealed that the current trend of rapid urbanisation that is realised in the context of poverty, unemployment and income inequality, poses serious problems for ensuring food security of urban households in developing countries (Crush and Frayne, 2010; Frayne, 2010). In addition, participants at the 2008 FAO Conference for Africa recommended that urban governance addresses urban food security issues by focusing on the following objectives, monitoring the intensity and symptoms of urban poverty, ensuring that food is available, there is access to healthy and sufficient food, disseminate appropriate adaptation strategies, strengthen the livelihoods of households by supporting producers of food chains, security of tenure, taking care of basic social services for poor urban households, addressing the livelihood strategies of poor urban households, and promoting the participation of the poor in policy decisions which affect them (Frayne, 2010).

2.2.3 Food security and livelihoods

Theoretically, the concept of food security has been heard since the Food and Agriculture Conference of Hot Springs, in the United States of America, in 1943 (FAO, 1982). This conference, which took place during World War II, was organised to assess the problems of food and agriculture around the world, to protect people from hunger and to ensure the right to food for all. In this regard, the United Nations Food and Agriculture Organization was founded at the Hot Springs Conference of 1943, but formally established in 1945 in Canada (FAO, 1982; Wilson, 1980). Even in the 1948 Universal Declaration of Human Rights, the concept of the right to food had been recognised as an indispensable factor for an adequate standard of living (Wilson, 1980). The right to food is also recognised in the International Covenant on Economic, Social and Cultural Rights of 1966 (Saul et al., 2014). Similarly, in the post-apartheid constitution of South Africa, it has been established that in South Africa “everyone has the right to access sufficient food” (South Africa Government, 1996). At the 1996 World Food Summit in Rome, it was recommended that “all countries should put in place adequate structures to ensure people’s food rights and eradicate hunger” (FAO, 1996b).

Sen's (1982) study and the study conducted by the World Bank in 1986 re-emphasise the need to incorporate the concept of livelihood into household food insecurity assessment studies (FAO, 2002). In itself, livelihoods are defined as the activities that ensure existence in households (Bruinsma, 2017). In the context of food security, household livelihoods include individuals, their capabilities and their resources (financial, material, cultural and spiritual) to survive (FAO, 2002; Helliker et al., 2018). According to Chambers and Conway (1992), households have sustainable livelihoods when they are able to cope with crises and other difficulties and when they can maintain their capabilities and assets without disrupting the natural environment. In contrast, households are said to lack sustainable livelihoods when they are unable to cope with crises and are forced to disrupt the natural environment to access food and basic needs (Chambers and Conway, 1992). Thus, it is probable that the concept of sustainable livelihoods is based on the ability of households to meet their basic needs while considering the well-being of present and future generations. However, Sen's theory of 1981 does not consider the coping strategies that households use when, for example, there are unexpected events which disrupt their livelihood (Corbett, 1988; Dercon, 2002; Ellis and Sumberg, 1998).

Studies on the link between livelihoods and household food security began to emerge in the 1990s (Davies, 2016; Ellis and Sumberg, 1998). In Carney's (1998) study, it was revealed that, unexpected shocks to livelihoods and the ability of households to overcome these shocks is critical in determining the vulnerability of households to food insecurity.

However, livelihood studies were particularly conducted in rural areas (Burchi and De Muro, 2016; Carney, 1998). In fact, very few studies on livelihood and household food insecurity were conducted in urban areas of developing countries (Battersby, 2016; Tacoli et al., 2015). Even now, reference is made to most of the indicators on livelihood assessment and food insecurity that have been tested in rural areas (Smit, 2016; Sonnino, 2016). Although the livelihoods context of urban households is generally different from that of rural households (Smit, 2016; Sonnino, 2016), there is of course hope to rely on this concept to improve the understanding of how households and individuals struggle to access food and other basic needs (Bernard, 2017; Hammelman and Hayes-Conroy, 2015). According to Crush and Battersby (2016), the current phenomenon of rapid urbanisation, requires in-depth studies of the livelihoods of poor urban households and their food insecurity. Therefore, the study identifies the impact of livelihoods on the households' access to food.

2.2.4 Food security and coping strategies

Coping strategies are defined as alternative solutions that individuals or households use to survive when particular circumstances disrupt their habitual livelihoods (Ellis and Sumberg, 1998). Generally, poor households develop strategies to cope with adverse events and livelihood shock (Corbett, 1988; Davies, 2016). According to Snel and Staring (2001), the households in difficult socio-economic situations use coping strategies to limit their expenses or earn extra income to allow them access to essential needs, such as, food, clothing, housing and health, as well as to ensure their future well-being. Devereux & Maxwell (2001) indicated that adaptation strategies involve a conscious evaluation of alternative action plans.

However, it is less likely that poor and vulnerable households will necessarily adopt coping strategies that do not expose them to food insecurity (Ziaei et al., 2013). This may be likely because, in general, each household adopts coping strategies in relation to their needs (Tacoli, 2017). Similarly, some households may deliberately expose themselves to food insecurity in order to achieve a certain goal. For example, some poor households may reduce the money allocated to their food and allocate it to children's schooling.

Usually, there are two types of coping strategies, namely, ex-ante coping strategies and ex-post coping strategies. The ex-ante coping strategies include diversifying economic activities and achieving conservative productions. The main idea of ex-ante strategies is to prevent a probable livelihood shock which is looming on the horizon (Christiaensen and Boisvert, 2000). The ex-ante coping strategies are realised before the crisis.

Generally, the risks to long-term can be avoided, reduced or transferred. Firstly, households can avoid the risk by living in a neighbourhood where the rent is affordable (Bickel et al., 2000). Secondly, households can transfer the risk by increasing the stock of food, by investing in liquid assets value such as radios, bicycles, jewellery and clothing, and by relying on social support (Dercon, 2002). Lastly, households may try to reduce risks by diversifying their sources of income. They can invest in alternative occupations and have many members who contribute to household income (Kimani-Murage et al., 2014). Households can minimise risks by producing food. For example, the results of a study on the food security of Zimbabwean migrants living in Johannesburg revealed that 45% of the households relied on casual jobs to survive (Crush and Battersby, 2016). In addition, the results of the same study indicated that 27% of households had members who were selling on the streets and were transport terminus.

Ex-post coping strategies defend the consumption level by allowing for participation in income-generating activities that have a negative effect on the social life of household members, and by liquidating productive assets acquired before the crisis occurs (Coates et al., 2007; Maxwell et al., 2003). According to Maxwell & Smith (1992), the ex-post coping strategies are to mitigate the impact of food insecurity. In summary, the five types of ex-post coping strategies include:

- i. Poor households can begin by liquidating physical assets before considering the liquidation of productive assets (Bhalla, 1993).
- ii. Households can get food through informal structures such as insurance, social networks, gifts, borrowing and food aid (Taylor et al., 1985).
- iii. The adjustment of the workforce is another strategy that households in distress use to access food. In some families, minors work in order to make a financial contribution to household (Riley and Mooock, 1995).
- iv. Households can rely on money from prostitution, theft and begging. Some households in distress abandon their children in the streets (Kane, 1989).

- v. Increasing austerity is another strategy used by poor and vulnerable households to minimise food insecurity. When the crisis deepens, households can substitute meals, consume socially unacceptable foods, reduce the size of meals or eat fewer meals (Corbett, 1988; Waal, 1989). Some households buy food with the money that was allocated to their children's schooling or medical care (Waal, 1989).

2.2.5 The household concept in the context of food security

In studies of food survival strategies, which seek to assess how households use limited livelihoods to access food, it is necessary to incorporate the household concept. Similarly, in urban areas, the household concept approach in household food access studies is needed to improve the understanding of livelihoods and their levels of food insecurity.

The household concept is a multidimensional concept that has utility in the social sciences, demography, economics and anthropology (Morrill and James, 1990). According to Souvatzi, (2007), the household concept is the indispensable concept of collecting and analysing data in social science. Similarly, Kunstadter (1984) found that social studies, which target households as a unit for data collection and analysis, provide much needed information on socio-demographic and socio-economic data of household members.

However, in the current circumstances of the evolution of social science, where social, demographic, economic, political, religious and cultural boundaries seem to be delimited, the definition of the household concept appears more complex to grasp (Van de Walle, 2006). In both developing countries, traditional conceptions of the household concept seems to be showing a rapidly changing attitude (Souvatzi, 2007; Van de Walle, 2006).. Chant (2002) observed that the difficulties of accommodating a precise definition of the household concept are influenced by disparities in civilizations, rules and conceptions of belonging to a household, the way in which resources are allocated, belonging to a labour market, kinships, marriages, old-age, age and sex. There are authors who have revealed that the household concept is also differentiated in size and in special dimension (Cancian and Danziger, 2009; Santley and Hirth, 1992) in relation to the types of opinions and choices to be exploited (Benson and Elder, 2011; Souvatzi, 2007), and according to the planning of the activities which are to be conducted by these members (Chant, 2002; Sharma, 2013; Souvatzi, 2007).

In particular, the household concept has been defined as “a community of people” (Booth, 1991), “a unit that consumes their material assets” (Chen and Dunn, 1996), “a group of

people who pursue the same objectives by collectively consuming their resources” (Bryant and Zick, 2005), “a group of people who have the autonomy to produce and consume their resources” (Guyer, 1981), and “a group of people who live in the same house and who share the food bought by their common resources” (Guyer, 1981).

Economists, who regard the household as a unit of analysis, have not been passive in determining the household concept. For example, Bryant and Zick (2005) characterises the household as a unitary, coherent and unified structure whose decisions are coordinated and acceptable to all. Mattila (1999) stated that in a household, economic decisions must be rational and likely to produce desired results for the benefit of all its members. In contrast, anthropologists have emphasised the conflicting factors as well as the ability of household members to compromise through negotiations (Chen and Dunn, 1996; Moore, 1994). Anthropologists emphasise that households are categorized according to socio-demographic and socio-economic factors such as sex, age, marital status, linked by rights, and obligations on access and use of their resources (Chen and Dunn, 1996; Janes et al., 2012; Van de Walle, 2006). Therefore, the provider of resources may, for example, have access to food advantages more than the other members who contribute very little to the household resources. However, in some studies, if one household member is food insecure, then this means that the entire household is registered as food insecure (Juillard et al., 2017; Sonnino, 2016).

Although it is difficult to agree on a standard definition of the household concept (Morrill and James, 1990), it is best to focus on a definition that can help the study to achieve its objectives (Sharma, 2013). This study considers the household concept as defined by Frayne (2001). According to Frayne’s (2001) definition, a household is a group of individuals, related or unrelated, who are aware of that they belong to the same house, and collaborating socially and economically. Therefore, according to their internal organisation, each household had its way of determining its head of household and the role that each household member must play to promote access to food in the household. In this study, households were targeted in order to collect and analyse data on socio-demographic profiles, socio-economic profiles, and food survival strategies of Congolese refugees and asylum seekers in Johannesburg.

2.2.6 Food security in South Africa

Section 27 of the South African Constitution guarantees the right of access to healthy and sufficient food, including water, social security and social assistance to meet the basic needs of each individual (Altman et al., 2009). Section 27 of the South African Constitution is consistent with Article 25 of the Universal Declaration of Human 1948, Article 11 of the International Covenant on Economic, Social and Cultural Rights, and the Plan of Action of the World Food Summit Rome of 1996. From a theoretical point of view, South Africa has a food supply that can ensure the food security of households in the country (Altman et al., 2009). However, cases of food insecurity continue to be reported in rural areas and in some urban neighbourhoods where there are poor households (Crush and Frayne, 2010). In most cases, the problems of poverty and income inequality have often been the basis of food insecurity in the urban areas of South Africa (Frayne, 2001). Nonetheless, the South African government has the socio-economic structures that contribute to the reduction of poverty and income inequality, and ensure the food security of poor and vulnerable households (Rudolph and Kroll, 2016).

In 2002, South Africa adopted the integrated food security strategy, which is a structure to achieve physical, social and economic, to sufficient, safe and nutritious by all South Africans, at any time and to meet their food preferences for an active and healthy life (Altman et al., 2009). Apart from the integrated food security strategy, the South African government has set up two programmes that fight against food insecurity of poor and vulnerable households (Jacobs, 2009). The first is the Programme to Fight Zero Hunger and the second is the Outcome 7 Programme. The Zero Hunger Programme is a structure of the Department of Agriculture and focuses on access to food, food production, distribution, marketing networks, stakeholder partnership and dialogue promotion (Altman et al., 2009). The Outcome 7 Programme focuses on agrarian reform and aims to improve access to food services, including consumption of diversified food and job creation in rural areas, to foster an sustainable institutional environment and to ensure inclusive growth (Jacobs, 2009). Generally, the most critical factor in food insecurity in South Africa is poverty, which has a significant impact on access to adequate and safe food (Crush and Battersby, 2016; Crush and Tawodzera, 2016; Kgantsi et al., 2018). In addition, food insecurity is also reported in the Johannesburg, which is an economic and industrial city of South Africa, with major socio-economic opportunities. According to Crush and Caesar (2017), informal neighbourhoods,

cross-border migrants, refugees, and asylum seekers living in Johannesburg are generally the most vulnerable communities to food insecurity. In a previous study, it was revealed that 56% of the inhabitants of three informal settlements in Johannesburg were food insecure (Rudolph and Kroll, 2016). It was revealed that 11% of Zimbabwean migrant's households were food secure, 5% were mildly food insecurity, 24% were moderately food insecure and 60% were severely food insecure (Tawodzera and Zanamwe, 2016).

2.3 General overview of the concept of migration

2.3.1 Key concepts of migration

Migration refers to the voluntary or involuntary movements of individuals or populations from one country to another or from one region to another, and is carried out for economic, political, social and cultural reasons (Roger Zetter, 2014). Depending on the circumstances, migration may be internal or external (Landau, 2006; Roger Zetter, 2014), moving in or out (Marfleet, 2006), and voluntary or involuntary (forced) (CoRMSA, 2009; Roger Zetter, 2014). Migration is internal when the movement of individuals or populations occurs within the internal borders of the country (Marfleet, 2006). On the other hand, migration is external when the movement of individuals or populations occurs across the borders of at least two countries (Crush and Ramachandran, 2015; Landau, 2006). The concept of migration can also be summarised in immigration and emigration (Dörschner and Machts, 2011; Geddes and Scholten, 2016). Immigration refers to the entry of non-indigenous individuals into a host country, and emigration is the act of leaving one's country, region or locality for political, social, economic, cultural or religious (Bouillon, 1998; IFRC, 2013). In addition, there is another form of migration called forced migration (Roger Zetter, 2014). Forced migration, however, refers to the involuntary displacement of populations (Marfleet, 2006). Generally, forced migration is linked to real fears of being persecuted because of race, religion, or political opinions (ACAT, 2013; Marfleet, 2006; Roger Zetter, 2014). Forced migrants can be grouped into 3 categories, namely, refugees, asylum seekers and undocumented migrants.

According to the Geneva Convention of 1951, a refugee is a person who has been forced to leave his or her country of origin to escape persecution for reasons of race, religion, membership of a particular social group or political opinions (Convention of 1951, Article 1A (2)) (CoRMSA, 2009; Kabwe-Segatti, 2008; Roger Zetter, 2014). Similarly, in South Africa, in its 1998 Refugee Protection Act No. 130, the post-apartheid government incorporated into

the principles universal conventions for the protection of the human rights of refugees as referred to in the Geneva Convention of 1951, in the 1967 York News Protocol and in the 1969 Organization of African Unity Convention (CoRMSA, 2009). For example, new forced migrants who seek refuge in South Africa are required to apply for refugee status at the Department of Home Affairs in order to seek asylum (CoRMSA, 2009; Crush and Dodson, 2007). Those who are granted civil protection by the South African government, by issuing refugee status, are immediately recognized as refugees (CoRMSA, 2009; Lakika et al., 2015). On the other hand, asylum seekers are forced migrants who are waiting for a decision on their asylum application that they previously applied for at the Department of Home Affairs (CoRMSA, 2009).

2.3.2 The evolution of the migration policy in South Africa

According to Cornevin (1979), black South Africans are descendants of the Bantu and Khoisan people in southern Africa. White South African are descendants of the Europeans and Jews who immigrated to South Africa between the 17th and 20th centuries (Christopher, 2001; Cornevin, 1979). Coloured South Africans are the hybrids of the descendants of Malay slaves and Khoisan, and of the union between the European colonizers and black people (Crush and Dodson, 2007; Landau and Segatti, 2009). By contrast, the Indian people of South African arrived in South Africa in the 1880s to work in the sugarcane plantations in Kwazulu-Natal (Bouillon, 1998).

After the Berlin Conference of 1885, the migration of Africans to South Africa began to be reported. It was formally reported in the 1910s (Bouillon, 1998; Cornevin, 1979). At that time, most African immigrants were recruited to work as labourers in mining, agriculture, and as maids (Adepoju, 2000; Cornevin, 1979; Peberdy, 1999). However, the authorities at the time immediately began to put in place legal devices to control the movement of immigrants into South Africa (Bouillon, 1998). As early as 1913, the South African authorities drafted an Immigration Regulation Act of 1913, which regulated the migration of white immigrants to South Africa (Bouillon, 1998; Landau and Singh, 2008). From 1913 to the 1930s, the Immigration Regulation Act of 1913 resulted in the migration of whites people and Jews to South Africa (Edmunds, 1997). In 1937, the South African government, led by the Afrikaners, adopted the Aliens Control Act of 1937, which is a controversial Act. It was deliberately crafted to discourage the immigration of African and non-European peoples (Cornevin, 1979; Edmunds, 1997). In the Aliens Control Act of 1937, black South Africans

were considered as temporary migrants (Bouillon, 1998). At that time, all African people were not allowed to stay in South Africa without a temporary residence permit (Bouillon, 1998; Landau and Segatti, 2009). That was also the case for black South Africans whose access to areas which were reserved for white people was conditioned by holding a temporary residence permit (Bouillon, 1998). While access to the residence permit was difficult for most African migrants entering South Africa (Bouillon, 1998; Cornevin, 1979), the authorities still issued temporary residence permits to African domestic migrants, and agricultural and mining workers (Marchand and Bouillon, 1985).

Between 1948 and 1991, the migration policy in South Africa had been under continual modification (Bouillon, 1998; Murray, 2011). In fact, in 1948, the Afrikaner nationalists, who ruled the country, developed the policy of apartheid, a policy of systematically separating black people and white people (Bouillon, 1998; Landau and Segatti, 2009). Consequently, all the skilled jobs were occupied by the white peoples (Adepoju, 2000; Bouillon, 1998; Marchand and Bouillon, 1985). In 1963, apartheid authorities further restricted the movement of African migrants to white people areas by banning family reunification (Adepoju, 2000; Bouillon, 1998).

The misdeeds of the apartheid policy have affected even the socio-economic structures of South Africa, which are essential for the survival of black people (Bouillon, 1998; Landau and Segatti, 2009). Even when the country needed skilled labour, the South African authorities skilled people from European countries (Adepoju, 2000; Bouillon, 1998; Landau and Segatti, 2009). Between 1960 and 1990, approximately 900 000 European migrants were recruited in South Africa to work in key sectors of the country (Bouillon, 1998; Edmunds, 1997; Kabwe-Segatti, 2008). Unlike African migrants who had difficulties obtaining a residence permit in South Africa, the South African authorities easily issued a permanent residence permit to migrants from Europe (Bouillon, 1998; Crush and McDonald, 2001).

However, by the 1980s, the South African authorities were becoming less strict with their apartheid policies. During that time, Indian and Coloured people were conferred separate citizenship which allowed them to register on electoral lists and to participate in parliamentary activities (Glaser, 1997; Neocosmos, 2010). In the early 1990s, the De Klerk government legislated the Aliens Control Act of 1991, which some people dubbed as the Last Act of Apartheid (Neocosmos, 2010). This act was drafted to unify and simplify all previous

migration policy texts in South Africa. Similarly, the Aliens Control Act of 1991 strengthened immigration control and protected the national job market (Bouillon, 1998).

However, during the transition period and after the multiparty elections of 1994, most of the provisions of the 1991 Aliens Control Act conflicted with the 1993 interim constitution and the 1996 post-apartheid constitution (Kabwe-Segatti, 2008; Landau and Segatti, 2009). This prompted the South African authorities to refer to the post-apartheid constitution of 1996 to structurally reform the Migration Policy Acts in South Africa. A new Migration Policy Act in South Africa, which some people consider as inclusive and non-discriminatory, was promulgated in 2002 and amended in 2004 (Neocosmos, 2010).

2.3.3 Urbanisation and migration in Johannesburg

Johannesburg is the economic and industrial capital of South Africa, and it is the largest city in southern Africa (Tomlinson, 2017). According to previous studies, it was the discovery of gold and diamond deposits in 1886 in the Witwatersrand that led to the development of Johannesburg (Mohlakoana et al., 2017; SACN, 2004; Tomlinson, 2017). However, Kok and Collinson (2006) found that migration policies in South Africa have largely influenced the trend of urbanisation and population growth in the city of Johannesburg. For example, between 1996 and 2001, the population of Johannesburg increased from 2 639 110 to 3 225 812 (SACN, 2004). In 2007, approximately 3 888 180 people lived in Johannesburg (SSA, 2007). In 2011, the South African government's statistical data estimated that the city of Johannesburg had about 4.4 million inhabitants (SSA, 2011).

The annual population growth in the urban areas of South Africa indicates that, from 1946 to 1970, and from 1970 to 1996, the annual population growth rates in Johannesburg had been 2.67% and 2.04%, respectively (SACN, 2004). In the post-apartheid period, from 1996 to 2001, and from 2001 to 2007, the annual population growth rate in Johannesburg was 4.10% and 3.16%, respectively (SACN, 2004; SSA, 2007). This revealed that, in the post-apartheid period, the population growth in Johannesburg was increased significantly.

It is important to note that, in the post-apartheid period, the trend of migration in South Africa's urban areas was dominated by the migration of black people who constituted the poorest communities in South Africa (Kok and Collinson, 2006). According to the 2011 statistical data of the South African government, the poverty rate in South Africa is 80.1%

among black people, 8.7% among coloured people, 8.6% among white people and 2.4% among Indian people (SSA, 2011).

Generally, the poverty of black people in the urban areas of South Africa and in Johannesburg can be explained by various reasons. Firstly, the rapid urbanisation of Johannesburg, which is growing more proportionately than socio-economic development (Crush and Tawodzera, 2016; Kgantsi et al., 2018), has exacerbated poverty and income inequality among the people of Johannesburg (Crush and Ramachandran, 2015; Jong, 2017; Ramachandran et al., 2017). Secondly, in the post-apartheid period, the trend of urban migration has been dominated by poor black immigration (Bennett, 2017; Kgantsi et al., 2018; Moyo et al., 2016). Thirdly, some studies have revealed that the discriminatory and xenophobic behaviour of some South African citizens against cross-border migrants prevents most forced migrants from developing sustainable livelihoods that can facilitate adequate access to basic needs (Christopher, 2001; Crush and Ramachandran, 2015; Grant and Thompson, 2015; Kgantsi et al., 2018; Tomlinson, 2017). Lastly, there are studies that have revealed that the HIV/AIDS pandemic and poor governance have also exacerbated the poverty of black people in South African cities (Brassell, 2018; Lakika et al., 2015).

2.3.4 Congolese refugees and asylum seekers in Johannesburg

Before addressing the situation of Congolese refugees and asylum seekers living in Johannesburg, it seems necessary to begin by introducing the evolution of the policy on forced migration in South Africa. Indeed, prior to the 1994 multiracial elections, South Africa had no legal provisions to guarantee the basic rights of refugees (Landau and Segatti, 2009; Rugunanan and Smit, 2011). At that time, more than 300 000 Mozambican forced migrants, fleeing armed conflict and political persecution, were living in South Africa without the South African government granting them temporary residence permits (Kabwe-Segatti, 2008; Landau and Segatti, 2009; Rugunanan and Smit, 2011). Yet, apartheid authorities easily issued a permanent residence permits to white people fleeing armed conflict in the formerly independent Portuguese and British colonies (Smit and Rugunanan, 2015, 2014). South Africa's accession to the 1951 Convention relating to the Status of Refugees, the 1967 Protocol relating to the Status of Refugees, and the 1969 Convention of the Organization of African Unity governing the specific aspects of refugee problems in Africa, occurred in the 1990s (Kavuro, 2015; Landau and Segatti, 2009; Odunayo et al., 2017). It was in 1993 that the South African government started collaborations with the Office of the United Nations

High Commissioner for Refugees (Landau and Segatti, 2009; Zihindula et al., 2017). However, the first Act which guaranteed rights for refugee and asylum seekers was Act No. 130 of 1998 which was legislated in 1998 by lawmakers in South Africa (De Jager, 2015). According to the internal provisions of Act No. 130 of 1998, forced migrants living in South Africa have the right to work, study and access basic needs, including health care, education, housing, food and social assistance (CoRMSA, 2009; De Jager, 2015; Dodson and Crush, 2015; Kavuro, 2015).

With regards to Congolese forced migration in South Africa, it is important to note that the presence of Congolese migrants in South Africa began to be reported in the late 1990s (Lakika et al., 2015; Steinberg, 2005). According to the statistical data of the United Nations High Commissioner for Refugees, since 2003 until today, the trend of forced Congolese migration to South Africa has only increased (UNHCR, 2016, 2014, 2007, 2005, 2003). However, it currently seems unclear whether Congolese refugees and asylum seekers in Johannesburg have adequate access to the socio-economic programmes which were put in place by the post-apartheid government to reduce poverty and income inequality.

2.4. Conclusion

This chapter examined the evolution over time of the concept of food security and migration policies in South Africa. In the context of rapid urbanisation in Johannesburg, existing literature that is consistent with the objectives of this study have revealed that majority of forced migrants in Johannesburg experience difficulties in accessing a better paying job and developing sustainable livelihoods. Yet, sustainable livelihoods are essential for access to healthy and sufficient food. This suggests that Congolese refugees and asylum seekers in Johannesburg, who are also forced migrants, may also experience difficulties in developing sustainable livelihoods, thus forcing them to use food survival strategies that may have a negative impact on them.

CHAPTER 3: METHODOLOGY

Chapter 3 presents the methods that were used in this study in order to identify, review, and analyse the data which was collected from interviews with household respondents. This chapter explores the conceptual and research approaches of this study. This chapter also explains how statistical methods were used for collection and analysis, and outlines the appropriate limitations and methods for data analysis.

3.1 Key tasks

According to previous studies, most forced migrants in Johannesburg do not have easy access to food and basic needs (Crush and Dodson, 2007; Jong, 2017; Murray, 2011). Yet, South Africa favours a policy of integrating forced migrants into the local community (Bennett, 2017; De Jager, 2015; Dodson and Crush, 2015; Homer-Dixon and Percival, 2018; Kavuro, 2015; Murray, 2011). This policy of integrating forced migrants into the local community also favours refugees and asylum seekers in improving their living conditions and developing sustainable livelihoods in order to access healthy and sufficient food (De Jager, 2015; Odunayo et al., 2017). The post-apartheid government has, in addition, put in place socio-economic structures to enable poor and vulnerable households to be safe from hunger (De Jager, 2015; Odunayo et al., 2017; Zihindula et al., 2015). Unlike most African countries, the South African legislation on forced migration protects the basic rights of refugees to work (De Jager, 2015; Odunayo et al., 2017), study, and access basic needs and food (Dodson and Crush, 2015; Odunayo et al., 2017). Although food is one of the most indispensable needs of people's lives (Bruinsma, 2017; Carolan, 2016; Jeukendrup and Gleeson, 2018; Whitney and Rolfes, 2018), previous studies have found that most urban households that do not develop sustainable livelihoods adopt food survival strategies that can have a negative impact on their present and future life (Gladwin et al., 2001; Rakodi, 2014).

While the nature of the rapid urbanisation in Johannesburg does not seem to be conducive in facilitating forced migrants to develop sustainable livelihoods and having access to safe and adequate food (Akampumuza and Matsuda, 2017; Battersby, 2016; Carolan, 2016), previous studies have failed to assess the food survival strategies of Congolese refugees and asylum seekers living in Johannesburg. Congolese refugees and asylum seekers in Johannesburg have deliberately crossed several borders to flee political persecution and armed conflicts, in an attempt to improve their living conditions (Grant and Thompson, 2015; Lakika et al., 2015).

However, the nature of the rapid urbanisation in Johannesburg may force them to adopt harsh food survival strategies that can compromise their future.

Therefore, it was important to conduct an in-depth study on the food security strategies of Congolese refugees and asylum seekers in Johannesburg. The study therefore, provides an understanding of how the Congolese refugees and asylum seekers behave when they experience difficulties in developing sustainable livelihoods.

One of the assumptions of this research is that a large proportion of Congolese asylum seekers and refugees are poor or very poor. Their livelihoods are characterised by intermittent and insecure labour and many households suffer from at least some periods of food insecurity.

3.2 Study areas

In principle, this study should be conducted in all districts of Johannesburg, where Congolese forced and food insecure migrants are vulnerable. However, due to time being a constraint, the study focuses on two districts in Johannesburg. These are Yeoville and Rosettenville.

Johannesburg was chosen as a study area because firstly, it is the area where the trend of post-apartheid migration has been largely dominated by poor and vulnerable migrants, including Congolese refugees and asylum seekers (Mitlin and Satterthwaite, 2013). Yet, in most cities, rapid urbanisation has exacerbated poverty and the development of unsustainable livelihoods (Grant and Thompson, 2015). Secondly, the results of a previous study revealed that in Johannesburg, a some Zimbabwean migrants were food insecure (Rudolph and Kroll, 2016). Yet, most Zimbabweans have the same cultures with South Africans and communicate in the same language (Lee, 2017; Makoni, 2017). This implies that they can better integrate themselves in Johannesburg than forced Congolese migrants whose language is another constraint to integration. Thirdly, since the end of apartheid, the level of poverty and income inequality has increased dramatically in Johannesburg (Haferburg and Huchzermeyer, 2017; Lombard and Crankshaw, 2017). Lastly, the discriminatory and xenophobic attitudes of some South Africans against Congolese forced migrants have been a characteristic in Johannesburg (Lakika et al., 2015).

3.3 Study population

This study focused on Congolese refugees and asylum seekers living in Johannesburg. This is because, according to previous studies, Congolese refugees and asylum seekers are among forced migrants who find it difficult to work in the formal sector (Jong, 2017; Lakika et al., 2015). Yet, Johannesburg is a city whereby access to food and basic needs depends on financial income. Therefore, working in the formal sector is essential for ensuring financial security which will in turn result in an access to healthy and sufficient food (Rudolph and Kroll, 2016). Congolese refugees and asylum seekers were targeted in this study because previous studies have shown that they are often victims of discrimination and xenophobia (Crush, 2017; Lakika et al., 2015). In addition, it has been necessary to focus on Congolese refugees and asylum seekers as they are among the few migrants who have crossed several borders to seek refuge in South Africa (Lakika et al., 2015).

3.4 Research design

In this study, the mixed method was adopted to collect data from households. In principle, the mixed method refers to the use of qualitative and quantitative approaches (Tolan and Deutsch, 2015). According to Johnson and Onwuegbuzie (2004), it is possible to rely on mixed methods to find a solution to research problems that derive from positivist and constructivist philosophies.

Although this study relied on the mixed method, the qualitative approach was used much more than the quantitative approach. The qualitative research method was used to describe and analyse the individual and collective actions, as well as the thoughts and perceptions of the respondents to the survey (Shoemaker and Reese, 2013).

It also uncovered in-depth information on the food survival strategies used by Congolese and asylum seeker refugees in Johannesburg. This is based on attitudes, opinions, experiences and views on the food security strategies that Congolese refugees and asylum seekers in Johannesburg are using to access food. As Sarantakos (2012) has pointed out, social realities, manifested in attitudes, opinions, experiences and perspectives, come from social interactions as perceived by survey respondents.

The quantitative research method used in this study, was adopted to collect some information on the demographic and macroeconomic profiles of household members, including family

size, age of household, and household expenses. As noted by Kothari (2004), the quantitative research method consists of numerically representing observations to describe and explain the phenomena that these observations reflect.

3.5 Sampling

For this study, data were collected in households. The household concept has been largely developed in the previous chapter 2 (see section 22). Nevertheless, there are several kinds of households. Depending on the structure, households can be grouped into male-centred households, female-centred households, nuclear households and extended households (de Saint Pol et al., 2004; Van de Walle, 2006). Male-centred households are households where the head of the household, who is male, does not have a partner or spouse (de Saint Pol et al., 2004). Female-centred households are households where the head of the household, who is female, does not have a partner or spouse (de Saint Pol et al., 2004; Van de Walle, 2006). Nuclear households are households that include two adult persons who are married or are partners (de Saint Pol et al., 2004; Schnitzer, 2016). Extended households are households with many relatives living in the same household (de Saint Pol et al., 2004). However, in this study, households that were composed of unrelated members were treated as extended households.

In this study, participants were identified through the non-probability sampling method. In each sampled household, an adult person was invited to participate voluntarily in an interview. A total of 75 household representatives voluntarily responded to open-ended questions from the survey. Of the 75 household members interviewed, 45 were selected from Yeoville and 30 from Rosettenville. Respondents who voluntarily participated in face-to-face interviews with the interviewer responded on behalf of all household members. In other words, the responses collected from the respondents concerned all members of the household.

The identification of the respondents was carried out through snowball sampling. According to Singleton et al., (1988), snowball sampling consists of selecting a small number of potential respondents, and relying on the social networks of these potential respondents to contact other respondents. Similarly, in this study, initially selected respondents facilitated contact with other respondents who met the study's criteria.

In principle, snowball sampling is generally recommended to target vulnerable and isolated populations (Singleton Jr et al., 1988). Therefore, it was imperative to use this technique to

target Congolese refugees and asylum seekers. As a reminder, Congolese refugees and asylum seekers, who are often victims of xenophobia and discrimination (Lakika et al., 2015), are vulnerable people who therefore deserve to be targeted by the snowball sampling method. Also, key informants facilitated the identification of households that met the criteria of the survey and promoted the collection of relevant information on livelihoods and livelihood strategies of Congolese refugees and asylum seekers in Johannesburg.

3.6 Data collection

In this study, data were collected through sampled household surveys. According to Babbie (2002), the survey is a method of collecting primary data from questionnaires that are consistent with the objectives of the study. Interviewing techniques, which are defined as the technique of questioning respondents to give their opinion on the objectives of the survey (Singleton Jr et al., 1988; Tolan and Deutsch, 2015; Venkatesh et al., 2013), were essential to collect the primary data of this study.

In this study, the in-depth interviews provided further insight into the food survival strategies used by Congolese refugees and asylum seeker in Johannesburg. According to Legard *et al.*, (2003), in-depth interviews add depth, detail, and meaning to a very personal level of experience. The data collection was done by adopting semi-structured interviews guided by open-ended questions and administered through in-depth face-to-face interviews. Each interview lasted approximately 60 minutes.

In addition, the questionnaire was developed to provide the observation tools that collect information from sampled households and analyse it for the purpose of qualitative and quantitative studies (Singleton Jr et al., 1988; Tourangeau, 1984). The open-ended questions in this study were helpful in deepening the debate. In addition, the perception and feelings of Congolese refugees and asylum seekers on their access to basic needs were further deepened through interviews with open-ended questions.

Face-to-face interviews were conducted between the interviewer and the adult respondents who regularly take care of food provision in the household. The interviews were conducted in the languages commonly spoken in the DRC, namely, French, Lingala, Swahili, Kikongo and Tshiluba. However, majority of the interviews were conducted in French, Lingala and Swahili.

In principle, several reasons motivated the idea of conducting the interviews in the aforementioned languages. Firstly, this study focuses on Congolese refugees and asylum seekers who have previously lived in the DRC. Secondly, as the interviews in this study were semi-structured and in-depth, it was necessary to put the respondents in favourable conditions for them to express themselves freely and deeply. Lastly, like all other forced migrants, Congolese refugees and asylum seekers are considered vulnerable people (ACAT, 2013; De Jager, 2015; Kavuro, 2015) therefore, it was important to communicate with them in their native languages in order to build confidence and confidentiality. It should be noted that the data collection was done exclusively by the principal investigator. In particular, several reasons motivated the principal investigator to become personally involved in the data collection of this study. First, as in South Africa, forced migrants are often vulnerable to discrimination and xenophobia (Crush and Ramachandran, 2017; Hlatshwayo and Vally, 2014; Kavuro, 2015; Murray, 2011), it seemed essential to focus on someone familiar with Congolese refugees and asylum seekers to collect data. Secondly, as this study relied on thematic analysis, it was necessary to entrust the collection of data to the person conducting the data analysis, so that he or she becomes more familiar with the data collected (Cohen et al., 2013; Denscombe, 2014).

3.7 Ethical considerations

Before the data was collected, the questionnaires in this study were submitted for approval to the Non-Medical Ethics Research Committee (HREC Non-Medical) of the University of the Witwatersrand. The Clearance Certificate for this study was issued in April 2017 by the Non-Medical Ethics Research Committee of the University of the Witwatersrand (see Protocol Number: H17 / 02/18 in Annex). In this study, ethical considerations were essential for collecting data from Congolese refugees and asylum seekers.

Respondents were formally assured of the confidentiality of the information collected, and the anonymity of their name. The information collected was carefully recorded and stored as hard copies. It is also important to note that no one under the age of 18 was selected to participate in the interview.

Potential respondents in each household were entitled to consult the fact sheet from the interviewer before answering the survey questions. The interviewer was required to provide verbal consent to potential respondents. Subsequently, the interviewer sought verbal consent

to obtain the agreement of the respondents, which indicated that they would participate freely and voluntarily in the interview.

As stated by Sin (2005), informed consent refers to the agreement of a person to participate in research after the purpose, risks and benefits of the research have been well explained by the interviewer. Generally, each participant is free to accept or refuse to participate in the survey (Fink, 2012). Similarly, participants had the right to interrupt their participation or to refuse to answer uncomfortable questions. It should also be noted that during the fieldwork, some respondents asked for advice on their problems with access to food and socio-economic needs.

To these topics, adequate responses were provided to alleviate the concerns of respondents. For example, some households, which have shown a willingness to find financial capital to invest in small income-generating activities, have been referred to the NGO as Jesuit Refugee Service (JRS). Some Congolese refugees and asylum seekers have been advised to regularly visit churches that distribute food to vulnerable people. Other Congolese refugees were also recommended to register their children to the Social Development Department and to the South Africa Social Security Agency (SASSA) for the Child Support Grant (CSG). Finally, respondents were informed that the results of this study would be recorded in a final report, and that a copy of this report would be provided to them upon request.

3.8 Data Analysis

In this study, it was important to proceed with the thematic analysis technique to analyse the different variables. Since qualitative research is generally diverse, complex and nuanced, it has been necessary to rely on the thematic analysis technique to obtain an accessible and theoretically flexible approach. For analysing the data of this study, several steps had to be followed. The first step was to obtain a deep and broad familiarization of the content of the answers collected from the respondents. The second step was to code the familiarized data. The third step was to search for themes, sorting the various codes into potential themes, and grouping all relevant coded data snippets into identifiable themes. The fourth step was to review the themes, examining the excerpts of the coded data and further coding the topics that were omitted in the previous steps. The fifth step was to define and denounce the themes of this study and the sixth step was to produce a report.

It is important to note that the contribution of the Chi-square statistical analysis was essential for the analysis and interpretation of the independent data between two variables. Furthermore, the quantitative data that was collected in this study was analysed by using Microsoft Excel.

3.9 Limitation of the study

This study was particularly confronted with several constraints. Time and its lack thereof, was a constraint. It was noted that data on food coping strategies needs to be collected at a time when households do not have enough resources to access food (Riley and Moock, 1995). For example, in a previous study on food security in South Africa, it was revealed that during the months of January and February, the majority of Zimbabweans living in Johannesburg had difficulty accessing food and basic needs (Tawodzera and Zanamwe, 2016). In other words, in January and February, Zimbabwean households in Johannesburg appeared to be exposed to using inadequate coping strategies to survive and access food. In contrast, households were less vulnerable to food insecurity in April. However, the protest that started at the end of the previous academic year (towards the end of 2016) had destabilized the normal course of academic activities and delayed the process of applying the survey questionnaires for approval to the Human Research Ethics Committee (HREC-Non-Medical). The clearance certificate was only approved in April 2017. As a result, data collection operations were particularly postponed to June 2017. This was done, in order to avoid collecting data in April, a month that does not generally coincide with the food shortage period for cross-border migrants in Johannesburg.

Due to the lack of time, which in turn disrupted the normal course of this study, data collection was done exclusively by the principal investigator, who was obliged to become familiar with the survey data in order to better analyse the collected information thematically.

Lastly, the data collection of this study was not carried out in all the districts of Johannesburg where most of the Congolese refugees and asylum seekers live. Therefore, the results of this study are based on the Congolese refugees and asylum seekers living in Yeoville and Rosettenville.

CHAPTER 4: SOCIO-DEMOGRAPHIC PROFILE OF THE SAMPLE

4.1 Introduction

According to previous studies, most urban households with serious difficulties in developing sustainable livelihoods are adopting survival strategies to access food and other basic needs (Knoll et al., 2017; Sonnino, 2016; Tawodzera and Zanamwe, 2016). Although food is one of the most essential basic needs (Knoll et al., 2017; Sonnino, 2016), most poor urban households are usually faced with reliance on limited resources to meet other basic needs (Eigenbrod and Gruda, 2015; Smit, 2016), including children's schooling, rent, food and health care. Similarly, there are poor urban households who can agree to sacrifice food consumption, for example, by keeping money to finance the migration of a household member to industrialised countries (Frayne, 2001; Rakodi, 1999; Ruel et al., 2009). This is done in order to ensure that those members work in companies that pay a better paying salary (Bezuidenhout et al., 2009; de Villiers, 2017). Although most previous studies have revealed that, the trend of migration is partially related to the socio-demographic profiles of household members (de Villiers, 2017; Myburgh, 2004; Pojmann, 2017). It is also important to note that the sociodemographic profiles of household members are also essential for assessing the food survival strategies of poor and food-insecure urban households (Battersby, 2016). Therefore, in this study, it was necessary to identify the sociodemographic profiles of Congolese refugees and asylum seekers living in Johannesburg, particularly in Rosentenville and Yeoville. Specific information on sociodemographic profiles of sampled households and household members is presented in the subsequent section.

4.2 Sociodemographic profiles of sampled households

Socio-demographic profiles of households are generally characterized by several factors (Chen and Dunn, 1996; Raphael, 2016; Schnitzer, 2016). In addition, households can also be organized into male-headed households and female-headed households (de Saint Pol et al., 2004; Tawodzera and Zanamwe, 2016). Male-headed households are the households where the head of household is male (de Saint Pol et al., 2004), and female-headed households are households where the head of household is female (de Saint Pol et al., 2004).

In the context of this study, it was necessary to focus on the following factors, the size, structure and profiles of the respondents. These factors, generally have an impact on the food security of poor urban households (Corbett, 1988; Kimani-Murage et al., 2014; Tawodzera and Zanamwe, 2016). In a previous study conducted in two cities in South Africa (Johannesburg and Cape town), it was revealed that the size and structure of a household have a influence on the access to food in households where there are Zimbabwean migrants (Crush and Tawodzera, 2016). Some authors have revealed that in order to successfully carry out studies on access to food for poor households, it is important to target the person who manages the food for the household (Bickel et al., 2000; Moser, 1998). Some findings from previous studies have found that in most households, women are responsible for cooking and sharing food to household members (Dodson and Chiweza, 2016; Flagg et al., 2014; Sidenvall et al., 2000). Therefore, in this study, it was necessary to present and analyse the factors that influence the socio-demographic profiles of sampled households, based on the size and structure of households, as well as the profiles of the respondents.

4.2.1 Household size

Table 1 illustrates that the total number of household members sampled is 326. The total size of sampled household members ranges from 1 to 10 and the average size, median size and modal size are all 4. In Rosentenville, 162 people lived in sampled households. The total size of household members ranged from 1 to 10, and the mean, median, and modal sizes were 4. In Yeoville, 164 people lived in sampled households. The total size of household members ranged from 1 to 8, and the average was 5, with a median and modal size of households of 4. This revealed that, regarding household size in the two study areas, there was not a characteristic difference. In other words, the household size in Rosettenville was almost similar to that of households in Yeoville.

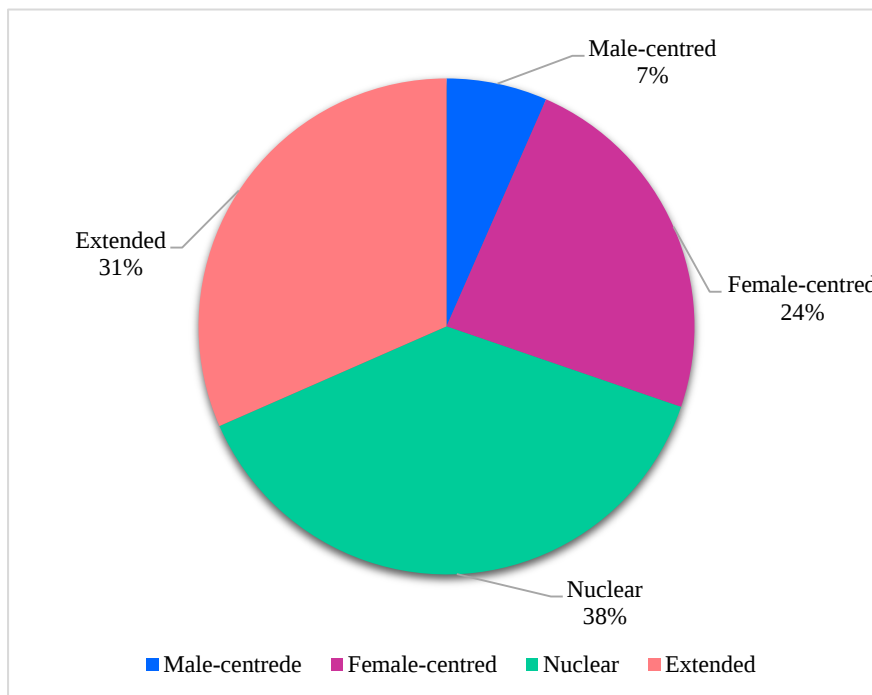
Table 1: Distribution of household size and study areas

Study areas	Number	Mean	Median	Mode	Minimum	Maximum
Rosettenville	162	5	4	4	1	10
Yeoville	164	4	4	4	1	8
Total	326	4	4	4	1	10
<i>(Source: Research Survey, 2017)</i>						
<i>Note: Used Excel to compute the mean, median, mode, maximum and minimum</i>						

4.2.2 Household structure

This study was conducted in 76 households. 36 households in Rosettnville and 40 households in Yeoville. Overall, the proportion of nuclear households was 38%, extended households were 31%, female-centred households were 24% and male-centred households were 7%, as illustrated in Figure 1.

Figure 1: Proportion of the household structure

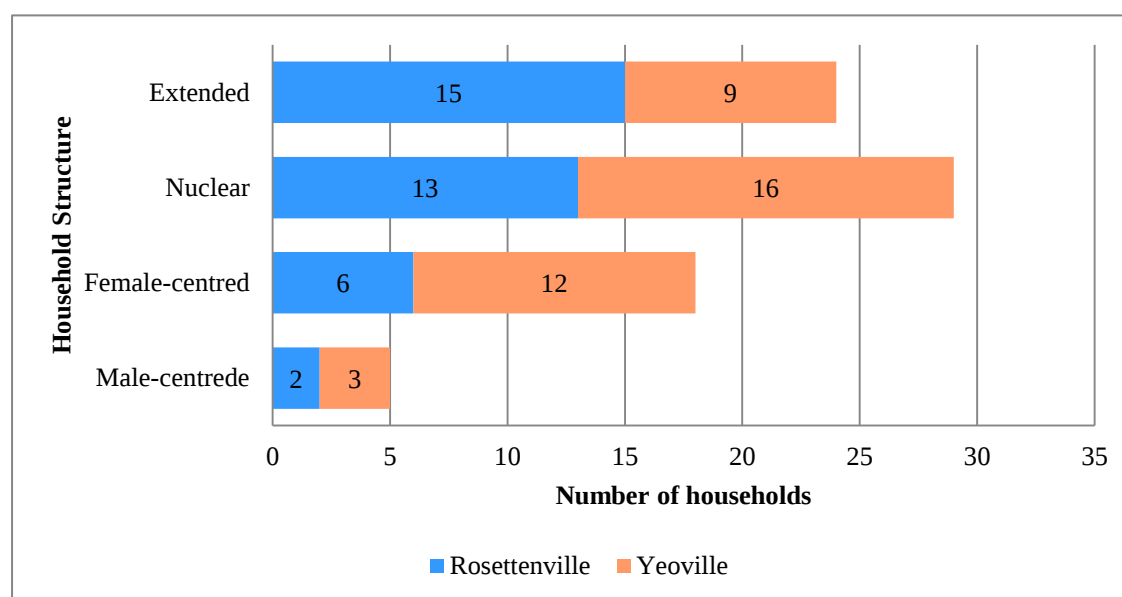


(Source: Research survey, 2017)

However, relative to the study areas, the number of nuclear households, female-centred households and male-centred households were larger in Yeoville than in Rosettnville, as illustrated in Figure 2. In contrast, the largest number of extended households was larger in Rosettnville than in Yeoville. This revealed that majority of the households in Yeoville were more likely to live with other relatives and non-relatives.

Table 2 illustrates that there were more male-headed households as compared to female-headed households, and that the households in Yeoville had the highest number of male-headed households and female-headed households, as compared to Rossetnville. This revealed that even in extended households, male-headed households dominated

Figure 2: Proportion of household structure in study areas



(Source: Research survey, 2017)

Table 2: Headed household and study areas

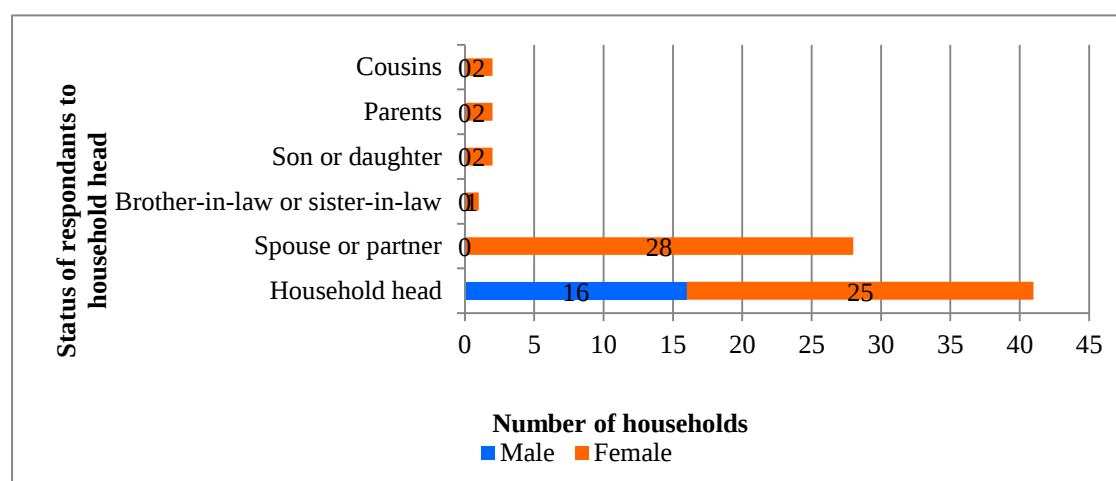
Household headed	Rosettenville		Yeoville		Total	
	Number	Percentage	Number	Percentage	Number	Percentage
Male-headed	23	63.9	26	65.0	49	64.5
Female-headed	13	36.1	14	35.0	27	35.5
	36		40		76	

(Source: Research survey, 2017)

4.2.3 Respondent profile

In studies of food survival strategies of poor urban households, it is imperative to target the adult who prepares and serves food in the household (Burchi and De Muro, 2016; Christiaensen and Boisvert, 2000; Knoll et al., 2017). As in most developing countries, the role of preparing, cooking and serving food is often reserved for women (Cai, 1998; Maxwell et al., 2003; McIntyre and Rondeau, 2004; Sidenvall et al., 2000). Therefore, in this study it was particularly important to focus more on the female population in households with male and female members, in order to collect household information. Thus, information on the socio-demographic profiles of the respondents in this study was collected and analysed according to their gender and their relationship to the head of the household. The details of the respondent's profiles are shown in Figure 3.

Figure 3: Gender and status of respondents to head of households



(Source: Research survey, 2017)

In practice, the details of the respondent's profiles are shown in Figure 3 above. However, early information from this section revealed that Figure 3 illustrates that females actively participated in face-to-face interviews with the interviewer. Out of all the interviewees in this study, 60 were female and only 16 were male. However, the few male respondents who participated in the interviews of this study were exclusively heads of the households. In the end, more than half of the respondents were heads of households and about a quarter of other respondents were wives and partners to the heads of households.

4.3 Information on household members

According to Che and Dunn (1996), households rely on social factors, which include legal rules and responsibilities that determine the ways in which household resources must be accessed and used by its members. However, within households, members do not contribute financially to the same height (Chen and Dunn, 1996). Bruck and Schindler (2008) assumed that household allocations and lack of coordination in food consumption decision-making could be the basis for the level differences. In addition, in a study by Van De Walle (2006), it was revealed that the majority of African households tended to live in extended families rather than nuclear families.

As a result, it was necessary to identify the composition of household members, the reasons for the migration of household members to South Africa and the relationships of household members to household heads. However, it is important to note that in this part of the study,

members of sampled households were identified according to their relationship to household heads.

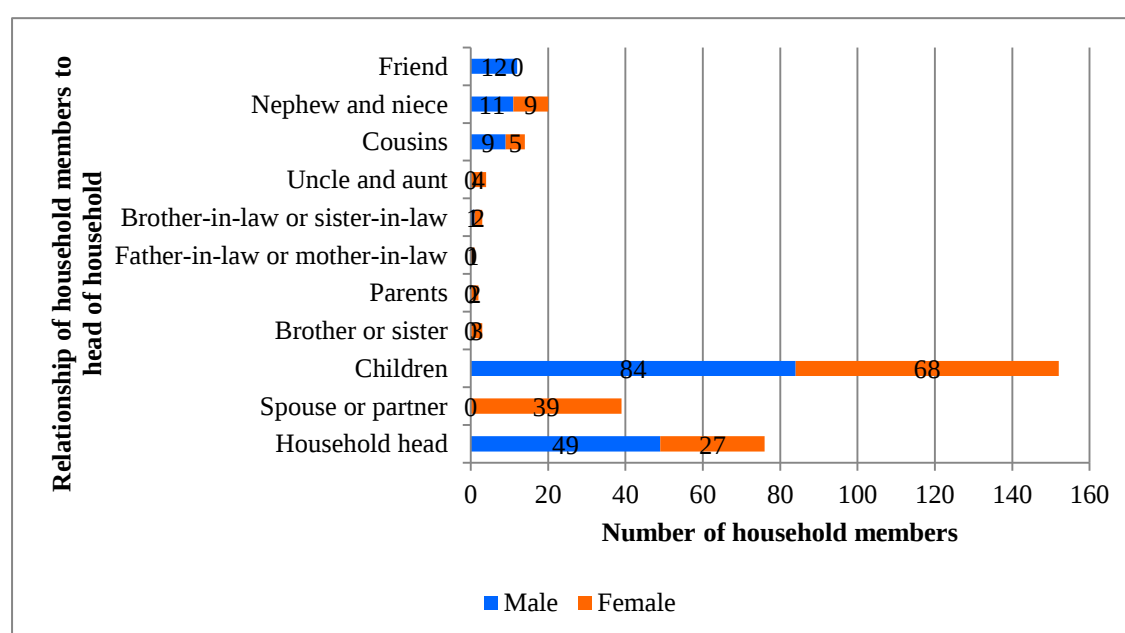
4.3.1 Composition of household members

By categorising sampled household members according to their relationships to household heads, the results shown in Figure 4 revealed that 46.6% of household members were children of the household heads, 23.3% were household heads, 12.0% were spouses or partners, 6.1% were nephews and nieces, 4.3% were cousins, 3.7% were friends, and 1.2% were uncles and aunts.

On the other hand, the proportions of the other related members, namely the nephews and nieces of the household head; the cousins ; uncles and aunts; the brothers-in-law and sisters-in-law; brothers and sisters; the dads and moms, and fathers-in-law and mothers-in-law were 6.1%; 4.3%; 1.2%; 0.9%; 0.9%; 0.6% and 0.3%, respectively. Similarly, it is also important to note that in this study; only 3.7% of household members were friends to household heads. This reveals that sampled households were strongly composed of relative members.

The results shown in Figure 5 reveal that, majority of the other household members were female. This revealed that the majority of female members of sampled households tend to live with relative members or with non-relatives members.

Figure 4: Gender distribution of household members (in relationship to head of household)



(Source: Research survey, 2017)

During the interviews, one respondent said,

“In Congo, I was comfortable because I lived with my parents. But here in South Africa, I'm not comfortable. In addition, as I live with my older brother, I do not often eat the food of my choice because my sister-in-law is hard on me. However, although I am not comfortable in my older brother's house, I am forced to live with him because if I rent in a room, or live with friends, I may have trouble finding marriage because, men will believe that, I am a prostitute” (28 year old Congolese interviewee, Johannesburg).

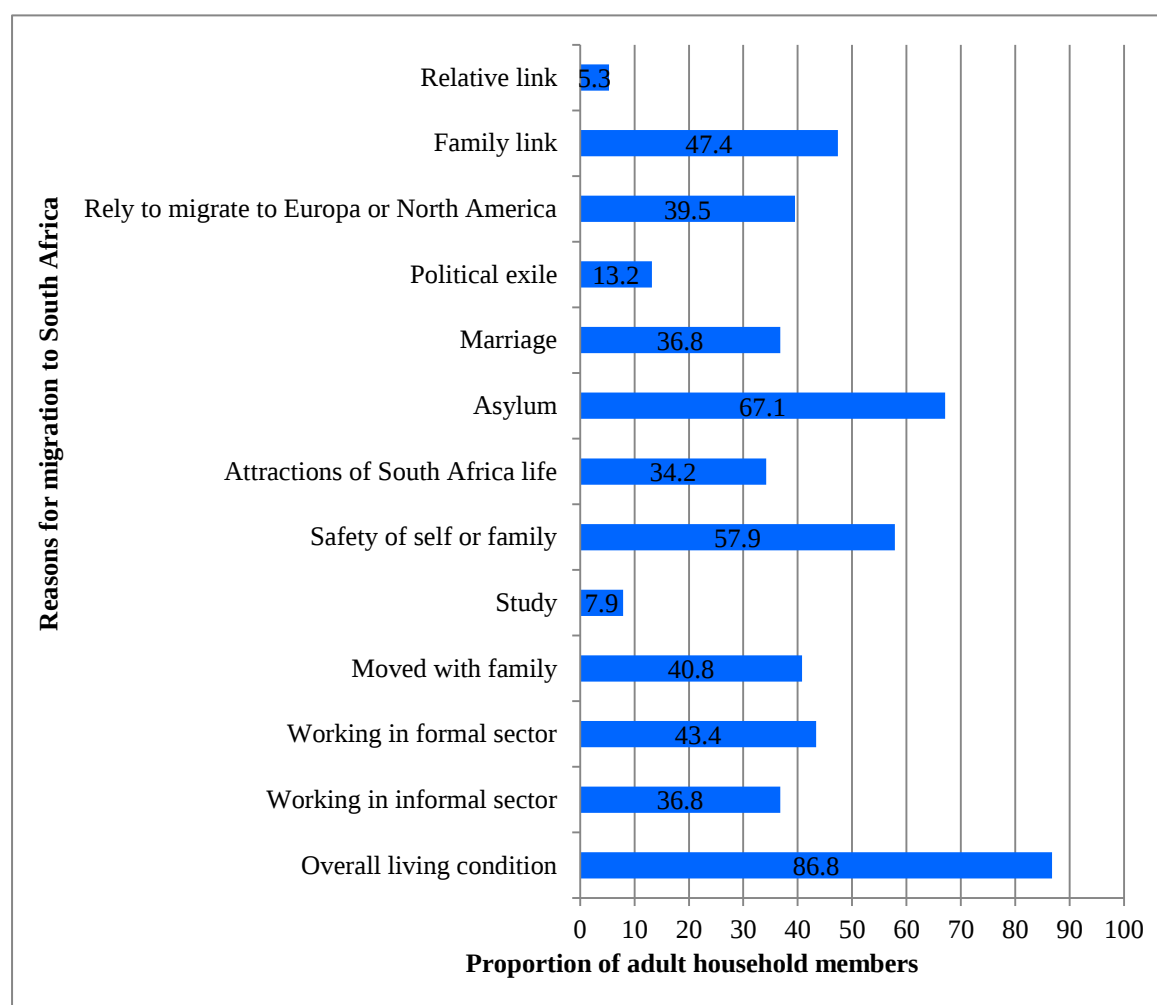
From the foregoing, it seems that social reasons, such as the search for marriage, had some responsibility for the motivations for female household members to live with relatives. However, to understand the reasons for the presence of older women like mothers, mothers-in-law and aunts, it was necessary to study the reasons for the migration of household members to South Africa from the DRC.

4.3.2 Reasons for migration to South Africa

It seems clear that since the end of apartheid, South Africa is facing an influx of Congolese refugees and asylum seekers (Lakika et al., 2015; Smit and Rugunanan, 2015). However, the DRC and South Africa do not have common borders. In most countries bordering the DRC, there is a large community of Congolese forced migrants who have fled armed conflict and political persecution (Bilgili et al., 2017). Therefore, in this study, it was necessary to determine the motivations that pushed Congolese refugees and asylum seekers to cross several borders in order to immigrate to South Africa. Especially that even in these sampled households, there are adult members, such as mothers-in-law and mothers to household heads, who do not seem to be in danger of political persecution in the DRC.

According to the information presented in Figure 5, the vast majority of household members have immigrated to South Africa to improve their living conditions. In practice, the reason for immigrating to South Africa to improve the living conditions of household members was recorded in 86.8% of the sampled households.

Figure 5: Reasons for migration to South Africa



(Source: Research survey, 2017)

The proportions of household members who migrated to South Africa to apply for asylum; their safety and the safety of their families; family reunification; have to move with their family; migrate to Europe or North America; and join the marriage, were 67.7%; 57.9%; 47.4%; 40.8%; 39.5% and 36.8% of sampled households. Similarly, the proportions of household members who entered South Africa to work in the informal sector; to seek political exile; to study and relative link, were 36.8%; 13.2%; 7.9% and 5.3%.

Looking at the proportion of household members who migrated to South Africa for relative links, it can be estimated that most mothers of heads of households, mothers-in-law and aunts lived in South Africa as member relatives. During an interview, a woman revealed that,

“When I arrived in South Africa, I had difficulties excelling in my business because there was no one to keep my children in my house. For that, I did my best to have my mother

come to South Africa to take care of my children. And since she came, I have been comfortable, because even though I am not at home, I know somebody is taking care of my children” (38-year-old Congolese interviewee, Johannesburg).

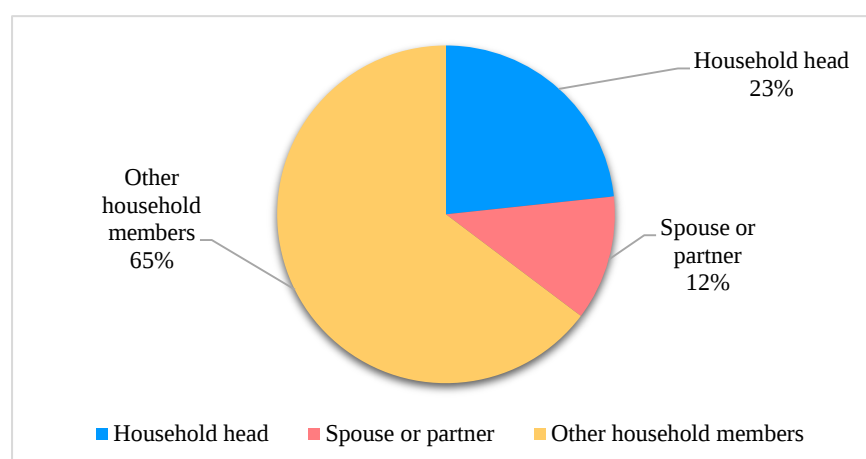
Previous information revealed that household members were relying heavily on improving their living conditions. Some household members relied also on relative members to take care for their children. However, so far, there is no information on the profiles of sampled household members. Therefore, in the following section, it was necessary to study the profiles of sampled household members, focusing on the relationships of household members to household heads.

4.3.3 Relationship of household members to household heads

In this part of the study, it was necessary to subdivide household members into three categories, household heads, spouses and partners, and other members. However, since the household concept has often been fluid and difficult to address (Van de Walle, 2006), it was necessary to let respondents give their views on the categorization of their households.

According to the results shown in Figure 6, the proportion of household heads was 23%, that of spouses or partners was 12% and that of other household members was 65%.

Figure 6: Relationship of household members to household heads

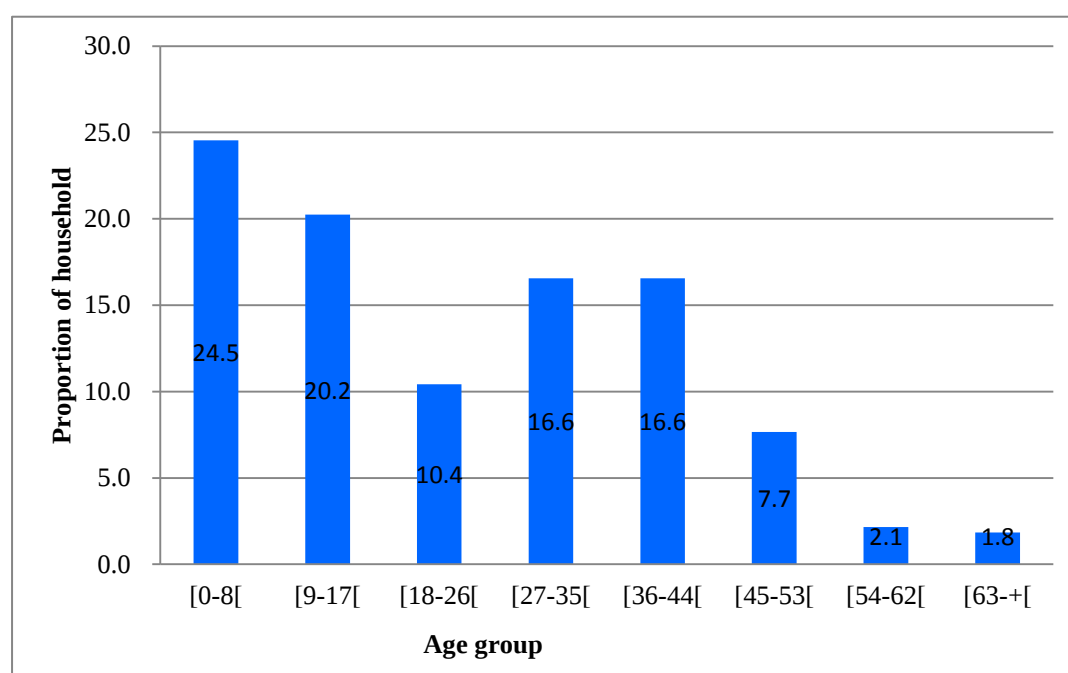


(Source: Research survey, 2017)

However, it was noted that majority of household heads and other household members were male, as illustrated in Figure 7. Similarly, although most members, aged 9 to 17, were born before their parents migrated to South Africa, the largest proportion of members under the

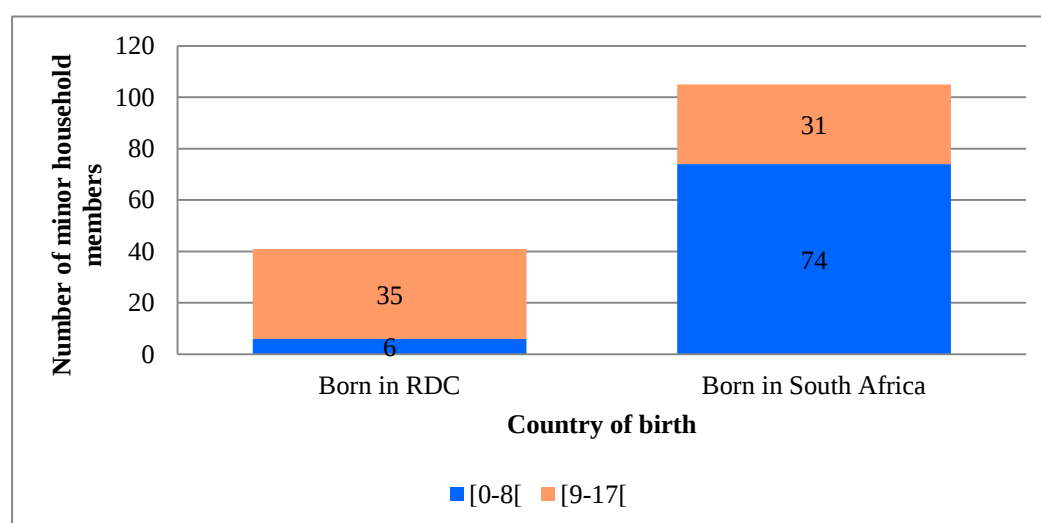
age of 18 was born in South Africa, as illustrated in Figure 8. Although about 70% of household members were also under age 35, the majority of household members aged 36 to 62 were household heads. In fact, in this study, about 45% of household members were under the age of 18, 10.4% were between 18 and 26 years old, 33.2% were between 27 and 44 years old, 7.7% were between the ages of 45 and 53, and about 4% of other household members were over age 54, as illustrated in Figure 10.

Figure 7: Age group of household members



(Source: Research survey, 2017)

Figure 8: Minor household members and their country of birth



(Source: Research survey, 2017)

It is important to note that among the minor household members, members aged 0 to 8 years were numerous, as members aged 9 to 17 years. In addition, the majority of the minors in the sampled households were born in South Africa, that is, they were born after their parents migrated to South Africa (see Table 3).

Table 3: Gender distribution of relationship of household members to household head

	Male		Female	
	Number	%	Number	%
Household head	49	64.5	27	35.5
Spouse or partner	0	00.0	39	100
Other household members	117	55.5	64	44.5
Total	166	51.0	160	49.0

(Source: Research survey, 2017)

Although the number of household members sampled in Rosettenville was almost similar to that of Yeoville, Yeoville had the highest proportion of household heads and other household members. On the other hand, Rosettenville had the highest proportion of spouses and partners to heads of households.

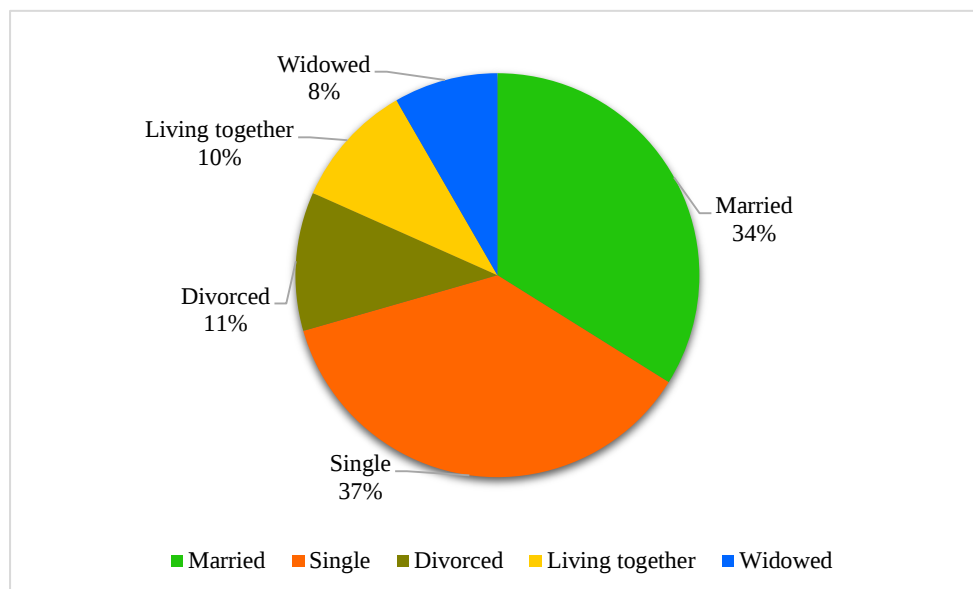
In this study, it was necessary to note that respondents from sampled households had a particular perspective on the qualification of household members. In fact, according to the people who took part in the interviews, the head of the household was the person in whom the other members of the household had confidence for the good organization of the household (de Saint Pol et al., 2004). In other words, the head of the household was the person in the household who had the final decision on the allocation of household resources. However, in households where the person who made the final decision lived with a partner (married or living together), the head of the household was the man (de Saint Pol et al., 2004; Schnitzer, 2016). However, there were also married people who lived as other members of the household. In contrast, household members considered marital partners as household heads, such as their spouses or partners. But children, cousins, brothers-in-law and sisters-in-law, uncles and aunts, stepfather and friends were considered members of the household.

Marital status

Figure 9 illustrates that 37% of adults in households were single, 34% were married, 11% were divorced, 10% were living together, and 8% were widowed. However, unlike the majority of single people who had a significant proportion of other household members, the

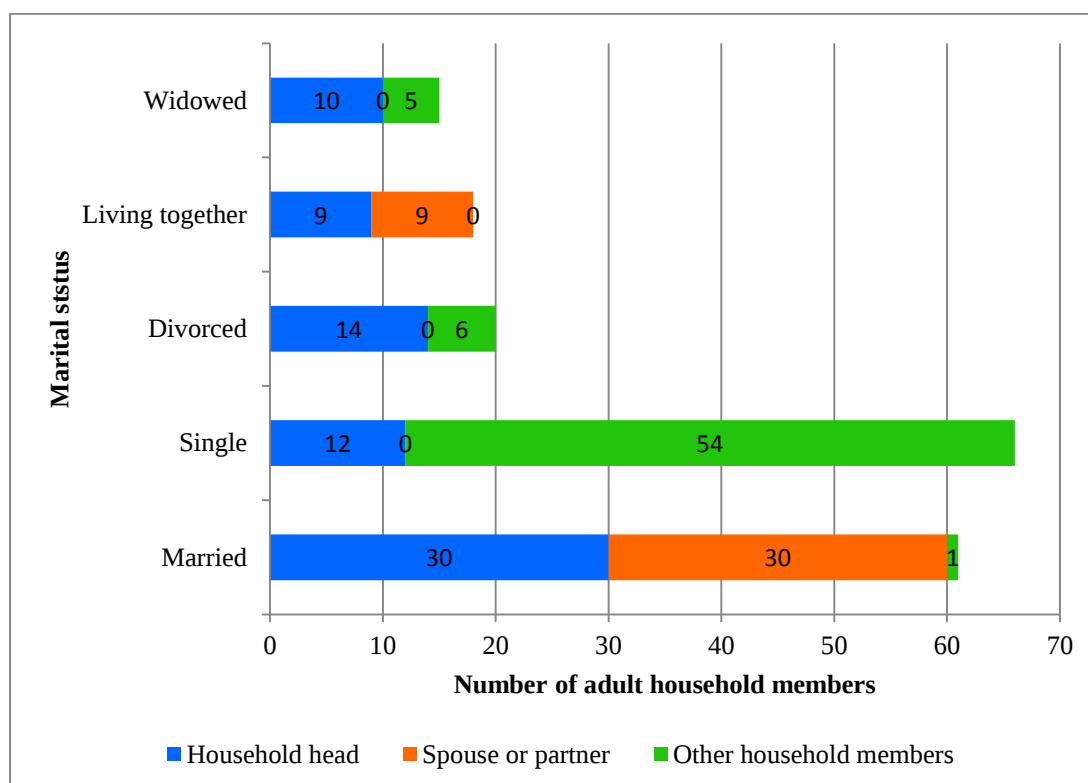
highest proportions of widowed and divorced persons were household heads, as illustrated in Figure 10.

Figure 9: Marital status of adult household members



(Source: Research survey, 2017)

Figure 10: Marital status and relationship of household members to household head



(Source: Research survey, 2017)

Figure 10 illustrates that although living together and married households have the same proportions of heads of households, and spouses or partners, about 1.6% of married households were in the other household member's category. This explains why, in this study, it was likely that married couples whose husbands were not heads of households would meet. In addition, majority of the widowed and divorced people were female, unlike most singles. This shows that divorced and widowed people may be likely to experience difficulties in developing sustainable coping strategies and access to food. This is because, according to previous studies (Misselhorn, 2005; Rakodi, 1995; Zagorsky, 2005), people living without partners were more vulnerable to food insecurity and poverty.

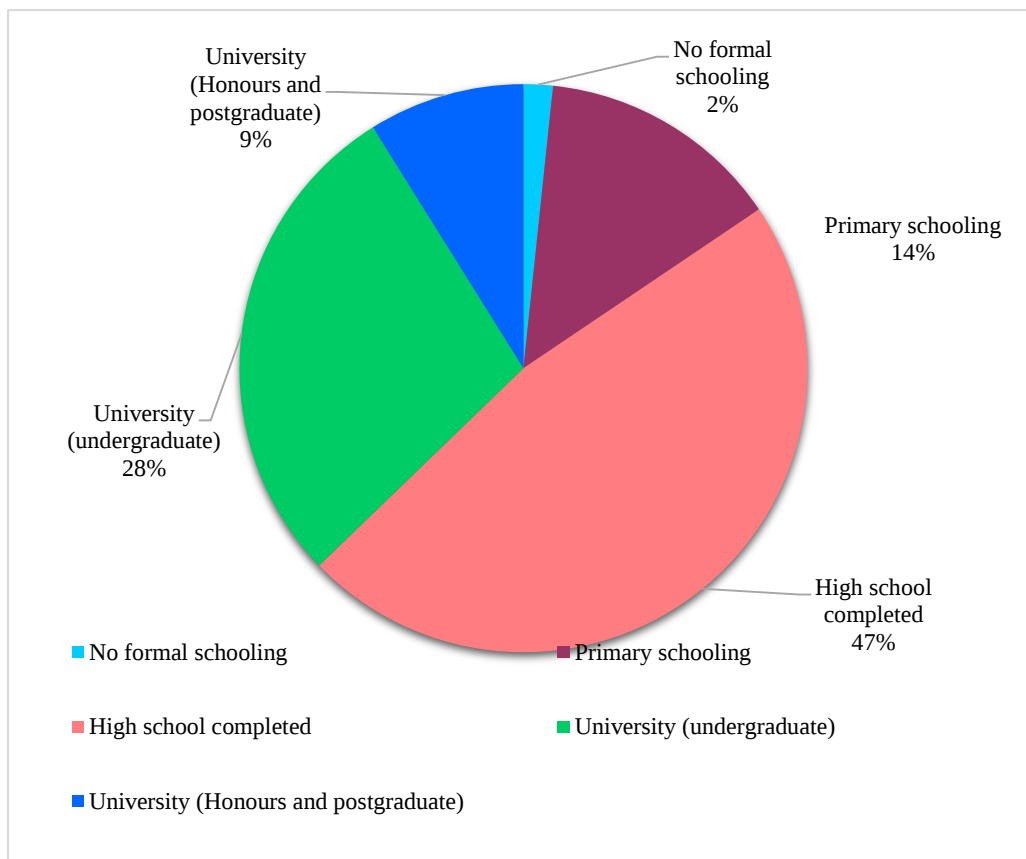
Education profile of adult household members

Figure 11 illustrates that 47% of the adults in households had completed high school, 28% had an undergraduate degree, 14% had a primary school certificate, 9% had a postgraduate degree, and 2% had never been to school.

Figure 12 illustrates that the largest proportion of household members who had completed university, and adults who had completed high school were household heads. The study illustrates that less than 40% of sampled households had university degree, which means that they are qualified to a level which can allow them to practice skilled work. The 60% constitutes the other household members and they were either at a semi-skilled level, meaning they held a secondary school certificate, or at a low-skilled level, meaning they held a primary school certificate or had never been to school. The results of previous studies have shown that in Johannesburg, low-skilled and unskilled people face serious difficulties in obtaining employment (Saunders, 2011; Turok and Borel-Saladin, 2014). Therefore, this means that a portion of the 60% of other household members face difficulties when it comes to obtaining employment.

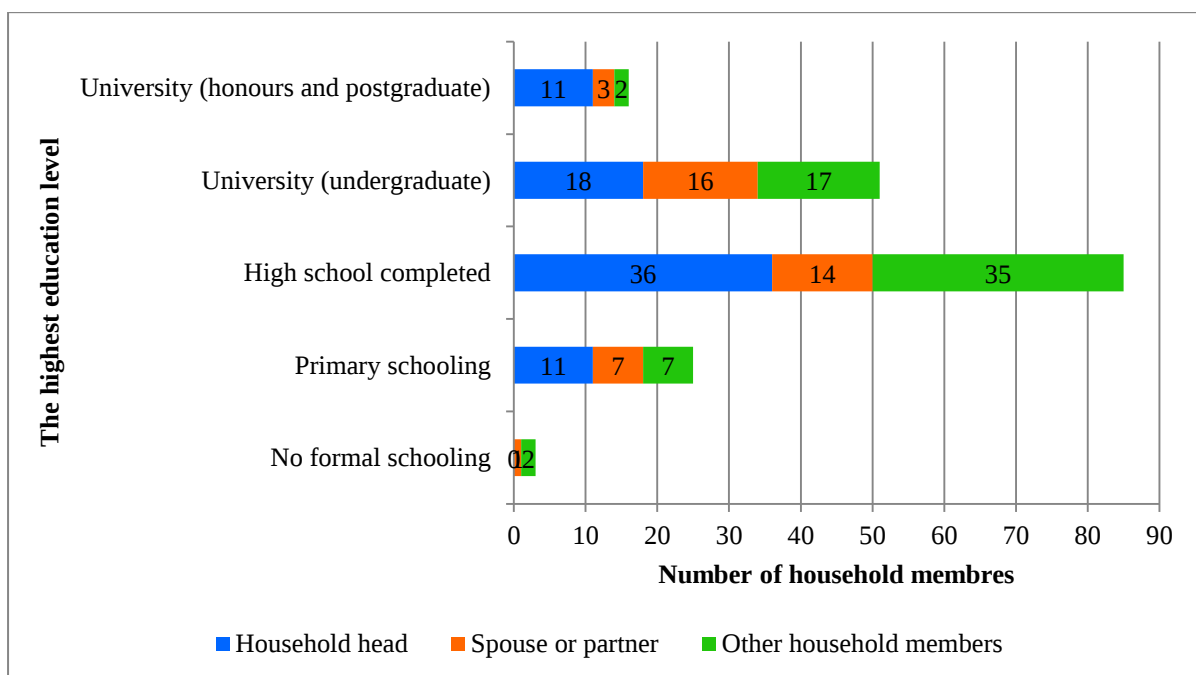
Figure 13 illustrates the level of education based on gender. It is noted that majority of the females have completed high school and have an undergraduate degree. This means that they are at a level which allows them to be employable.

Figure 11: Marital status and relationship of household members to household heads



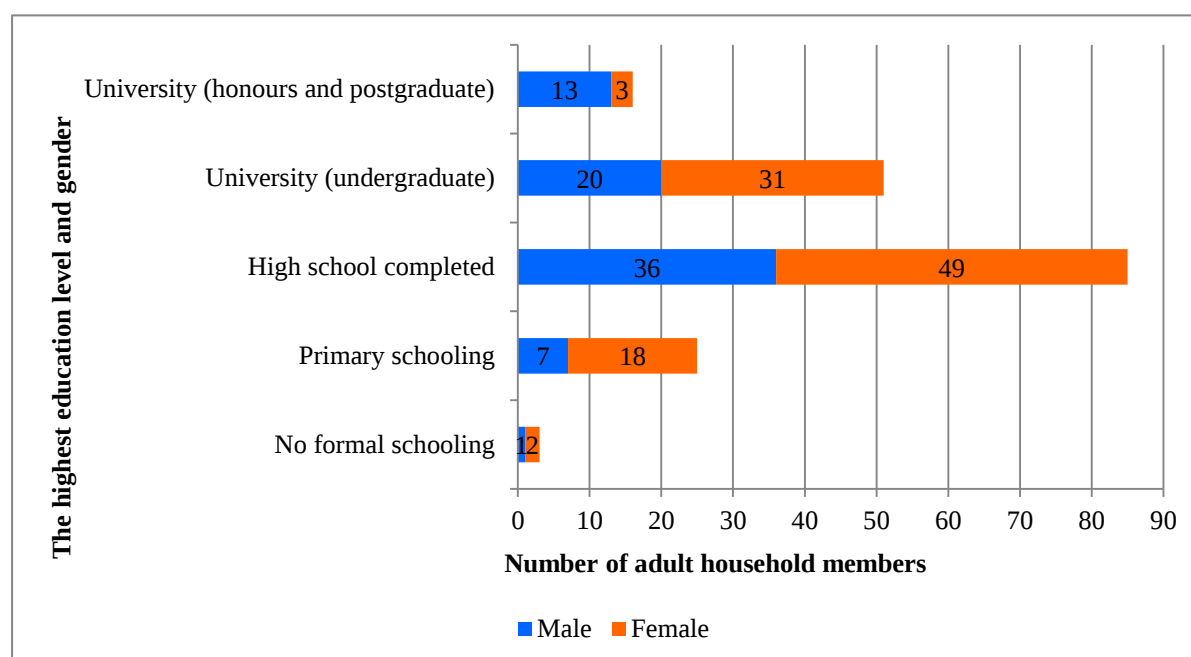
(Source: Research survey, 2017)

Figure 12: Education level distribution of relationship of household members to household head



(Source: Research survey, 2017)

Figure 13: Education and gender



(Source: Research survey, 2017)

Legal status of adult households and study areas

While the legal status may have an impact on household income, the results collected in this study reveal that majority of household members were asylum seekers, as shown in Table 4. In addition, although all categories of household members had a significant proportion of those who held asylum seeker documents, other household members had a higher proportion than other categories. Yet previous studies have revealed that in South Africa, asylum seekers do not receive government social subsidies to reduce their level of poverty (De Jager, 2015). Therefore, it can be estimated that majority of household members who do not hold refugee statuses may have more difficulty in reducing their level of poverty.

Table 4: Legal-status of adult household

	Asylum seekers		Refugees status	
	Number	%	Number	%
Household head	55	73.3	20	26.7
Spouse or partner	28	71.8	11	28.8
Other household members	56	84.8	10	15.2
Total	139	77.2	41	22.8

(Source: Research Survey, 2017)

4.4 Conclusion

It is noted that in order to evaluate food survival strategies in urban areas, it is necessary to take into consideration the socio-demographic profiles of poor and food-insecure urban households (Cai, 1998; Tawodzera and Zanamwe, 2016). Therefore, in this study, it was necessary to identify the socio-demographic profiles of Congolese refugees and asylum seekers in Johannesburg. The above results were particularly relevant to Congolese refugees and asylum seekers living in Rosettenville and Yeoville. Although the proportion of male-headed households is almost double that of female-headed households, the proportion of male-centred households was very small relative to the proportion of other household structures. However, it should be noted that most respondents who participated in the interviews in this study were female. The sampled households also had a significant number of related members. Only 12% of household members were married or living with a partner, more than half of the household members were of working age and more than 75% of household members had at least completed high school. Similarly, the proportion of household members obtaining refugee status was higher than that of household members who obtained asylum seekers.

CHAPTER 5: HOUSEHOLD LIVELIHOODS AND HOUSEHOLD INCOME

5.1 Introduction

Household income is essential for access to basic needs and food in most cities in South Africa (Crush et al., 2011; Dodson and Chiweza, 2016). However, to access basic food and needs, household members usually rely on informal work and other alternative livelihood strategies (Crush et al., 2011), and in urban areas of southern Africa, most informal occupations have the characteristics of survivalist activities (Frayne, 2001; Okyere and Kita, 2015; Valodia et al., 2006). Survivalist activities are types of activities, usually economic, that are not considered to have the potential to generate decent income and create better paying job opportunities (Ranyane, 2015). According to Ranyane (2015), occupations in survivalist activities are activities in the informal sectors that provide income for the survival of household members.

Therefore, this chapter focuses on the livelihoods of sampled households, to assess whether the Congolese refugees and asylum seekers in Johannesburg are developing sustainable livelihood strategies. To address this issue, it was necessary to identify the main occupations of household members, the alternative livelihoods of households and the monthly incomes of sampled households.

5.2 Main occupations of household members

In urban areas in Southern Africa, similarly to Johannesburg, it was revealed that formal and informal work were essential sources of income for poor households (Frayne, 2001; Okyere and Kita, 2015; Satterthwaite and Tacoli, 2002; Valodia et al., 2006). Therefore, as this study focuses on a portion of Congolese forced migrants in Johannesburg, such as Congolese refugees and asylum seekers, it is necessary to present the main occupation of sampled household members. Similarly, it is necessary to analyse the variables that influence the main occupations of household members. In this study, the main occupations of household members are the activities, formal and informal sectors, which have the largest contribution to household income (Bickel et al., 2000). However, the unemployed are considered as people who have the capacity to work, but who are unemployed after unsuccessfully seeking paid work (Warr, 1987).

5.2.1 Presentation of the main occupation of household members

According to the results shown in Table 5 below, 43.9% of adult household members were unemployed, 8.3% were students, 16.1% were unskilled workers, 10.6% were personal security agents, 6.7% worked in the informal economy and 5% were in the business (self-employed). The proportion of drivers, which was 2.2%, was equivalent to that of the service workers. The proportion of skilled manual workers, which was 1.1%, was equivalent to that of office workers, and foreman. It was noted that 52.2% of adult household members were unemployed and were students, 22.8% were low-skilled workers, 16.1% were semi-skilled workers, and 8.9% were skilled workers. This revealed that a large proportion of adult household members did not have better paying jobs to support them. Previous studies have shown that in Johannesburg, the unemployed and the poor are likely to experience difficulties in accessing adequate food. Therefore, since most adult members of sampled households have difficulties finding better paying job, it seemed necessary to further identify the factors that influence the main occupation of the household members

Table 5: Main occupation of household members

	Numbers	Percentage
Skilled	16	8.9
Skilled manual work	2	1.1
Business (self-employed)	9	5.0
Officer worker	2	1.1
Professional worker	3	1.7
Semi-skilled	29	16.1
Service worker	4	2.2
Security service	19	10.6
Driver	4	2.2
Foreman	2	1.1
Low-skilled	41	22.8
Informal economy	12	6.7
Unskilled manual worker	29	16.1
Others	94	52.2
Student	15	8.3
Unemployed	79	43.9

(Source: Research survey, 2017)

5.2.2 Factors influencing the main occupation of household members

According to Frayne (2001), the household is a structure made up of a certain number of people who cooperate socially and economically. In addition, Bryant and Zick (2005) found that in difficult times, households usually rely on the input of all members to maximize their income. Therefore, in this part of the study, it was necessary to present and analyse the factors that influence the main occupation of household members. Thus, focusing on the relationships of household members to household heads, the study areas, the legal status of household heads, the sex of working household members, and the level of education of household members who work.

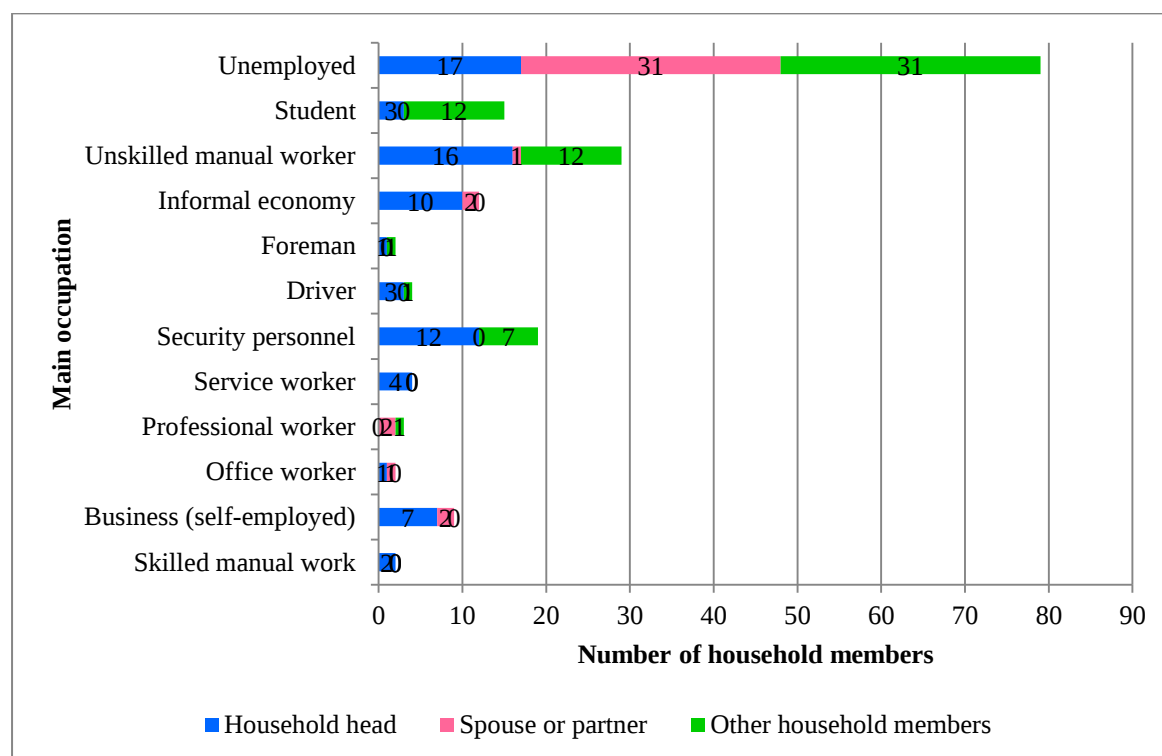
Relationship of household members to household heads and Gender of working members

In this study, it was necessary to identify the relationships between household members and household heads, as well as the main occupations of household members. This is because Bryant and Zick (2005) revealed that the problem of resource allocation within the household can cause different nutritional levels.

However, it is important to note that the data presented and analysed in Figure 14 illustrates that skilled manual workers and service workers were heads of households. Similarly, the majority of workers in the informal economy, self-employed, drivers, personal security agents and unskilled manual workers were heads of households. In contrast, the largest numbers of professional workers were spouses or partners, and majority of the household members were students. In addition, when analysing the data, it was found that the main occupations of household members were dependent on the relationships of household members to household heads.

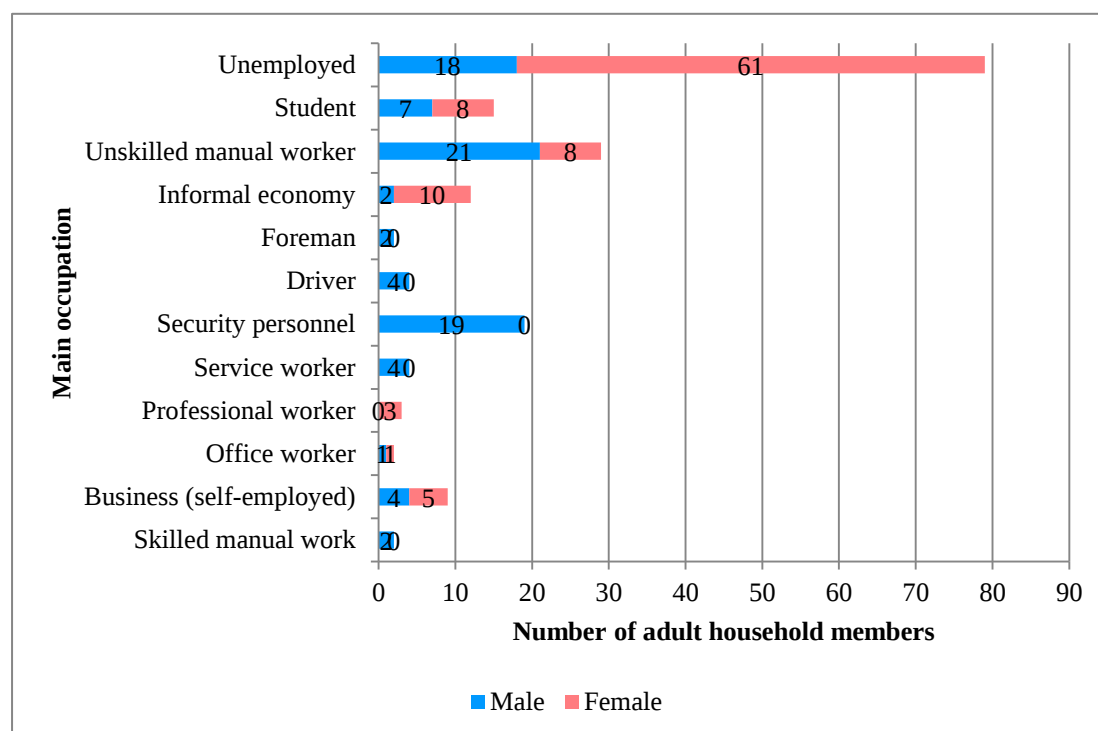
The results presented in Figure 15 illustrate that female members constitute a large proportions of unemployed, students and workers in the informal sectors. This has shown that female-headed households may have difficulty finding better paying jobs. In addition, Bryant and Zick (2005) revealed that there may be a relationship between the nutritional difference within the household and the resource allocation problem. Therefore, it can be concluded that female-headed households are more vulnerable to food insecurity.

Figure 14: Main occupation of household members and relationship of household members to household heads



(Source: Research survey, 2017)

Figure 15: Sex distribution and main occupation of household members



(Source: Research survey, 2017)

The highest level of education of working members, Legal status and Study Areas

In a study by Saunders (2011), it was revealed that in Johannesburg, skilled people have the facilities to access skilled jobs (Grant and Thompson, 2015; Saunders, 2011; Turok and Borel-Saladin, 2014). Yet while skilled jobs have generally generated decent incomes (Turok and Borel-Saladin, 2014), it has been found that most skilled forced migrants, including Congolese refugees and asylum seekers, face difficulties in finding the well-paying jobs (Hunter and Posel, 2012; Turok, 2014).

Therefore, in this study, it was necessary to identify the relationship between the main occupation of household members and their level of education. According to the results shown in Figure 16, majority of skilled and semi-skilled workers had a university degree.

On the other hand, most informal sector workers, unskilled manual workers and unemployed persons had a secondary school diploma. Similarly, majority of household members who had primary school certificate and those who had never been to school, worked in the informal sector, in unskilled manual labour and were unemployed.

Therefore, while the hypothesis that low-skilled people in urban areas of South Africa have difficulty finding sufficient gainful employment, this is true (Saunders, 2011; Turok and Borel-Saladin, 2014), then, it can be assumed that most household members, including women, do not have the opportunity to find a better paying job. This is because, by looking at Figure 15 of this study, it is evident that female members of sampled households are in large numbers unemployed.

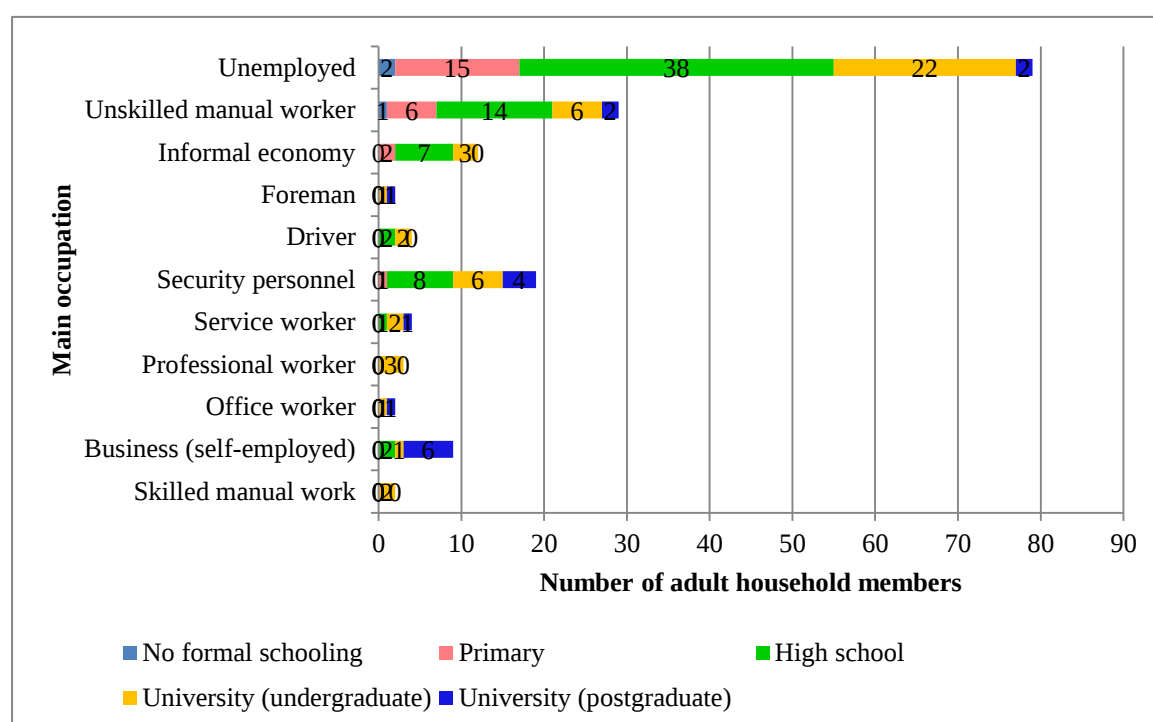
It is also important to note that in this study it was necessary to identify the relationship between the main occupation of household members and their legal status, particularly for the Congolese refugees and asylum seekers sampled in this study. This initiative was needed in order to determine whether the Congolese refugees and asylum seekers sampled in this study had the same opportunities to access to the well-paying jobs. This is because some previous studies have shown that, unlike refugees, asylum seekers face many difficulties in finding better paying jobs (Grant and Thompson, 2015; Smit and Rugunanan, 2015).

According to the results shown in Figure 17, majority of the unemployed, students, unskilled manual workers and workers in the informal economy were asylum seekers. On the other hand, most household members who were skilled manual workers and self-employed had the

status of being refugees. Similarly, half of the drivers, the foreman and the ex-officio workers, had the status of refugees. Therefore, while it is true that asylum seekers have difficulty finding a job, it may be likely that the majority of female members of sampled households have difficulty finding employment. This study shows that, skilled workers and self-employed workers held the status of refugees, so it can be said that the status of refugees can be considered indispensable for access to skilled jobs.

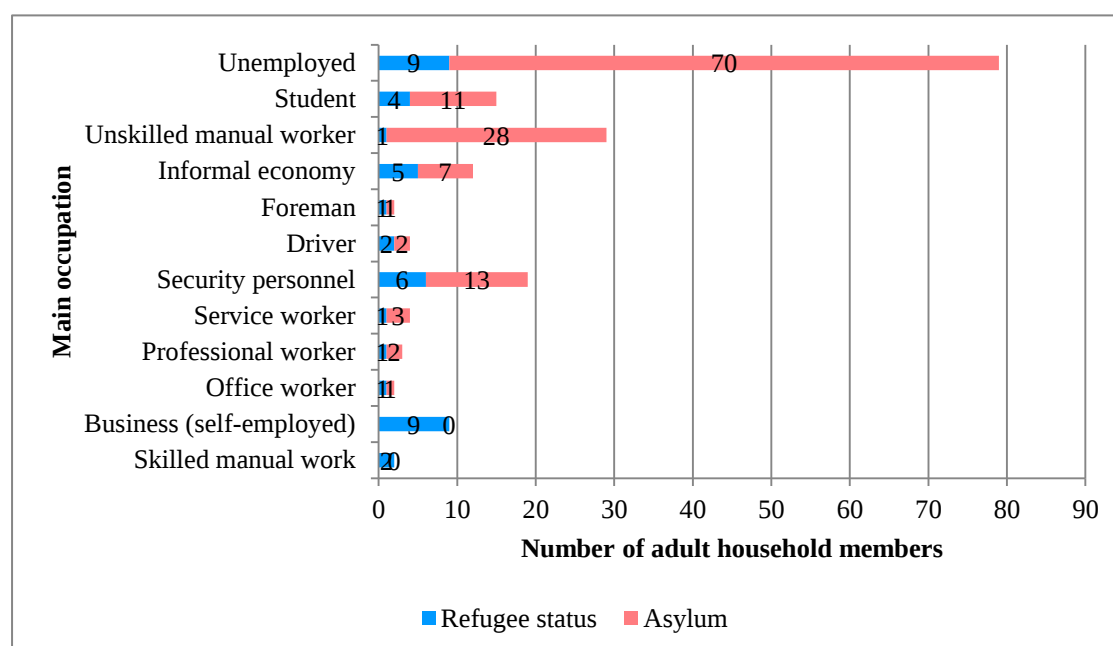
Regarding the relationship between the main occupation of household members and the study areas, it is important to note that the results shown in Figure 18 revealed that majority of skilled manual workers, office workers, professional workers, service workers, security guards and drivers, lived in Rosettenville. Similarly, most of the unemployed and unskilled manual workers also lived in Rosettenville. In contrast, majority of students, informal sector workers, and foreman and business people (self-employed) lived in Yeoville. This shows that the study areas did not have a significant impact on the main occupation of household members. In addition, when analysing the data, it was found that the relationship between the main occupation and the study areas was not statistically significant. This made the Chi-square hypothesis test insignificant to a degree of freedom of 11 and a 0.05 confidence level.

Figure 16: Main occupation and highest education level of household members



(Source: Research survey, 2017)

Figure 17: Main occupation and legal status of adult household members



(Source: Research survey, 2017)

Figure 18: Main Occupation and Study Areas



(Source: Research survey, 2017)

In conclusion, it is clear that the largest proportion of households in the sample had difficulty being employed in jobs that pay a living wage. For example, the results shown in Table 5 revealed that only 25% of sampled household members were employed as skilled and semi-

skilled workers. Therefore, it seemed necessary to further identify how these sampled households managed to live in Johannesburg, a city where access to food and basic needs is conditioned by the acquisition of financial income (Saunders, 2011; Turok and Borel-Saladin, 2014). To do this, it was essential to identify the alternative livelihood strategies that these sampled households develop.

5.3 Alternative household livelihood strategies

The results of the previous section (Section 5.2) showed that majority of sampled household members were unemployed and in low-skilled jobs. This shows how much of the sampled household members are employed in jobs that do not pay a living wage. Nevertheless, previous studies in Southern Africa have shown that poor households often rely on and develop alternative livelihood strategies to supplement the income of their main occupation (Crush and Frayne, 2010; Patel and Hochfeld, 2011; Tacoli, 2017; Turok, 2014).

These alternative livelihood strategies of households can be derived from formal or informal sectors (Crush and Frayne, 2010; Grant and Thompson, 2015; Valodia et al., 2006). For example, it is clear that the post-apartheid government has put in place formal programmes of social assistance and public subsidy to reduce the levels of poverty and income inequality (De Jager, 2015; Lakika et al., 2015; Okyere and Kita, 2015; Proudlock et al., 2014; Zihindula et al., 2015). According to Valodia et al., (2006), poor households also rely on alternative livelihood strategies derived from informal sectors such as begging, casual occupations, and crafts. Therefore, in this study, it was necessary to determine the alternative livelihood strategies of sampled households, and to assess the socio-economic and socio-demographic factors that influence these strategies.

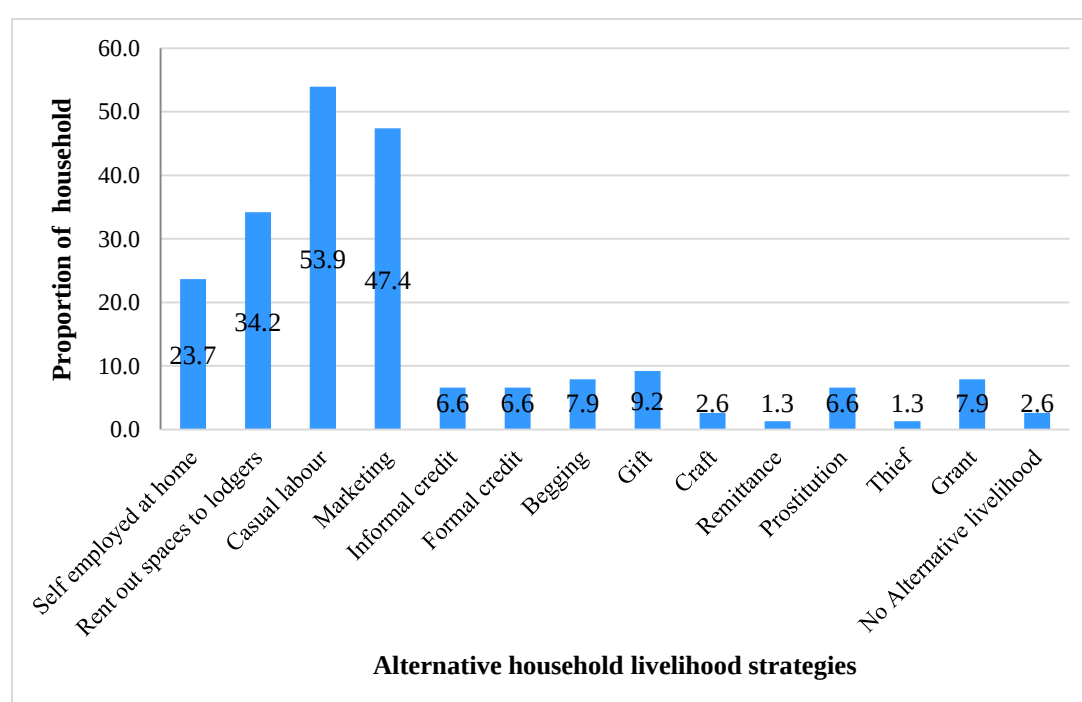
5.3.1 Alternative livelihood strategies of sampled households

In this study, casual occupations were referred to as, washing clothes and vehicles, occasional electrical troubleshooting and gardening and these made up the greatest proportion of alternative livelihood strategies. The results shown in Figure 19 revealed that 53.9% of households relied on casual labour to increase their household income, 47.4% were active in marketing, 34.2% invested in the renting out spaces to lodgers, 23.7% relied on self-employment at home, 9.2% of households relied on gifts, and 2.6% relied on crafts. In addition, 7.9% of households relied on grants, and the proportion of households that relied on begging was also 7.9%. Households that relied on formal credit, prostitution and informal

credit, all had an equivalent proportion, which was 6.6%. 1.3% of households relied on theft, and the proportion of households relying on remittance was also 1.3%.

In addition, concerning the number of alternative livelihood strategies that households use to increase their income, it should be noted that, the results shown in Table 6 revealed that 41% of households relied on two strategies, 25% relied on one strategy, 17% relied on three strategies, 13% relied on four strategies, 1% relied on five strategies and 3% did not rely on any alternative livelihood strategies.

Figure 19: Alternative household livelihood strategies



(Source: Research survey, 2017)

Table 6: Frequency of alternative household livelihood strategies

	Alternative household livelihood strategies					
Frequency	Zero	One	Two	tree	Four	Five
Proportion (%)	2.6	25	40.8	17.1	13.2	1.3

(Source: Research survey, 2017)

5.3.2 Factors influencing alternative household livelihoods strategies

Rudolph & Kroll (2016) found that, in the current context of rapid urbanisation, characterized by urbanisation being more proportional than economic development, it is essential to assess the factors that negatively influence the livelihoods of poor households. Alternative

livelihood strategies of households are mechanisms put in place by households to improve their resources when they have suffered a shock (Krantz, 2001; Rakodi, 2014). For example, some previous studies have found that women face challenges in developing sustainable livelihoods (Kihato, 2013; Smit and Rugunanan, 2015). It is also noted that in South Africa, forced migrants holding asylum seekers have more difficulty accessing social grants than forced migrants holding a refugee status (Proudlock et al., 2014). According to Proudlock et al., (2014), until now, asylum seekers are not eligible to receive the Child Support Grant, whereas the Child Support Grant has a significant impact on reducing poverty and food insecurity for households living in South Africa (Patel and Hochfeld, 2011). However, in this part of the study, it was necessary to analyse the factors that influence alternative livelihood strategies of sampled households.

Relationship of household members to household heads and gender of household members who doing alternative livelihood strategies

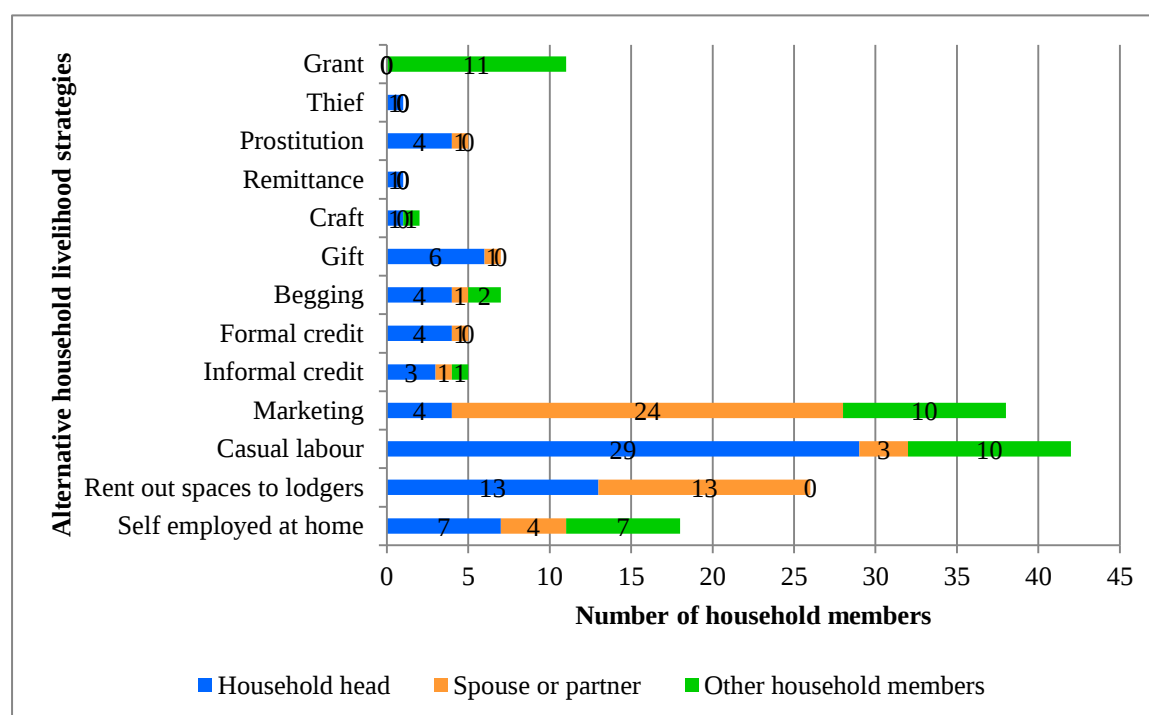
However, the results shown in Figure 20 revealed that majority of household members relying on casual labour, gifts, prostitution, begging, formal credit, informal credit, handicrafts, theft and remittance were household heads. In contrast, spouses or partners were the majority of household members who relied on marketing, and other household members were the only ones to perceive the Child Support Grant.

From the foregoing, it had been found that alternative livelihoods and relationships of household members to household heads were statistically significant. This means that the Chi-square hypothesis test was significant at a degree of freedom of 24 and at a level of confidence of 0.05. This means that alternative livelihoods depended on the relationship of household members to household heads.

Figure 21 illustrates that majority of household members who relied on theft, craft work, casual work and informal credit, were male. In contrast, the majority of household members who relied on marketing, renting out space, self-employment at home, gifts, informal credit, prostitution and begging, were female.

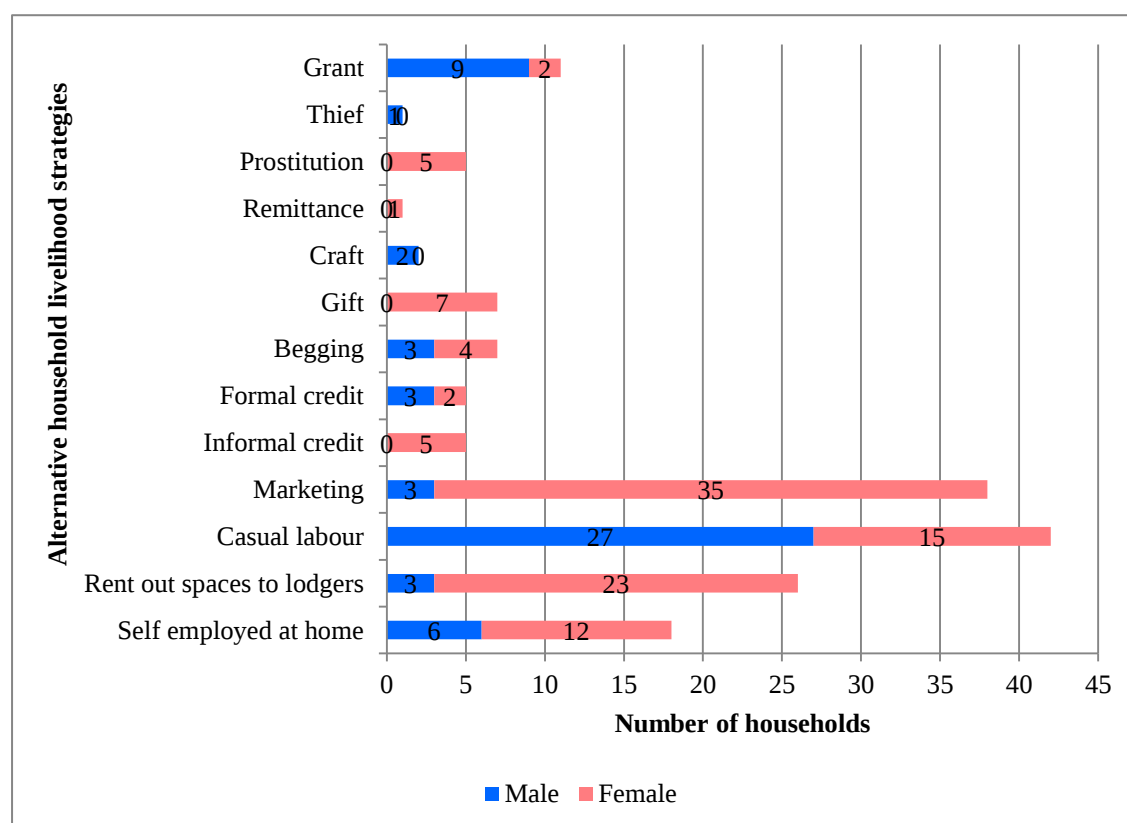
This revealed that, majority of male household members considered different strategies than female household members. Similarly, it was found that the dependency relationship between the household members' gender and alternative livelihood strategies was statistically significant.

Figure 20: Number of household members using alternative household livelihood strategies



(Source: Research survey, 2017)

Figure 21: Distribution of alternative household livelihood strategies and gender



(Source: Research survey, 2017)

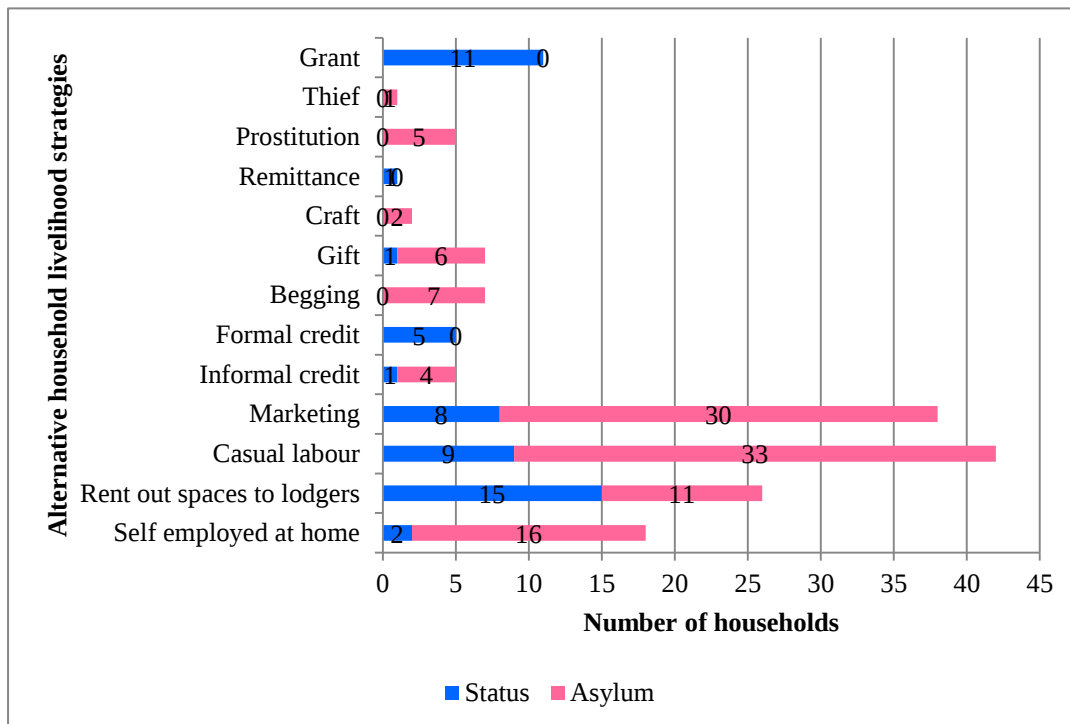
Legal status and Study areas

According to the data presented in Figure 22, majority of household members who relied on formal credit, renting out space to lodgers, and remittance, held refugee status. On the other hand, household members who relied on begging, crafts, theft, and prostitution, were asylum seekers. Similarly, majority of household members who were asylum seekers relied on self-employment at home, gifts, informal credit, casual work, and marketing. For example, out of 76 household leaders sampled in this study, 55 were asylum seekers and 21 had a refugee status. Out of the 39 spouses and partners who were identified, 28 were asylum seekers and 11 were refugees. Similarly, of all the other household members identified in this study, 56 were asylum seekers and 9 were refugees. From the foregoing, it had been found that the legal status of household households was statistically dependent on alternative livelihoods used in households. It is also important to note that all household members who had formal strategies (Formal Credit and Grant) had refugee status. This implies that the status of refugees is an indispensable document for collecting government subsidies that contribute to the reduction of poverty and income inequality. On the other hand, Congolese forced migrants holding the asylum seekers documents are excluded from government subsidies that contribute to the reduction of poverty and income inequality. As a result, they are forced to rely on informal strategies such as, crafts, prostitution, begging, and theft, borrowing money from third parties, casual labour, and small businesses on the streets. Yet, most informal strategies are characteristic of survivalist activities.

The data shown in Figure 23 revealed that majority of household members relying on the grant, prostitution, remittance, casual labour and self-employment at home, lived in Rosettenville. On the other hand, the largest number of households relying on the renting out space to lodgers, informal credit, formal credit, gifts, crafts, theft and begging lived in Yeoville.

For example, among household members who relied on casual labour, 22 lived in Rosettenville and 20 lived in Yeoville. However, it is important to note that, the study areas and the alternative livelihood strategies were not statistically significant.

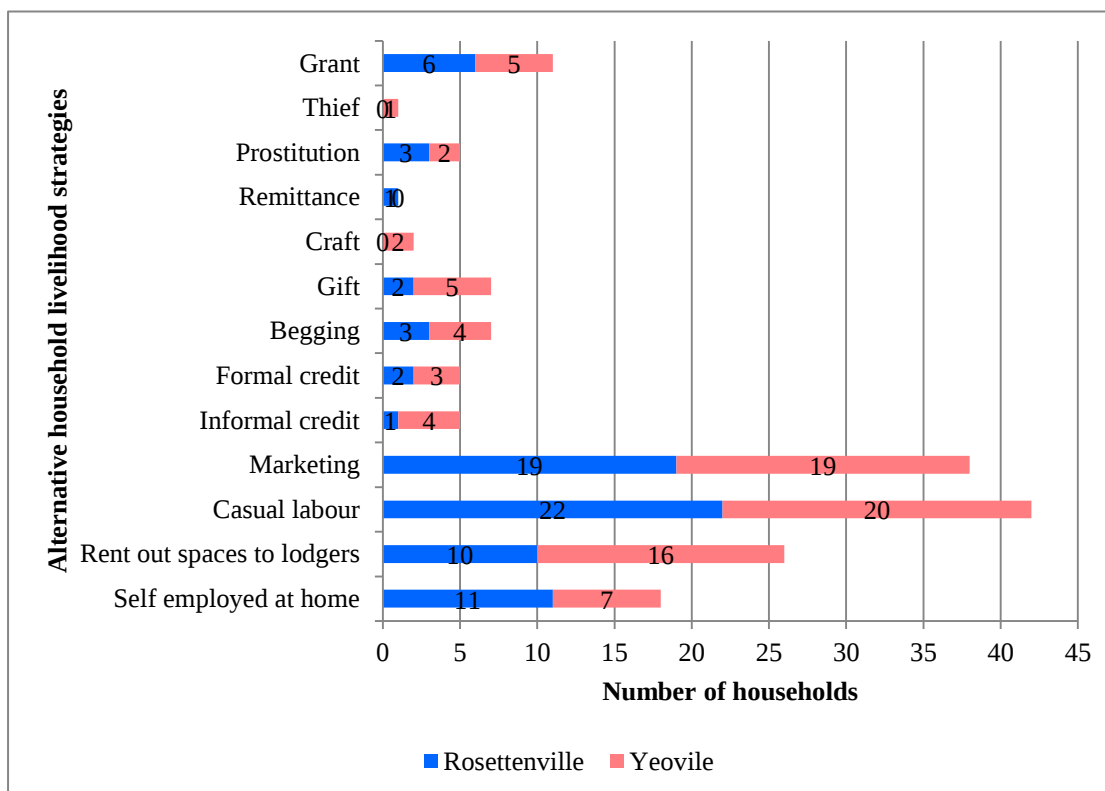
Figure 22: Alternative household livelihood strategies and legal status



(Source:

Research survey, 2017)

Figure 23: Alternative household livelihood strategies and study areas



(Source: Research survey, 2017)

5.4 Monthly household income

From the previous sections it can be concluded that a large proportion of sampled household members experience difficulties in finding the better paying jobs. A significant proportion of sampled household members rely on livelihood strategies to increase household income and access basic needs, including food. However, although most members of sampled households have developed livelihood strategies to improve their living standards, the level of income earned by these household members is still unknown. Therefore, it was important to study the monthly income earned by sampled households. This is because, according to Kimani-Murage et al., (2014), in southern African cities, the level of income is essential for determining the ability to access basic needs and food in poor households.

5.4.1 Proportion of monthly income of sampled households

In this study, the monthly average income of sampled households was R 4379.60. The median and modal income was R3500, as illustrated in Table 7. The data presented in Table 8, 28 revealed that 18.4% of households earned monthly incomes below R2173. Whereas, 39.5% of households earned an income ranging from R2173 to R4145, 15.8% of households earned an income ranging from R4146 to 6118, 17.1% of households earned an income between R6118 and R8091. Similarly, 7.9% of households earned an income between R8092 and R10064, and 1% of households earned more than R10064.

Table 7: Household monthly income

	Mean	Median	Mode	Minimum	Maximum
Household Income (R)	4379.60	3500	3500	14300	200

(Source: Research survey, 2017)

Table 8: Proportion of income group

Income group	Percentage
[200-2173[	18
[2173-4146[	40
[4146-6119[	16
[6119-8092[	17
[8092-10065[	8
[10065 +	1

(Source: Research survey, 2017)

5.4.2 Factors influencing household income

According to Chrush and Frayne (2010), in urban areas, it is important to know the factors that influence urban poverty, in order to promote access to food for poor households. For example, in the study by Rudolph & Kroll (2016), it was revealed that female-headed households generated low income. In another study by Zagorsky (2005), it was revealed that married households had the potential to earn more income than unmarried households. Similarly, Proudlock et al., (2014) revealed that the exclusion of asylum seekers from the Child Support Grant prevented some poor forced migrants from reducing their levels of poverty. Therefore, in this study, it was essential to analyse the variable monthly household income in relation to the household structure, the sex of the household head, the legal status of the household head, the study areas, and the marital status of household heads.

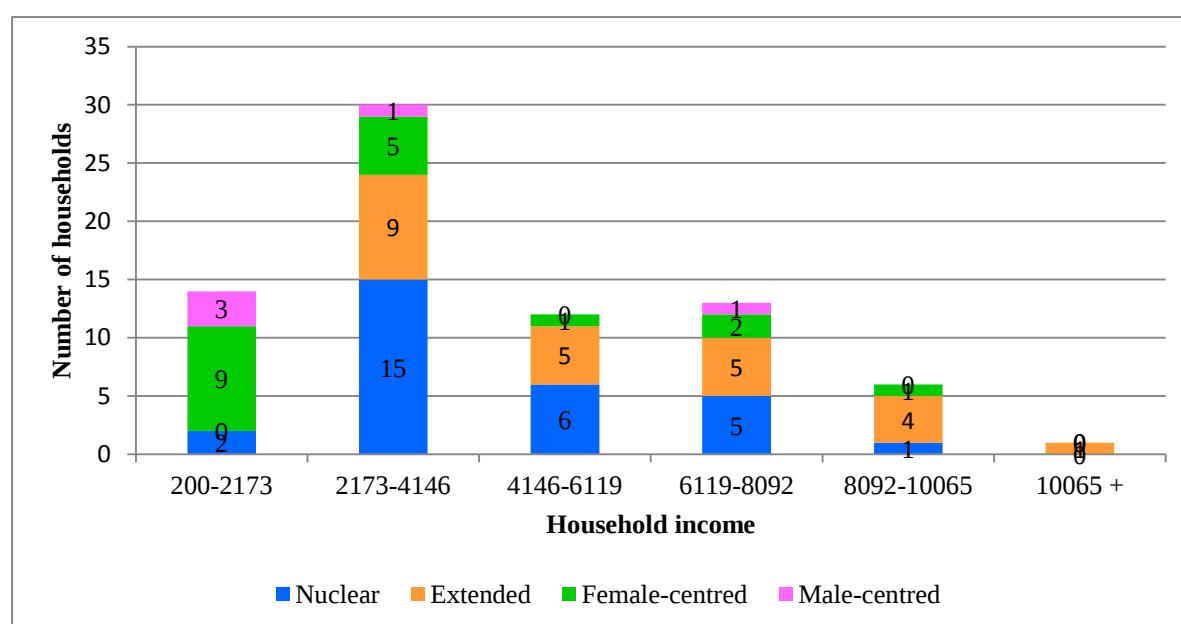
Household structure and Headed households

In Figure 24 illustrates that majority of households earning monthly incomes below R2173, were female-centred households. Nuclear households had the largest number of households earning monthly income ranging from R2173 to R4145, and between R4146 and R6118.

In contrast, the households earning an income above R10064 were the extended households. Similarly, extended households had the highest number of households earning incomes between R8092 and R10064. In addition, when analysing the data, it was found that the household income was dependent on the household structure.

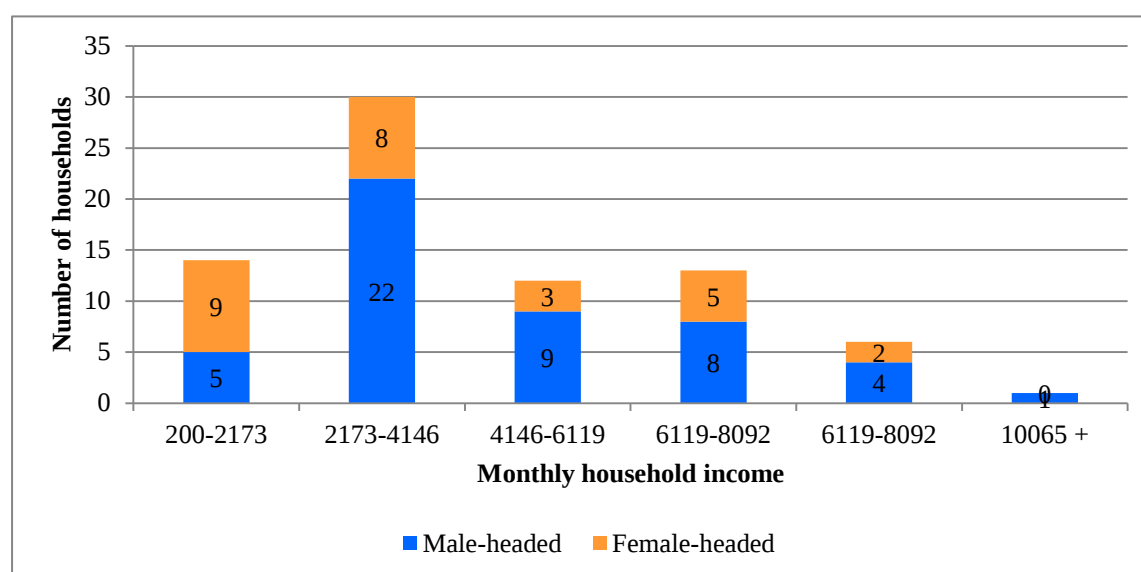
The results shown in Figure 25 revealed that majority of households earning less than R2173 were female-headed households. Whereas the households earning between R2173 and R10065, and more than R10065, were male-headed households. It is important to note that, when analysing the data, it was revealed that the variable monthly household income and the sex of household heads were statistically independent.

Figure 24: Monthly household income and household structure



(Source: Research survey, 2017)

Figure 25: Headed household and monthly household income



(Source: Research survey, 2017)

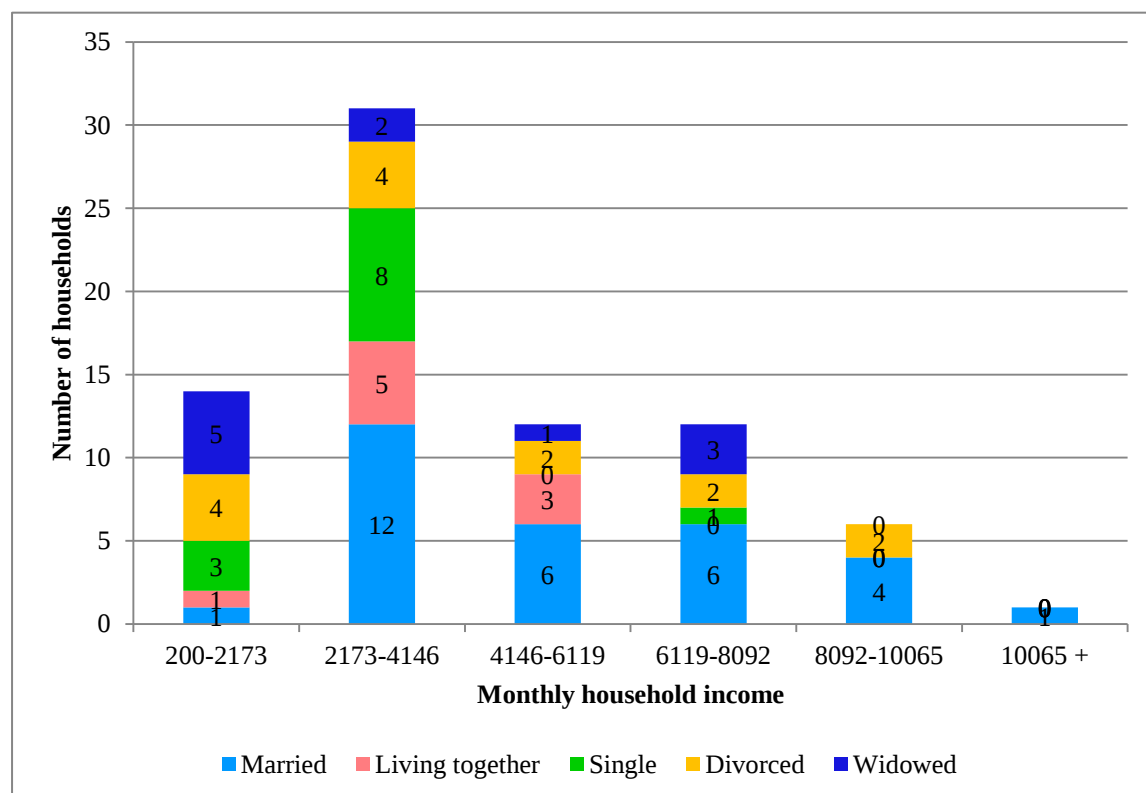
Marital status of household heads and Study areas

In Figure 26, it was revealed that majority of households earning incomes ranged between R2173 and R10065 were headed by the married people. On the other hand, households headed by widowers were the majority of households earning incomes between R200 and R2173.

For example, in this study, of the 14 households earning an income between R200 and R2173, 5 were headed by widowers, 4 by the divorced, 3 by singles, 1 by partners living together and 1 by married people. On the other hand, among households earning income between R2173 and R4146, 11 were headed by married people, 8 by singles, 5 by partners living together, 4 by the divorced and 2 by the widowed. There were 4 married households and 2 divorced household earning incomes between R8092 and R10065. Similarly, the only household earning an income above R10065 was a married household. However, it is important to note that, in the statistical analysis, it was revealed that the marital status of household heads was not statistically dependent on the monthly household income.

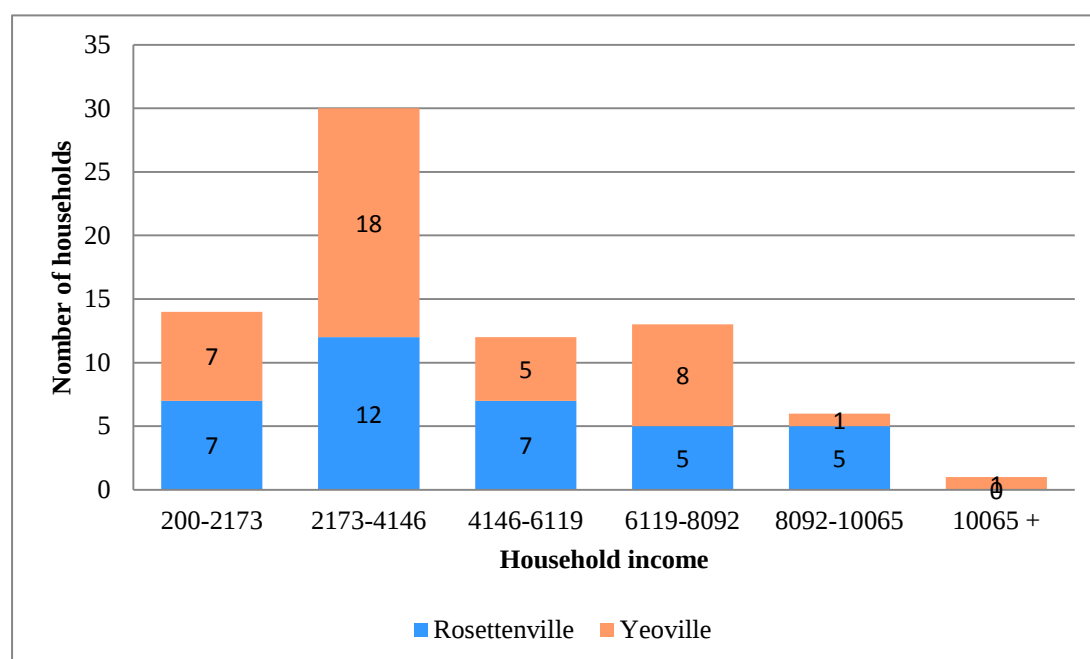
When comparing the study areas, Figure 27 illustrates that majority of households earning an income between R4146 and R6119, and between R8092 and R10065 live in Rosettenville. On the other hand, most households earning incomes ranging between R2173 and R4149, R6119 and R8092, and more than R10065 live in Yeoville. However, it is important to note that the statistical analysis of the variable household income and the study areas is independent.

Figure 26: Marital status and monthly household income



(Source: Research survey, 2017)

Figure 27: Study areas and monthly household income



(Source: Research survey, 2017)

5.5 Conclusion

In the context of the rapid urbanisation in Johannesburg, where socio-economic difficulties lead to discrimination and xenophobia against cross-border migrants, the need to identify the sources of income for forced migrants is essential. In particular, in most urban areas of developing countries, such as Johannesburg, where sustainable livelihoods are essential for access to basic needs, households rely on inadequate income for access to food.

Therefore, as this study was particularly concerned with Congolese refugees and asylum seekers in Johannesburg, it was necessary to identify the livelihoods of sampled households. This was done by focusing on the main occupations of household members, alternative livelihood strategies of households and the monthly household income.

The results of this part of the study revealed that more than half of the members of working-age households were unemployed. Also, about three-quarters of household members earned low wages, or were unemployed. Similarly, a significant number of Congolese refugees and qualified asylum seekers are underemployed. It is important to note that a very large majority of sampled households were adopting alternative livelihood strategies to access food and other basic needs. In terms of household income, it was found that almost half of the

household members earned less than R4200; a quarter of the household members earned a salary above R6200.

The necessary elements to identify the sources of income of Congolese refugees and asylum seekers from Johannesburg were addressed in this section of the study, together with the household survival strategies. This was done in order to understand why poor households struggle to access basic needs. In addition, it is also important to know how poor households behave when they do not have enough resources to access food. As a result, information on the survival livelihood strategies of Congolese refugees and asylum seekers is presented and analysed in the subsequent chapter.

CHAPTER 6: FOOD SOURCES AND COPING STRATEGIES

6.1 Introduction

Previous studies have revealed that poor urban households in developing countries are developing coping strategies to access food and basic needs (Devas, 2014; Nelson, 2017). By observing the results of Chapter 5, it is clear that majority of sampled households earn a low income thus rendering them as poor urban households. Although households have used coping strategies to mitigate shocks due to food shortages (Corbett, 1988; Davies, 2016), coping strategies can have negative consequences for the future of the households (Davies, 2016; Dercon, 2002). Therefore, in this part of the study, it was necessary to examine the food sources of sampled households and the coping strategies they use. This was done in order to understand whether or not Congolese refugees and asylum seekers access privileged food sources and develop coping strategies that do not have a negative impact on the future of their households. However, the data presented and analysed in the sections below, concerned the food sources of sampled households and the coping strategies that they used when they did not have enough resources to access adequate food.

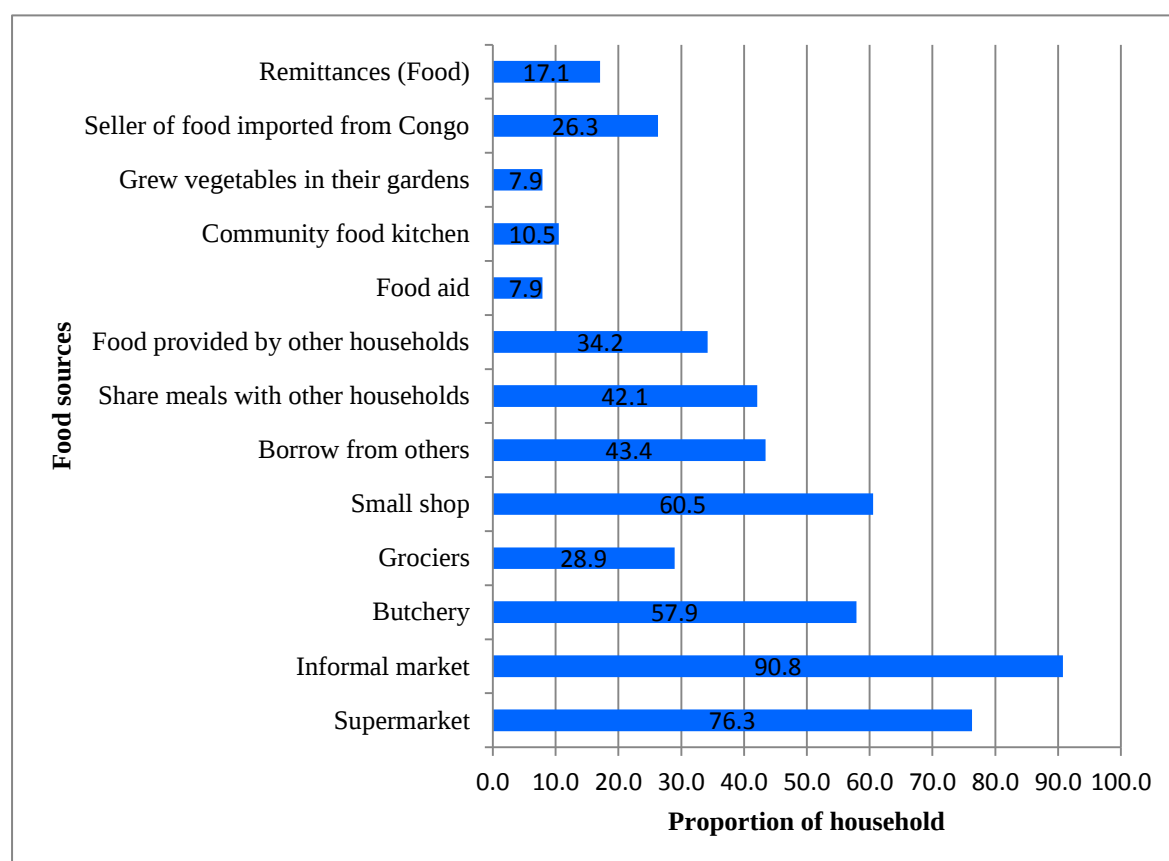
6.2 Food sources

According to Davies (2016), in urban areas, food sources are essential for understanding poor household coping strategies. For example, poor households may wish to buy food in stores where food is cheaper (Kimani-Murage et al., 2014). Therefore, in this part of the study, it was necessary to present data on the food sources of sampled households. Similarly, analyse and evaluate the factors that influence sampled households to use different food sources.

6.2.1 Food sources of sampled households

According to the results shown in Figure 28, although most sampled households used multiple food sources, the most important food sources of sampled households were the informal market (90.8%), supermarkets (76.3%), small shops (60.5%), and butchers (57.9%). Some households used more of other sources such as, borrowing food from other households (43.2%), sharing food with other households (42.1%), relying on food provided by other households (34.2%), and buying food from food vendors imported from the DRC (26.3%). Similarly, there were households that relied on food aid (7.9%), others on food remittances (17.1%), and 7.9% of households grew vegetables in their gardens.

Figure 28: Household food sources



(Source: Research survey, 2017)

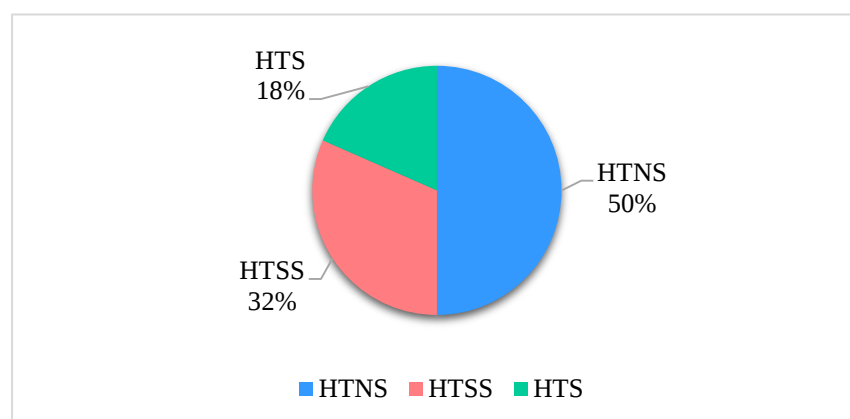
In interviews with potential respondents, most respondents indicated a willingness to grow vegetables for their households. However, they lamented the lack of free space to grow their own vegetables. For example, a 36-year-old Congolese woman revealed that, “Here in Johannesburg, we buy all the food. While in Congo, I used to grow vegetables for my household. Unfortunately, here it is difficult to find space to grow vegetables for my household because my landlord does not accept tenants growing vegetables in the yard of his house. Therefore, we have to spend money buying food that we could grow in ourselves”. From the foregoing, it was found that sampled households were able to limit their food expenditure by growing vegetables in the gardens of their homes. However, they found it difficult to find available space to carry out this activity.

In addition, it was important to note that, almost all categories of sampled households, at least bought their food in supermarkets, informal markets, small shops, butchers, and grocers. However, in relation to food sources, it was found that a certain category of sampled households used three different food sources. The first category consists of households whose

food sources are those that everyone normally uses. This first category of households is arbitrarily named households using traditional food sources (HTS). The second category of households is made up of households that combine the food sources that everyone normally uses and sustainable food sources. This second category of households is arbitrarily named households using traditional food sources and sustainable food sources (HTSS). The particularity of this category of households is that they have enough resources to buy foods of their choice. The third category consists of households that sometimes use traditional sources (HTS) but, also rely on non-sustainable food sources, such as food aid, food provided by other households, and borrowing food. This latter category of households is arbitrarily named households using traditional food sources and non-sustainable food sources (HTNS).

By considering the results shown in Figure 29, it was found that 50% of sampled households used traditional and non-sustainable food sources, 31.6% of sampled households using traditional and sustainable food sources, and 18.4% of households used only the traditional food sources.

Figure 29: Food sources groups



(Source: Research survey, 2017)

Therefore, it can be concluded that most sampled households did not buy food from the street vendors who imported food from the DRC, did not grow vegetables at home, and did not have access to remittance. However, to understand the motivations that led sampled households to rely on different food sources, it was necessary to analyse the variable household food sources with other socio-demographic and socio-economic variables. As a result, information on the determinants of food sources in sampled households is presented and analysed in the subsequent section.

6.2.2 Factors influencing food sources in sampled households

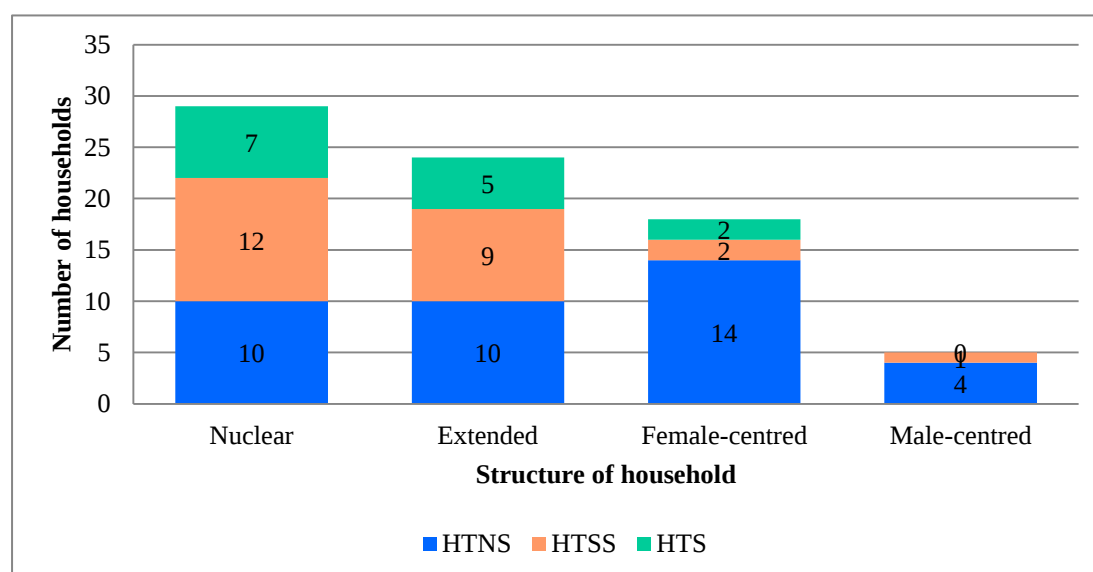
Household food sources often influence household structure, household head gender, marital status of household heads, study areas, legal documents of household members and the monthly income generated in households (Handbury et al., 2015; Parappurathu et al., 2015). This suggests that when conducting a study on poor household food survival strategies, it is necessary to analyse the impact of food sources on the socio-economic profiles of sampled households (Parappurathu et al., 2015). Therefore, in this part of the study, it was necessary to present and analyse the different variables which may have an influence on the food sources of sampled households.

Household structure

Figure 30 illustrates that female-centred households and male-centred households had the largest number of households that used HTNS to access food, whereas, most extended households and nuclear households used HTSS.

However, there is not enough statistically significant evidence to support the hypothesis that dietary sources and household structure are significantly dependent. The Chi-square hypothesis test was statistically insignificant at a degree of freedom of 6 and at a 0.05 confidence level.

Figure 30: Food sources and household structure



(Source: Research survey, 2017)

Headed household and Study Areas

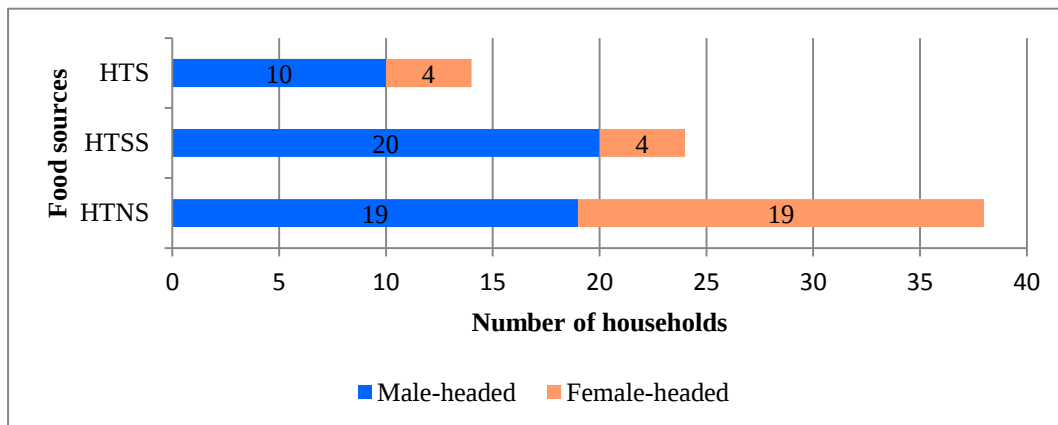
The results shown in Figure 31 revealed that of the 38 households that used HTNS, 19 were male-headed households and 19 were female-headed households. Among households using HTSS, 20 were male-headed households and 4 were female-headed households. For households that used HTS, 10 were male-headed households and 4 were female-headed households. This means that most female-headed households obtained their food through informal markets, small shops, borrowing from other households, sharing with other households, butchers and help from NGOs. However, during the statistical analysis, it was revealed that the relationship between food sources and gender of household heads was statistically significant. The Chi-square hypothesis test was statistically significant at a degree of freedom of 2 and at a 0.05 confidence level.

Regarding the relationship between the food sources of the sampled households and the study areas, it is important to note that the sampled households living in Rosettenville had the highest number of households using HTSS, as illustrated in Figure 32.

In contrast, households in Yeoville had the largest number of households that used HTNS. This may reveal that households living in Rosettenville had more opportunities to buy their food from street vendors who imported food from the DRC, to grow vegetables for their households and to receive remittances. However, statistical analysis found that the relationship between the study areas and the food sources was statistically insignificant. The Chi-square hypothesis test was statistically insignificant at a degree of freedom of 2 and at a 0.05 confidence level.

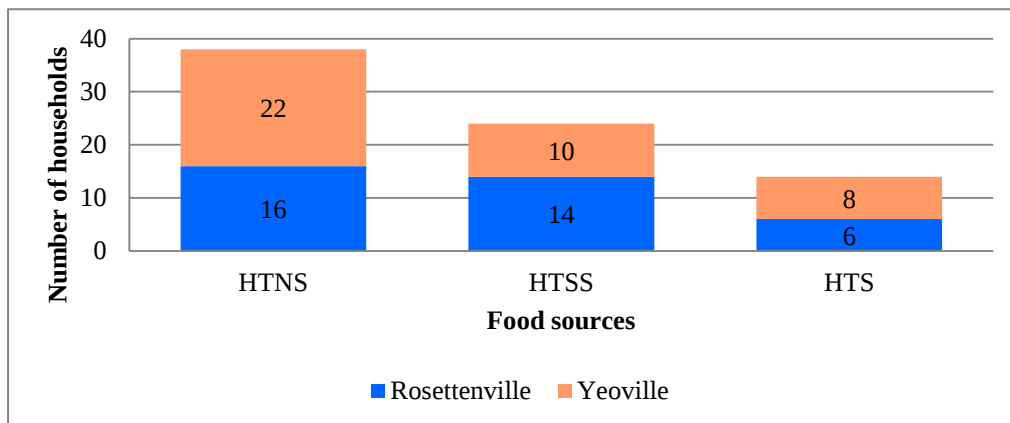
The relationship between food sources and monthly wages of sampled households is shown in Figure 33. It is important to note that, majority of the households earning an income of above R4146, used HTSS. In contrast, majority of the households earning less than R4146 used HTNS. In addition, it is important to note that, when analysing the data, it was found that, the relationship between food sources and household monthly incomes, was statistically significant the Chi-square hypothesis test was statistically significant at a degree of freedom 10 and at a confidence level of 0.05.

Figure 31: Food sources and headed household



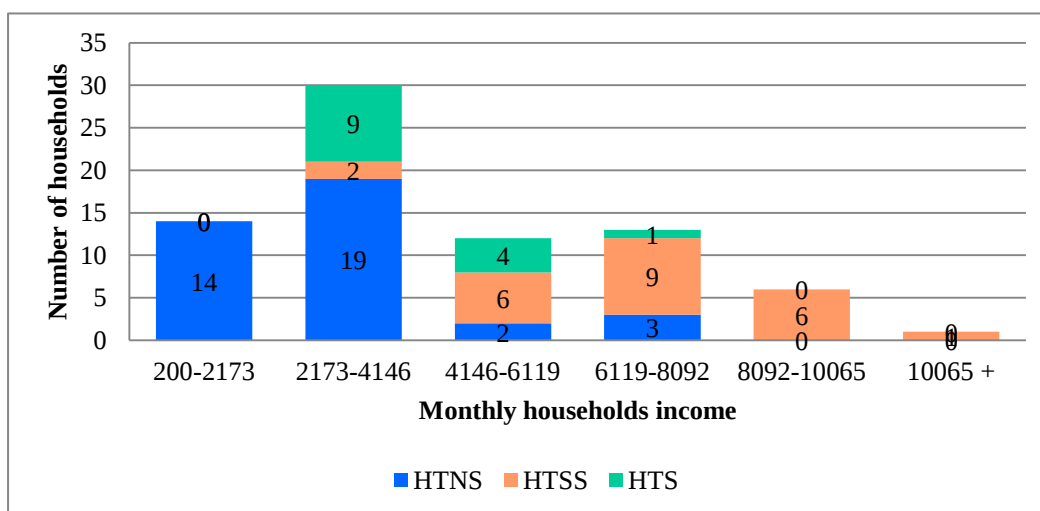
(Source: Research survey, 2017)

Figure 32: Food source and Study areas



(Source: Research survey, 2017)

Figure 33: Food sources group and monthly household income



(Source: Research survey, 2017)

6.3 Household coping strategies

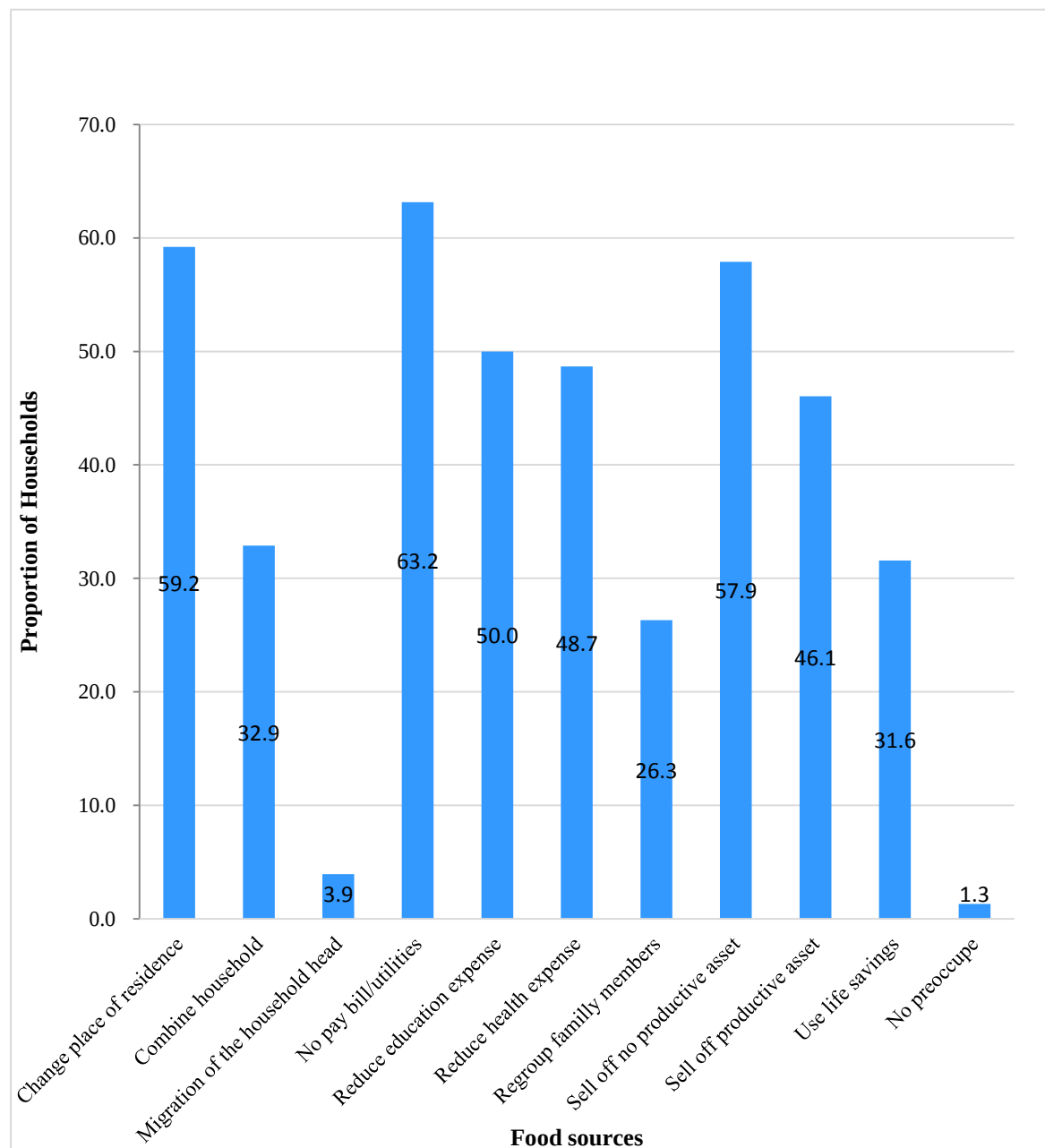
Poor households usually develop coping strategies to partially meet their basic needs (Poulsen et al., 2015). However, according to Bertelett et al., (2016), in developing countries, most poor urban households sacrifice other basic needs to provide food to household members. Therefore, as this study focused on the food survival strategies of Congolese refugees and asylum seekers, it was necessary to present the coping strategies of sampled households, as well as analysing the factors that influence households to adopt particular coping strategies.

This part of the study is divided into two sections. The first section is about the coping strategies adopted by sampled households. This section presents and identifies the coping strategies adopted by sampled households in order to address food insecurity situations. The second section is about the coping strategies adopted by households during food shortages. This section presents and develops the food survival strategies of sampled households. In other words, it has identified the behaviour of households when they do not have enough resources to access food.

6.3.1 Coping strategies adopted in households

In order to focus on the food consumption of household members, the results shown in Figure 34 revealed that 63.2% of sampled households did not pay bills and utilities, 59.2% frequently changed residences, 57.9% had sold their non-productive assets, 50% reduced spending on children's schooling, 48.7% reduced spending on health care, and 46.1% had sold their productive assets. Similarly, 32.9% of sampled households combined households, 31.6% used their savings, 26.3% had regrouped, 3.9% had migrated to areas where work was available, and 1.3% of sampled households were not concerned with using coping strategies to survive and access food.

Figure 34: Household coping strategies



(Research survey, 2017)

6.4.2 Coping strategies adopted in households to prioritise food for household members

According to the responses collected from some of the respondents in this study, the socio-economic difficulties in Johannesburg led some sampled households to develop adaptation strategies to guarantee the food of their household members. For example, a household head respondent said,

“Life in Johannesburg is very difficult. We have serious difficulties in earning a decent income. However, although the South African authorities have information about the living conditions in which we live, they impose on us to pay bills and pay for utilities. In any case, I do not pay these bills and utility fees. Although the refusal to pay bills and pay for state services can affect my criminal record, I prefer to prioritize the food expenses of my children than to pay the state’s obligations. Moreover, I think that by refusing to pay the obligations of the state to favour the food of my children, the state must not condemn me, especially because it is the state that should guarantee the food security of my children” (38-year-old Congolese interviewee, Johannesburg).

Other respondents revealed that they generally changed their places of residence so as to provide food for their children. For example, one female widow head respondent said,

“Since I live in Johannesburg, I regularly change homes to live in cheaper homes. This is because homeowners are constantly increasing the rent. Still, I earn a low income and I cannot use all my income to pay rent and leave my family hungry. Therefore, I prefer to live in cheaper homes, even of poor quality, provided I keep some money for food in my household” (53-year-old Congolese interviewee, Johannesburg).

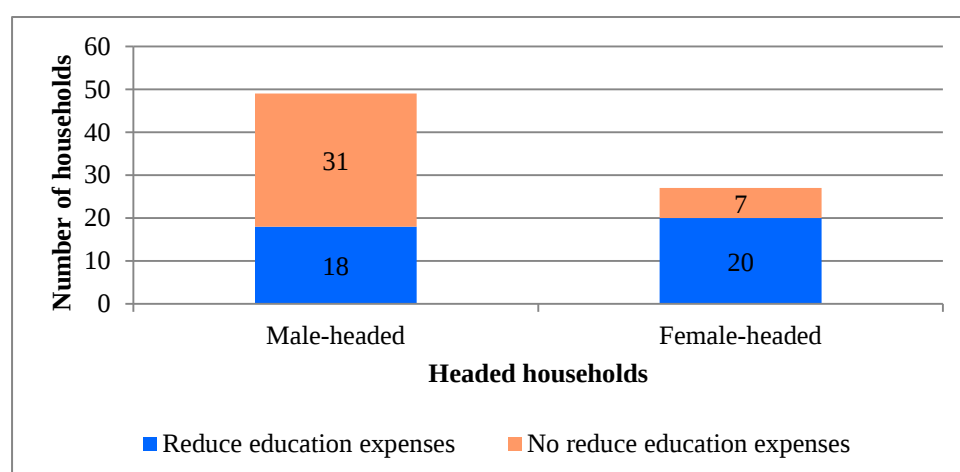
Some respondents revealed that they were reducing their children’s schooling expenses in order to prioritize access to food for their households. However, while the strategy of reducing child-rearing expenditures may favour some households to access food, it may, jeopardise their children’s (Crush and Frayne, 2010). This is because, in urban areas, people with a low level of education find it difficult to earn a living wage and access healthy and adequate food (Crush and Frayne, 2010; Saunders, 2011; Turok and Borel-Saladin, 2014). It was noted that female-headed households were among the households that reduced the schooling expenses of their children. For example, a divorced woman head of household said,

“When I lived with my former husband, we helped each other to meet the basic needs of the household. But since we divorced, I suffer tremendously to meet the basic needs of my household. At the moment, as children are not being chased out of school, I prefer to use the money that should be spent on schooling children to buy food. Really, I have no other choice, especially because my former husband does not even help me with R1 to pay the children’s school fees” (45-year-old Congolese interviewee, Johannesburg).

The remarks made by the divorced woman head of household, was sufficient motivation for determining if there was a relationship between the sexes of the household head and reducing

the expenses of the children's education. For this purpose, Figure 35 revealed that, majority of female-headed households reduced their children's education expenditures to obtain food. This hypothesis was statistically significant when analysing the data. In other words, there is a dependency relationship between female-headed households and the reduction in child-rearing expenditure. The Chi-square hypothesis test was statistically significant at a degree of freedom 1 and a confidence level of 0.05.

Figure 35: Sex of household heads and reduce education expenses



(Source: Research survey, 2017)

In addition, there are respondents who have revealed that they have reduced health expenditures for food. This was the case in female-headed households and widowed households, who revealed that,

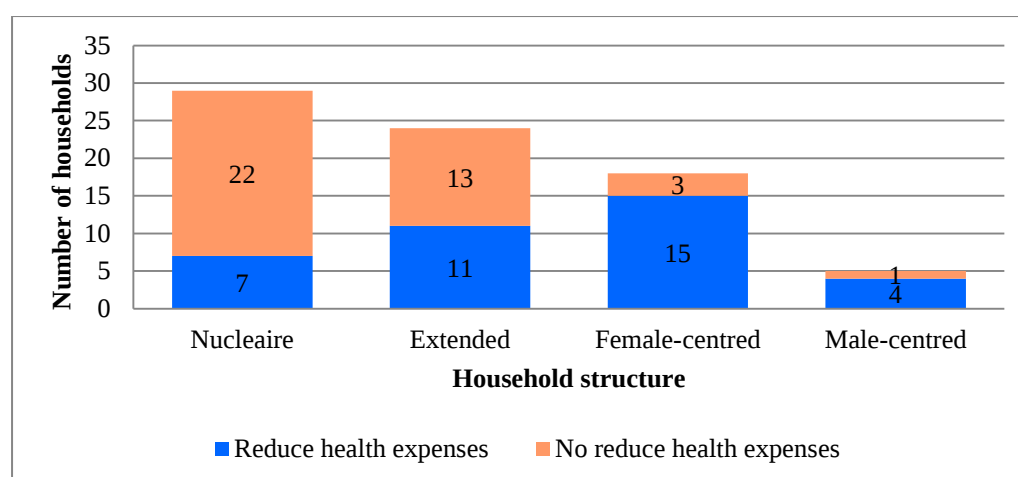
“Me here, I have high blood pressure and diabetes. Unfortunately, I often have to use the money for medicines to get food for my household. Still, I take a risk by decommissioning the money from the drugs for food, because if I die, no one will take care of my children. My husband has already died and my children are still minors. If I die, my children can easily start living on the streets. The South African authorities and the officials of the United Nations High Commissioner for Refugees must find solutions to our concerns” (43-year-old Congolese interviewee, Johannesburg).

To try to understand the motives that drove household members to use the money allocated to health for food, it was necessary to evaluate the relationship between reducing health expenditure and the household structure. Similarly, it was necessary to assess the impact of reducing health expenditure and marital status of household heads.

Figure 36 shows that, most households which were reducing their health expenditure to buy food were male-centred households and female-centred households. Even during the statistical analysis, it was revealed that, the reduction of health expenditure was statistically dependent on the household structure. The Chi-square hypothesis test was statistically significant at a degree of freedom of 3 and a confidence level of 0.05.

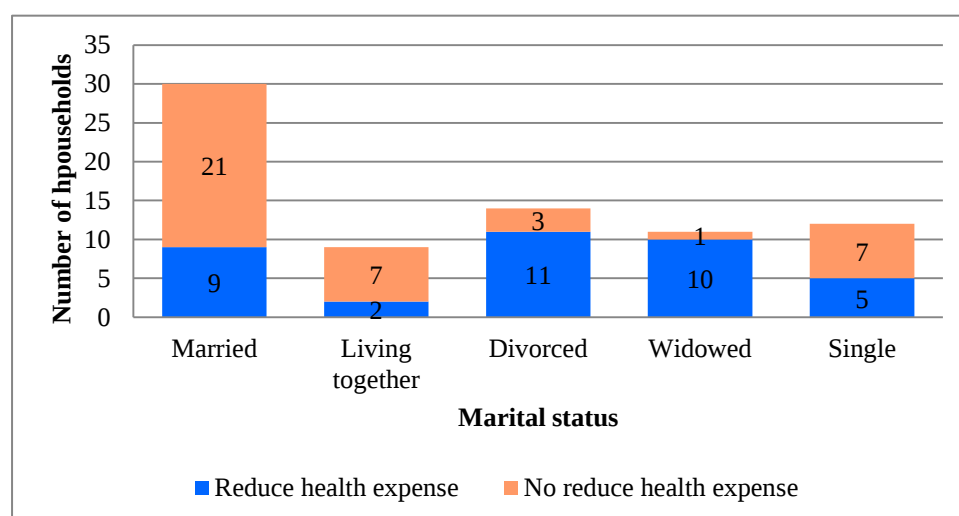
Figure 37 also shows that, most households that reduced their health expenditures were divorced and widowed households. This hypothesis was valid after the statistical analysis of sampled household data. The Chi-square hypothesis test was statistically significant at a degree of freedom of 4 and a confidence level of 0.05.

Figure 36: Reduce health expenses and household structure



(Source: Research survey, 2017)

Figure 37: Reduce health expenses and marital status of household heads



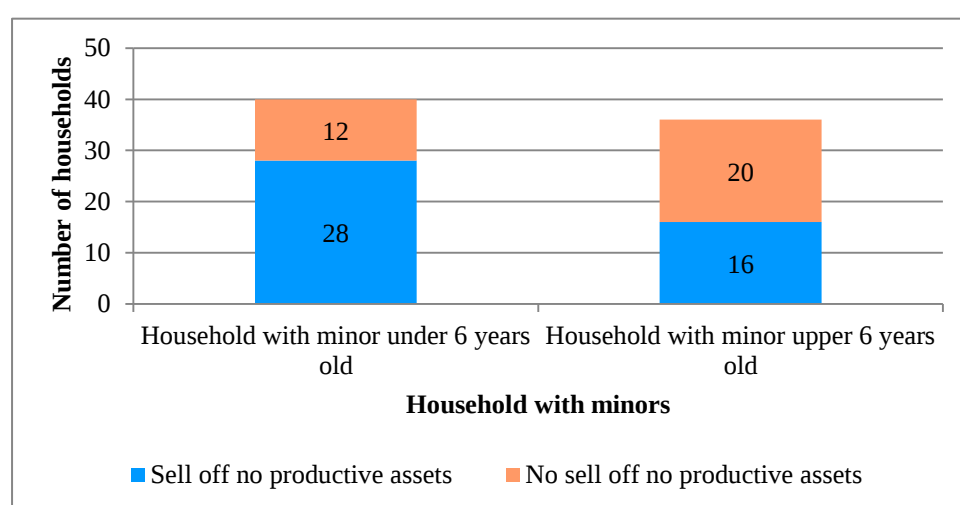
(Source: Research survey, 2017)

As shown in Figure 38, some households sold their non-productive assets to ensure food in their households. However, during an interview with a potential respondent, a female head of household said,

“I do not earn enough money. These past two months, I have not been able to raise enough money to pay rent and food in my household. Therefore, as I did not want to be kicked out of the house and endanger the lives of my household members, I was forced to sell my fridge to pay for food and supplement the rent money. This is because, I could not let my children under 6-years old, sleep outside and be hungry, and if my socio-economic situation does not improve, I will end up selling all my assets that I have in my house” (42-year-old Congolese interviewee, Johannesburg).

To shed more light on the motivations that compelled sampled households to sell their non-productive assets, analyses of the relationship between sell non-productive assets and having at least one minor, who is 6-years old, were carried out in this part of the study. Having at least one minor child in the household was deliberately considered because, in the previous intervention, the respondent said, “I could not let my children under 6-years old, sleep outside and be hungry”. Therefore, the results presented in Figure 38 revealed that, majority of households with minors under 6-years old had sold off their productive asset in order to ensure that there is food in the household. The Chi-square hypothesis test was statistically significant at a degree of freedom of 1 and a confidence level of 0.05.

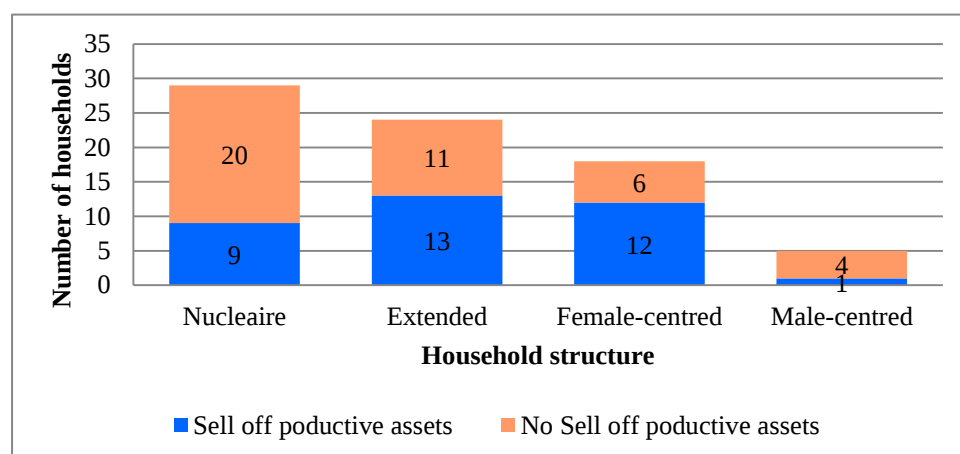
Figure 38: Group age of minor and sell off productive assets



(Source: Research survey, 2017)

It is noted that the selling of productive assets is significantly dependent on the gender of the head of the household, and on the marital status of the head of the household. Figure 39 and Figure 40 illustrate that majority of households who were selling productive assets were female-headed households. Similarly, most households headed by widowed women and divorced women sold their productive assets. For the statistical analysis between the selling off productive assets and the sex of the household head, the Chi-square hypothesis test was statistically significant at a 0.05 level of confidence and a degree of freedom of 2. For the statistical analysis between the selling off productive assets and the marital status of the head of the households, the Chi-square hypothesis test was statistically significant at a 0.05 level of confidence and a degree of freedom of 4.

Figure 39: Sell off productive assets and household structure



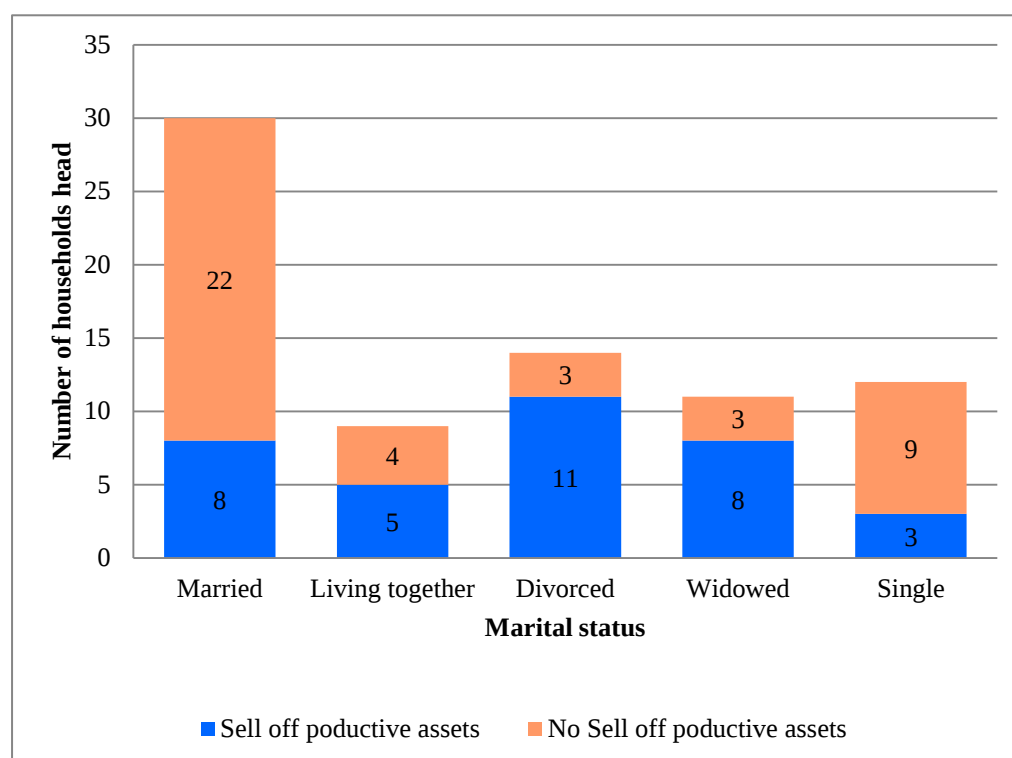
(Sources: Research survey, 2017)

Figure 40: Sell off productive assets and marital status of household head



(Sources: Research survey, 2017)

Figure 41: Sell off productive assets and the marital status of household head



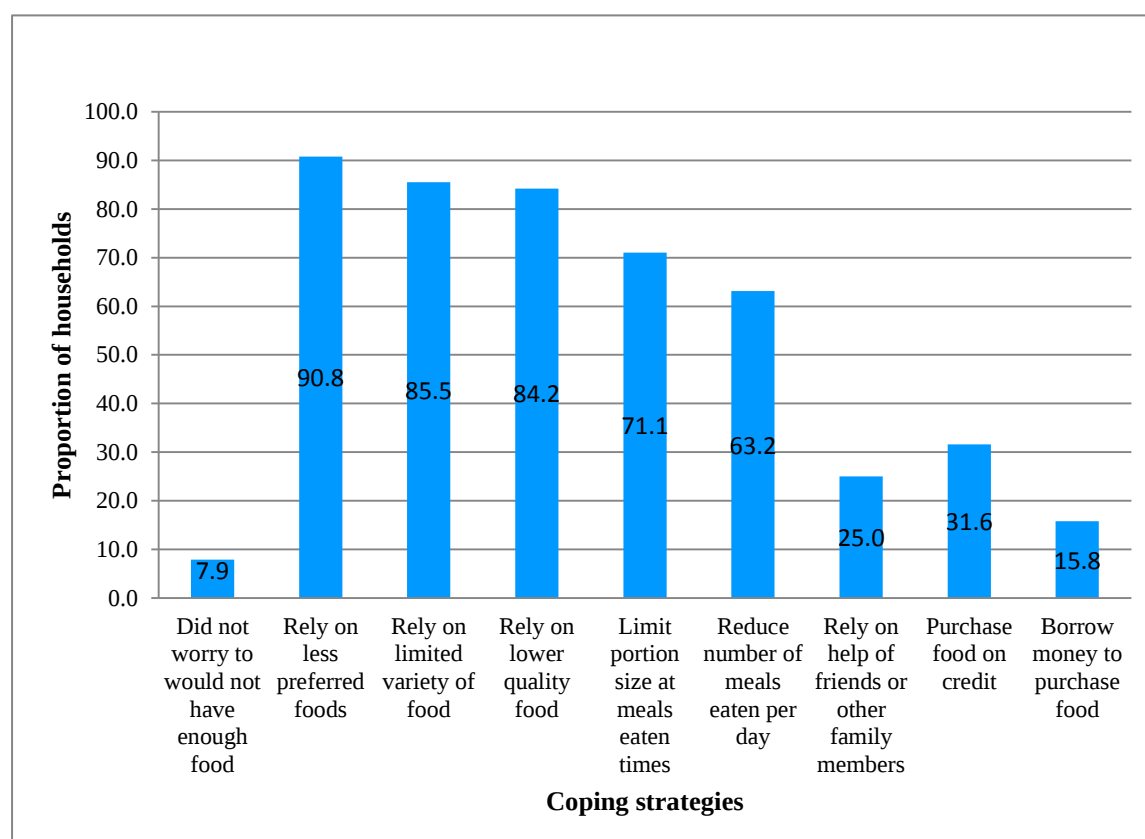
(Sources: Research survey, 2017)

6.4.3 Coping strategies used by sampled households during food shortages

According to Coates et al., (2006), the lack of sufficient resources and food shortages in poor households, pushed some households to change their eating habits. Similarly, households reported using coping strategies during food shortages, and during financial and resource crises. Figure 46 illustrates that during periods of food shortages in households; most poor households developed coping strategies to mitigate the crisis.

According to the results shown in Figure 41, it was found that 90% of sampled households relied on non-preferred foods, 85.5% relied on limited varieties of food, 84.2% consumed lower quality foods, 71.1% limited the size of their food, 63.2% reduced the number of meals per day, 31.6% buy food on credit, 25% relied on help from friends or other family members, 15.8% borrowed money to buy food, and 7.9% of sampled households were not worried about food shortages. This revealed that during periods of food shortage and financial crisis (lack of resources and decent income in the household), a significant proportion of household's sampled used coping strategies to partially mitigate famine in the household.

Figure 42: Dietary strategies used by households during food shortages



(Sources: Research survey, 2017)

It is noted that poor households do not adapt coping strategies (Corbett, 1988; Ellis, 2000; Waal, 1989), as they rely on certain internal and external factors, in order to accomplish coping strategies (Devas, 2014; Ellis, 1998). Similarly, in this study, sampled households relied on certain constraints to adopt their coping strategies. Therefore, it was necessary to evaluate the different factors that influenced the behaviours of sampled households.

Relying on less preferred, lower quality and/or limited variety foods

During interviews with potential respondents, there were respondents who had explained the reasons that motivated them to rely on less preferred foods, to eat lower quality foods and/or to purchase foods of limited variety. For example, a married woman said,

“With my large family, it is difficult to eat the foods of our preference and to diversify foods. In reality, we force ourselves to eat the food available in the household. The most important thing for us is to satisfy our stomach. Even if the food is of a lower quality, we force ourselves to eat it. Besides, everyone in the house knows that we buy cheaper foods and that

in this country, cheaper foods are often of poor quality” (28-year-old Congolese interviewee, Johannesburg).

Limiting the size to the portions of meals eaten and reducing the number of meals eaten per day

As shown in Figure 46, a significant proportion of households limited the size of the portions of meals consumed and reduced the number of meals consumed per day. This revealed that, coping strategies of limiting the size of the portions of meals consumed and reducing the number of meals consumed per day were frequently used in sampled households. These coping strategies were to alleviate the difficulties of accessing food during periods of food shortage. For example, one respondent revealed that:

“In our household, when the food is insufficient, we reduce the size of the portions of the meals of grown-ups to allow the children to eat enough. However, if there is not enough food in the house, as was the case in the past week, I ate once a day. I work as car guard at Fourways mall, so I prefer not to eat in the morning at home and ask for food from my friends at work or from people who come to buy food at the mall” (41-year-old Congolese interviewee, Johannesburg).

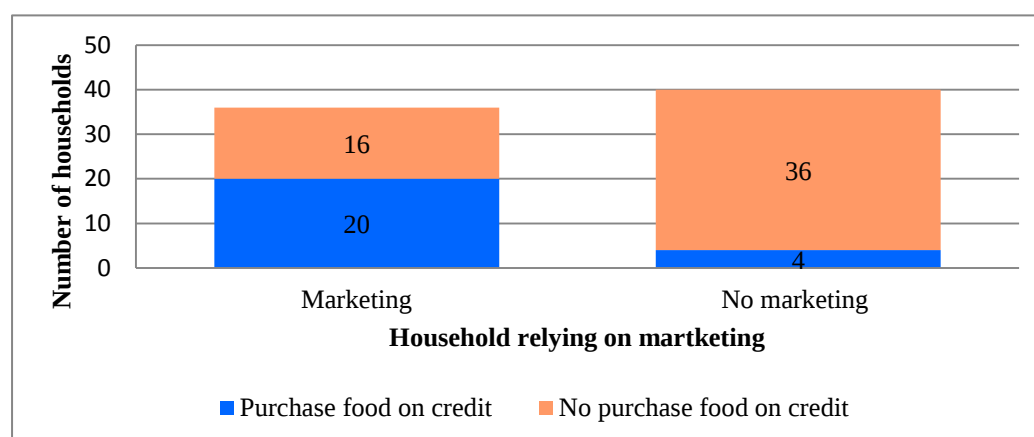
Purchase food on credit and rely on help from friends and other families

In this study, some sampled households purchased food on credit and/or relied on help from friends and other families. Figure 42 illustrates that majority of households relying on trade, bought food on credit.

However, it is important to note that, the previous assumption was proven based on data analysis which confirmed the relationship between households that rely on trade and households that buy food on credit. The Chi-square hypothesis test was statistically significant at a degree of freedom of 1 and at confidence level of 0.05. One respondent who had a small business on the street said,

“When I do not have money, I buy food on credit in the neighbourhood’s small shops. The vendors in the neighbourhood’s small shops trust me because they see me selling on the street. They know that when I get the money, I’ll pay them, and I do my best to be on good terms with them because they help me a lot” (39-year-old Congolese interviewee, Johannesburg).

Figure 43: Purchase Food on Credit and Marketing (As Alternative Livelihood Household Strategies)

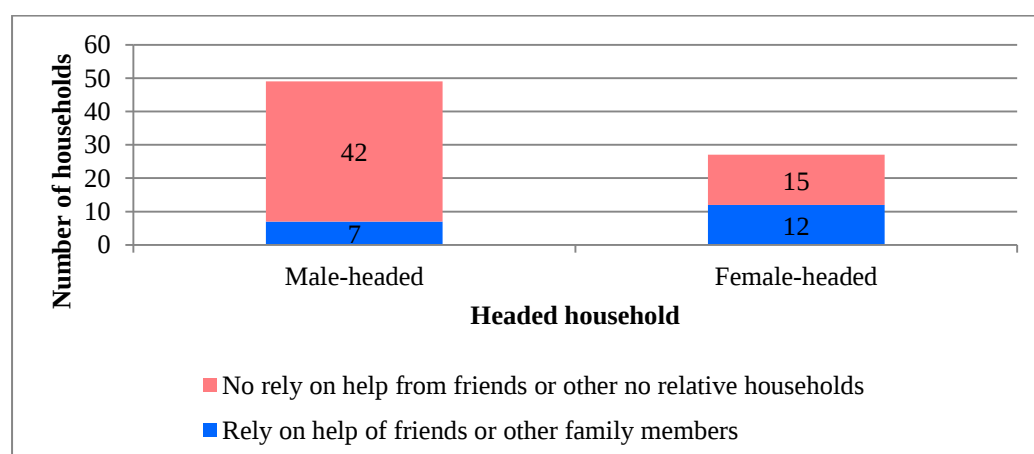


(Source: Research survey, 2017)

Figure 43 shows that majority of female-headed households relied on food aid from friends and/or other families. In the statistical analysis, it was found that the relationship between relying on help from friends and other families to obtain food and the sex of household head was significantly positive at a degree of freedom of 2 and a confidence level of 0.05. In addition, during face-to-face interviews, one interviewee said,

“Here in South Africa, when you do not have a partner, you suffer a lot. For us women, it is very difficult for us to support the household. Sometimes we even miss the food in the house to eat. Only, if I am at the end, I ask the neighbours for food or I tell my children to call my big brother to help with the food because my older brother cannot refuse to help me because he knows that I have children. At home, older brothers can never accept that their sister’s children may be starving” (36-year-old Congolese interviewee, Johannesburg).

Figure 44: Rely on the help from other households and Sex of household head



(Source: Research survey, 2017)

6.4 Conclusion

The current phenomenon of rapid urbanisation in developing countries, which is not associated with socio-economic developments, requires studies on adaptation strategies of poor households. Previous studies have revealed that the socio-economic difficulties faced by most urban poor households can push some poor households to adopt inappropriate coping strategies that can compromise the future of their households and their household members.

This study has revealed that majority of sampled households had difficulty developing sustainable livelihoods, thus making it necessary to identify the food sources and coping strategies of sampled households. It is important to note that the vast majority of sampled households were simultaneously buying food in informal markets, supermarkets, butchers, grocers and small shops. The food sources for the first category of households sampled was, informal markets, supermarkets, butchers, grocery stores and small shops. The second category of sampled households also relied on the help of friends and brothers, the borrowing of food from friends and family members, the meals shared with other households, the neighbours, and food aid. The third category also used food sources which were used in the first category, and they also relied on food imported from the DRC, growing their own vegetables and collecting remittances. However, majority of households used the food sources used in the second category. This revealed that most sampled households used less sustainable food sources.

In addition, over 95% of households have adopted coping strategies to maximize their chances of accessing food and basic needs, and about 92% of households adopted food adaptation strategies during food shortages. However, female-headed households, divorced households, and households headed by widowed were more likely to develop severe coping strategies.

From the above, it is clear that majority of sampled households did not use adequate food sources. In addition, a significant proportion of sampled households relied on food borrowing from other households, food aid, food provided by other households and neighbours, and meals shared with other households. In addition, it was found that the majority of sampled households relied on coping strategies, especially during food shortages. This revealed that sampled households were likely to adopt risky adaptation strategies.

CHAPTER 7: GENERAL CONCLUSIONS

7.1 Background

In recent years, several studies have been conducted in cities in South Africa to try to assess the level of food insecurity of poor and vulnerable households (Naicker et al., 2015; Rudolph and Kroll, 2016). Most of these studies have focused on poor households in South Africa, Zimbabwe and South Africa's neighbouring countries. Most of these sampled households have similar demographic, socio-economic, and cultural profiles (Altman et al., 2009; Naicker et al., 2015). In Johannesburg, however, there are also Congolese refugees and asylum seekers who have difficulties with finding the best paying jobs, and developing sustainable livelihoods that can ensure access safe and adequate food and to other basic needs (Darling, 2017; Grant and Thompson, 2015; Lakika et al., 2015; Moyo et al., 2016). As a result, much less is known about how Congolese refugees and asylum seekers develop livelihood strategies for accessing food and other basic needs, and how they adopt food survival strategies during food shortage periods. This study, therefore, attempted to fill the gaps in research aimed at understanding the food survival strategies of poor and vulnerable urban households.

The aim of this study was to evaluate the food survival strategies of Congolese refugees and asylum seekers in Johannesburg. This was achieved through an in-depth analysis of literature and the analysis of data collected from households. The three objectives of achieving the aim of this study were, to examine the social and demographic profiles of Congolese refugees and asylum seekers communities in Johannesburg, to identify the income and livelihood profiles of Congolese refugees and asylum seekers in Johannesburg, and to explore the coping strategies of community members during periods of income and food scarcity, with a specific focus on intra-group support structures.

7.2 Socio-demographic profiles of sampled households

While socio-demographic profiles of households are essential for assessing the level of food insecurity of poor households and their food survival strategies (Corbett, 1988; Devas, 2014; Jacobs, 2009), previous studies have failed to seek to understand the relationship between socio-demographic profiles of households and food survival strategies (Coates et al., 2007; Dodson and Chiweza, 2016; Hanson et al., 2007).

The results of the study show that a large number of respondents were female, and the few men who participated in the interviews of this study were household heads. This noted that this study was targeting people who had reliable information on household food security and food survival strategies. In both Rosettenville and Yeoville, household sizes were almost the same, although the average size for households in Rosettenville was slightly higher than households in Yeoville. Nuclear households and extended households were the majority as compared to other types of households. Similarly, male-headed households were more indexed than female-headed households.

Regarding information on the socio-demographic profiles of household members, it is important to note that the majority of sampled households were composed of related members. This shows that there is a possibility that members of sampled households could agree on the management and allocation of their resources. Although this may be favourable for household members who have not significantly changed their eating habits, it may also be detrimental to poor households who prefer to eat foods imported from the DRC. This is because food imported from the DRC may cost more than food produced in South Africa.

In this study, although the majority of sampled households were composed of a large number of related members, there were also married people who lived as household members and obeyed the orders of the household head. In other words, there are families living together in the same household to achieve a common goal. This practice may be advantageous in that it has the potential to minimise expenses and the possibility of famine.

Another observation is that majority of household members are under 18 years of age, and that most of them are born in South Africa. It is likely that these children may have dietary preferences different from those of other adult members who were born in the DRC. This may also be the case for related household members who arrived in South Africa, and have the preferences of food from the DRC. Similarly, although most households were composed of related members, complaints by some respondents about the disagreements between them and the partners of their related members suggest that cohabitation between related and unrelated members is not friendly and, may expose some household members to food insecurity. It is also important to note that the vast majority of Congolese refugees and asylum seekers have chosen to immigrate to South Africa to improve their living conditions. Which proves that Congolese forced migration to South Africa is a deliberate act. This is because while the motivation to improve their socio-economic conditions was not

conceivable, Congolese refugees and asylum seekers living in Johannesburg could accept living in countries bordering the DRC.

The results of this study also revealed that more than one-third of household members had at least university level education, and less than 20% had not attended high school. This revealed that a large number of Congolese refugees and asylum seekers from Johannesburg were qualified and had the qualities of working as skilled workers. However, since a large number of household members do not hold the status of being refugees, it is likely that sampled households are unable to find better paying jobs and develop sustainable livelihoods. This is because, according to previous studies, some employers take advantage of the vulnerability of forced migrants and pay them low wages. Similarly, in South Africa, asylum seekers do not benefit from government subsidies and social assistance programmes for poverty alleviation and income inequalities, which are essential for sustainable livelihoods, and decrease the level of household food insecurity.

7.3 Household livelihoods and household income

In most developing countries, income is essential for access to food and other basic needs. However, access to a substantial income often depends on how well the job pays. Similarly, according to previous studies, households that do not earn enough income to adequately access healthy and sufficient food and other basic needs to develop coping strategies. Therefore, in this study, it was important to present the livelihoods of sampled households and their amount of income they earn. This was to assess whether Congolese refugees and asylum seekers in Johannesburg have the socio-economic profiles of households adopting less severe food survival strategies.

Concerning the livelihoods of sampled households, it was important to gather information on the main occupations of heads of households and other household members. The results on the main occupation of household heads revealed that almost half of the household members were unemployed and less than 10% of household members worked as skilled workers. This shows that a significant number of households did not work in sectors that could generate a decent income. Household heads were, however, listed in almost all areas. On the other hand, the largest number of spouses or partners of heads of households were unemployed. The majority of the unemployed were female and held the asylum seekers document. Similarly, the largest number of household members who worked in the informal sector was female,

held the asylum seekers document and was composed of heads of households. All household members who were employed as skilled manual workers were male and held the status of a refugee. The household members who were self-employed were members of both male and female households. In addition, all members of households who were employed as skilled workers and all those who were self-employed held the status of refugees. This shows that the refugee status was essential to occupy qualified jobs. Similarly, although most Congolese refugees and asylum seekers are qualified, they unfortunately have serious difficulties in finding jobs in the formal sector and are generally under-employed.

It is also important to note that in this study, sampled households developed alternative livelihood strategies to access food and other basic needs. More than 95% of household members relied on alternative livelihood strategies to access food and other basic needs. The vast majority of alternative livelihood strategies were informal. In other words, the vast majority of households did not rely on government subsidies, which are essential for reducing poverty and income inequality. Nevertheless, the few household members who adopted formal strategies, such as receiving grants and formal credit, all had refugee statuses. This proves that a refugee status was essential for reducing poverty and income inequality, can improve livelihoods, and ensure access to healthy and adequate food for households. Also, all categories of household members were active in alternative livelihood strategies, including those with individuals under the age of 18 years. It was also noted that the wives of household heads opt for prostitution as a livelihood strategy. Therefore, it is evident that most members of sampled households relied on hard livelihood strategies to access food and other basic needs. Nevertheless, the refugee's status was essential for access to food and other basic needs.

With regards to monthly household income, it is important to note that about 58% of households have incomes below R4146 and only 9% of households have incomes above R8092. Unlike most households with incomes above R4146, the majority of nuclear households, female-centred households and male-centred households earned less than R4146.

7.4 Food sources and food survival strategies

According to previous studies, most forced migrants in Johannesburg face serious difficulties in developing sustainable livelihoods (De Jager, 2015; Knoll et al., 2017; Lakika et al., 2015; Tomlinson, 2017). Yet sustainable livelihoods are essential to promote access to safe and

adequate food and other basic needs (Christopher, 2001; Crush, 2016; Lakika et al., 2015; Smit, 2016; Szabo, 2016). Therefore, in Chapter 6 of this study, it was necessary to evaluate food sources and food survival strategies adopted by Congolese refugees and asylum seekers in Johannesburg.

The results obtained in Chapter 6 revealed that majority of the households bought their food in informal markets, supermarkets, small shops, butchers and wholesalers. However, compared to information on food sources, the households sampled in this study were grouped into three categories. Thus, according to the results of this study, less than 20% of households were able to eat the food categories of their choice. In contrast, about half of the households relied on unsustainable sources, that is, relying on food aid, food provided by other households, and sending their children to eat in other families. This revealed that, although food is available in the study areas, a large number of sampled households did not have enough resources to access the food of their choice. Similarly, although female-headed and male-headed households were more likely to rely on HTNS food sources, female-headed households were more vulnerable than male-headed households.

It is also important to note that in this study, a significant number of sampled households adopted food survival strategies during periods of food shortages. However, most female-headed households have adopted more severe strategies than male-headed households. For example, among households relying on food aid from friends or other families, households headed by female members outnumbered households headed by male members. It is also important to note that women empowerment is a factor that has played a vital role in reducing household hunger. For example, in this study, it was revealed that women who marketed on the street had the opportunity to buy food on credit at small stores in the area.

Finally, this study presented and analysed reliable information on the food survival strategies of sampled households. It provided essential information on the socio-demographic profiles of sampled households, main occupations of household members, alternative livelihood strategies of households, the monthly income of the household, food sources, coping strategies used when households do not have sufficient resources and strategies used in case of food shortages.

The previous findings strongly revealed that majority of the households in the sample had adopted rigorous coping strategies to access food and other basic needs. In general, in

sampled households, female members were likely to adopt more stringent food survival strategies than male members.

However, although this study assesses the food security strategies of Congolese refugees and asylum seekers, it has unfortunately not studied the severity of the food survival strategies of the sample households in relation to the level of food insecurity. This reveals that, it is currently difficult to get an idea of the level of insecurity of sampled households. Therefore, it seems imperative to conduct additional studies to assess the levels of food insecurity of Congolese refugees and asylum seekers, and to seek mechanisms for female-headed households to improve their living conditions and socio-economic conditions (Corbett, 1988).

References

- ACAT, 2013. Droit d'asile | ACAT France [WWW Document]. URL <http://www.acatfrance.fr/droit-asile> (accessed 10.7.18).
- Adepoju, A., 2000. Issues and recent trends in international migration in Sub-Saharan Africa. *Int. Soc. Sci. J.* 52, 383–394.
- Akampumuza, P., Matsuda, H., 2017. Weather shocks and urban livelihood strategies: The gender dimension of household vulnerability in the Kumi District of Uganda. *J. Dev. Stud.* 53, 953–970.
- Alternative food-security indicators: revisiting the frequency and severity of 'coping strategies' - ScienceDirect [WWW Document], n.d. URL <https://www.sciencedirect.com/science/article/pii/S0306919299000512> (accessed 10.11.18).
- Altman, M., Hart, T., Jacobs, P., 2009. Household food security status in South Africa. *Agrekon* 48, 345–361.
- Babbie, E., 2002. *Survey research methods* Belmont: Wodsworth.
- Barthel, S., Parker, J., Ernstson, H., 2015. Food and green space in cities: A resilience lens on gardens and urban environmental movements. *Urban Stud.* 52, 1321–1338.
- Bartlett, S., Hart, R., Satterthwaite, D., Barra, X. de la, Missair, A., 2016. *Cities for Children: Children's Rights, Poverty and Urban Management*. Routledge.
- Battersby, J., 2016. *The State of Urban Food Insecurity in Cape Town*. Southern African Migration Programme.
- Bennett, R., 2017. Mean Streets: Migration, Xenophobia and Informality in South Africa. J. Crush, A. Chikanda and C. Skinner (eds.), *Southern African Migration Project, the African Centre for Cities and the International Development Research Centre* (Cape Town, South Africa), 2015. No. of pages: x+ 287, Price: \$35.00. ISBN: 9781920596118. Popul. Space Place 23, e2039.
- Benson, J.E., Elder, G.H., 2011. Young Adult Identities and Their Pathways: A Developmental and Life Course Model. *Dev. Psychol.* 47, 1646–1657. <https://doi.org/10.1037/a0023833>
- Bernard, H.R., 2017. *Research methods in anthropology: Qualitative and quantitative approaches*. Rowman & Littlefield.
- Besada, H., 2007. *Fragile Stability: Post-Apartheid South Africa*.
- Bezuidenhout, M.M., Joubert, G., Hiemstra, L.A., Struwig, M.C., 2009. Reasons for doctor migration from South Africa. *South Afr. Fam. Pract.* 51, 211–215.
- Bhalla, G., 1993. Food Security in South and South East Asian Countries. *Man Dev.* 15.
- Bhorat, H., Thornton, A., Van der Zee, K., 2017. *Socio-Economic Determinants of Crime in South Africa: an Empirical Assessment*.

- Bickel, G., Nord, M., Price, C., Hamilton, W., Cook, J., 2000. Measuring food security in the United States: guide to measuring household food security. Meas. Food Secur. U. S. Guide Meas. Househ. Food Secur.
- Bilgili, O., Loschmann, C., Siegel, M., 2017. The Gender-Based Effects of Displacement: The Case of Congolese Refugees in Rwanda. KNOMAD Work. Pap. 21.
- Booth, W.J., 1991. The new household economy. Am. Polit. Sci. Rev. 85, 59–75.
- Bouillon, A., 1998. Immigration et immigrés en Afrique du Sud. Rev. Eur. Migr. Int. 14, 193–219.
- Brassell, S.N.H., 2018. Prevalence of Disability in a Cohort of HIV-Infected children attending an urban paediatric HIV Clinic in Johannesburg, South Africa.
- Brouillet, A., Huyghebaert, P., Turot, O., Baris, P., Beauval, V., Cartier-Bresson, J., Castellanet, C., Chetaille, A., Coste, J., Dubois, J.-L., 2007. Rapport sur le développement dans le monde 2008: l'agriculture au service du développement: note de lecture du réseau IMPACT.
- Brück, T., Schindler, K., 2008. The impact of conflict and fragility on households: A conceptual framework with reference to widows (No. 9292301373). Research paper/UNU-WIDER.
- Bruinsma, J., 2017. World agriculture: towards 2015/2030: an FAO study. Routledge.
- Bryant, W. Keith, Zick, C.D., 2005. The Economic Organization of the Household. Cambridge University Press.
- Bulbulia, A., 2015. Childhood pedestrian mortality in Johannesburg, South Africa: magnitude, determinants and neighbourhood characteristics.
- Burchi, F., De Muro, P., 2016. From food availability to nutritional capabilities: Advancing food security analysis. Food Policy 60, 10–19.
- Cai, L.A., 1998. Analyzing household food expenditure patterns on trips and vacations: a Tobit model. J. Hosp. Tour. Res. 22, 338–358.
- Cancian, M., Danziger, S., 2009. Changing Poverty, Changing Policies. Russell Sage Foundation.
- Carney, D., 1998. Sustainable rural livelihoods: What contribution can we make? Department for International Development.
- Carolan, M., 2016. The sociology of food and agriculture. Routledge.
- Chambers, R., Conway, G., 1992. Sustainable rural livelihoods: practical concepts for the 21st century. Institute of Development Studies (UK).
- Chant, S., 2002. Researching gender, families and households in Latin America: From the 20th into the 21st century. Bull. Lat. Am. Res. 21, 545–575.
- Chen, M.A., Dunn, E., 1996. Household economic portfolios.
- Christiaensen, L.J., Boisvert, R.N., 2000. On measuring household food vulnerability: Case evidence from Northern Mali. Department of Agricultural, Resource, and Managerial Economics, Cornell University.
- Christopher, A., 2001. Urban segregation in post-apartheid South Africa. Urban Stud. 38, 449–466.
- Clover, J., 2003. Food security in sub-Saharan Africa. Afr. Secur. Stud. 12, 5–15.

- Coates, J., Frongillo, E.A., Rogers, B.L., Webb, P., Wilde, P.E., Houser, R., 2006. Commonalities in the Experience of Household Food Insecurity across Cultures: What Are Measures Missing? *J. Nutr.* 136, 1438S-1448S. <https://doi.org/10.1093/jn/136.5.1438S>
- Coates, J., Swindale, A., Bilinsky, P., 2007. Household Food Insecurity Access Scale (HFIAS) for measurement of food access: indicator guide. Wash. DC Food Nutr. Tech. Assist. Proj. Acad. Educ. Dev. 34.
- Cohen, L., Manion, L., Morrison, K., 2013. The ethics of educational and social research, in: *Research Methods in Education*. Routledge, pp. 99–128.
- Corbett, J., 1988. Famine and household coping strategies. *World Dev.* 16, 1099–1112. [https://doi.org/10.1016/0305-750X\(88\)90112-X](https://doi.org/10.1016/0305-750X(88)90112-X)
- CoRMSA, 2009. Protecting refugees, asylum seekers and immigrants in South Africa. CoRMSA.
- Cornevin, M., 1979. *L'apartheid: pouvoir et falsification historique*. Unesco.
- Crush, J., 2017. Informal migrant entrepreneurship and inclusive growth in South Africa, Zimbabwe and Mozambique. Southern African Migration Programme.
- Crush, J., 2016. Migration, development and urban food security. Southern African Migration Programme.
- Crush, J., 2001. The dark side of democracy: Migration, xenophobia and human rights in South Africa. *Int. Migr.* 38, 103–133.
- Crush, J., Battersby, J., 2016. Rapid urbanisation, urban food deserts and food security in Africa. Springer.
- Crush, J., Caesar, M., 2017. Food remittances: Migration and food security in Africa. Southern African Migration Programme.
- Crush, J., Chikanda, A., Skinner, C., 2015. Migrant entrepreneurship and informality in South African cities. *Mean Str. Migr. Xenophob. Informality South Afr.* Cape Town SAMP ACC IDRC 1–24.
- Crush, J., Dodson, B., 2007. Another Lost Decade: The Failures of South Africa's post-apartheid Migration Policy. *Tijdschr. Voor Econ. En Soc. Geogr.* 98, 436–454.
- Crush, J., Frayne, B., 2010. The invisible crisis: urban food security in Southern Africa. Citeseer.
- Crush, J., Hovorka, A., Tevera, D., 2011. Food security in Southern African cities: the place of urban agriculture. *Prog. Dev. Stud.* 11, 285–305.
- Crush, J., McDonald, D.A., 2001. Introduction to special issue: Evaluating South African immigration policy after apartheid. *Afr. Today* 48, 1–13.
- Crush, J., Ramachandran, S., 2017. Migrant entrepreneurship collective violence and xenophobia in South Africa. Southern African Migration Programme.
- Crush, J., Ramachandran, S., 2015. Doing business with xenophobia. *Mean Str. Migr. Xenophob. Informality South Afr.* 25–59.

- Crush, J., Tawodzera, G., 2016. The food insecurities of Zimbabwean migrants in urban South Africa. Southern African Migration Programme.
- Darling, J., 2017. Forced migration and the city: Irregularity, informality, and the politics of presence. *Prog. Hum. Geogr.* 41, 178–198.
- Davies, S., 2016. *Adaptable livelihoods: Coping with food insecurity in the Malian Sahel*. Springer.
- De Jager, J., 2015. The right of asylum seekers and refugees in South Africa to self-employment: a comment on *Somali Association of South Africa v Limpopo Department of Economic Development, Environment and Tourism*: current developments/case notes. *South Afr. J. Hum. Rights* 31, 401–409.
- de Saint Pol, T., Deney, A., Monso, O., 2004. Ménage et chef de ménage: deux notions bien ancrées. *Trav. Genre Sociétés* 63–78.
- de Villiers, J., 2017. Career plans of final-year South African student teachers: migration to ‘greener pastures’? *Afr. Educ. Rev.* 14, 212–229.
- Denscombe, M., 2014. *The good research guide: for small-scale social research projects*. McGraw-Hill Education (UK).
- Dercon, S., 2002. Income Risk, Coping Strategies, and Safety Nets. *World Bank Res. Obs.* 17, 141–166. <https://doi.org/10.1093/wbro/17.2.141>
- Devas, N., 2014. *Urban Governance Voice and Poverty in the Developing World*. Routledge.
- Devereux, S., Maxwell, S., 2001. *Food security in sub-Saharan Africa*. ITDG Publishing.
- Dodson, B., Chiweza, A., 2016. Gender and food insecurity in southern African cities. Southern African Migration Programme.
- Dodson, B., Crush, J., 2015. *Migration Governance and Migration Rights in the Southern African Development Community (SADC): Attempts at Harmonization in a Disharmonious Region*.
- Dörschner, J., Machts, F., 2011. *The 1951 Convention Relating to the Status of Refugees and Its 1967 Protocol: A Commentary*. OUP Oxford.
- Dos Santos, S., Adams, E., Neville, G., Wada, Y., de Sherbinin, A., Bernhardt, E.M., Adamo, S., 2017. Urban growth and water access in sub-Saharan Africa: Progress, challenges, and emerging research directions. *Sci. Total Environ.* 607, 497–508.
- Edmunds, M., 1997. Skilled Foreigners" the solution" to...’. *Wkly. Mail Guard*.
- Eigenbrod, C., Gruda, N., 2015. Urban vegetable for food security in cities. A review. *Agron. Sustain. Dev.* 35, 483–498.
- Ellis, F., 2000. *Rural Livelihoods and Diversity in Developing Countries*. OUP Oxford.
- Ellis, F., 1998. Household strategies and rural livelihood diversification. *J. Dev. Stud.* 35, 1–38.
- Ellis, F., Sumberg, J., 1998. Food production, urban areas and policy responses. *World Dev.* 26, 213–225.
- FAO, 2002. FAO - The Anti-Hunger Programme [WWW Document]. URL <http://www.fao.org/WorldFoodSummit/sideevents/papers/Y6820E.htm> (accessed 10.7.18).

- FAO, 1996a. World Food Summit [WWW Document]. URL <http://www.fao.org/WFS/> (accessed 9.30.18).
- FAO, 1996b. Rome Declaration and Plan of Action [WWW Document]. URL <http://www.fao.org/docrep/003/w3613e/w3613e00.htm> (accessed 10.7.18).
- FAO, 1982. FAO: its origins, formation and evolution 1945-1981 [WWW Document]. URL <http://www.fao.org/docrep/009/p4228e/P4228E04.htm> (accessed 10.7.18).
- Fink, A., 2012. How to conduct surveys: A step-by-step guide: A step-by-step guide. Sage Publications.
- Flagg, L.A., Sen, B., Kilgore, M., Locher, J.L., 2014. The influence of gender, age, education and household size on meal preparation and food shopping responsibilities. *Public Health Nutr.* 17, 2061–2070.
- Frankenberger, T.R., McCaston, M.K., 1998. The household livelihood security concept. *Food Nutr. Agric.* 30–35.
- Frayne, B., 2010. Pathways of food: mobility and food transfers in Southern African cities. *Int. Dev. Plan. Rev.* 32, 291–310.
- Frayne, G.B., 2001. Survival of the poorest: Food security and migration in Namibia.
- Geddes, A., Scholten, P., 2016. The politics of migration and immigration in Europe. Sage.
- Gladwin, C.H., Thomson, A.M., Peterson, J.S., Anderson, A.S., 2001. Addressing food security in Africa via multiple livelihood strategies of women farmers. *Food Policy* 26, 177–207.
- Glaser, D., 1997. South Africa and the limits of civil society. *J. South. Afr. Stud.* 23, 5–25.
- Grant, R., Thompson, D., 2015. City on edge: immigrant businesses and the right to urban space in inner-city Johannesburg. *Urban Geogr.* 36, 181–200.
- Guyer, J.I., 1981. Household and community in African studies. *Afr. Stud. Rev.* 24, 87–138.
- Haferburg, C., Huchzermeyer, M., 2017. 5 Redlining or renewal? The space-based construction of decay and its contestation through local agency in Brixton, Johannesburg. *Negat. Neighb. Reput. Place Attach. Prod. Contestation Territ. Stigma* 60.
- Halloran, A., Vantomme, P., Hanboonsong, Y., Ekesi, S., 2015. Regulating edible insects: the challenge of addressing food security, nature conservation, and the erosion of traditional food culture. *Food Secur.* 7, 739–746.
- Hammelman, C., Hayes-Conroy, A., 2015. Understanding cultural acceptability for urban food policy. *J. Plan. Lit.* 30, 37–48.
- Handbury, J., Rahkovsky, I., Schnell, M., 2015. Is the focus on food deserts fruitless? Retail access and food purchases across the socioeconomic spectrum. National Bureau of Economic Research.
- Hanson, K.L., Sobal, J., Frongillo, E.A., 2007. Gender and marital status clarify associations between food insecurity and body weight. *J. Nutr.* 137, 1460–1465.

- Heidhues, F., Atsain, A., Nyangito, H., Padilla, M., Gheri, G., Vallée, L., 2004. Development strategies and food and nutrition security in Africa: An assessment. Intl Food Policy Res Inst.
- Helliker, K., Chiweshe, M.K., Bhatasara, S., 2018. The Political Economy of Livelihoods in Contemporary Zimbabwe. Routledge.
- Hlatshwayo, M., Vally, S., 2014. Violence, resilience and solidarity: The right to education for child migrants in South Africa. Sch. Psychol. Int. 35, 266–279.
- Homer-Dixon, T., Percival, V., 2018. The Case of South Africa, in: Environmental Conflict. Routledge, pp. 13–35.
- Hulme, D., Shepherd, A., 2003. Conceptualizing chronic poverty. World Dev. 31, 403–423.
- Hunter, M., Posel, D., 2012. Here to work: the socioeconomic characteristics of informal dwellers in post-apartheid South Africa. Environ. Urban. 24, 285–304.
- IFRC, 2013. Shifting Borders: Externalizing migrant vulnerabilities and rights [WWW Document]. Issuu. URL https://issuu.com/goldmercury/docs/shifting_borders_externalizing_migr/38 (accessed 10.7.18).
- Jacobs, P.T., 2009. The status of household food security targets in South Africa. Agrekon 48, 410–433.
- Janes, C., Stall, R., Gifford, S.M., 2012. Anthropology and Epidemiology: Interdisciplinary Approaches to the Study of Health and Disease. Springer Science & Business Media.
- Jeukendrup, A., Gleeson, M., 2018. Sport nutrition. Human Kinetics.
- Johnson, R.B., Onwuegbuzie, A.J., 2004. Mixed methods research: A research paradigm whose time has come. Educ. Res. 33, 14–26.
- Jong, N., 2017. Displays of masculinity and rituals of display: Congolese immigration and xenophobia in Johannesburg. J. Hist. Sociol.
- Juillard, H., Mohiddin, L., Péchayre, M., Smith, G., Lewin, R., 2017. The influence of market support interventions on household food security: An evidence synthesis.
- Kabwe-Segatti, A.W., 2008. Migration in post-apartheid South Africa: Challenges and questions to policy-makers. Agence française de développement, Département de la recherche.
- Kane, P., 1989. 12 Famine in China 1959-61: Demographic and Social Implications. Differ. Mortal. Methodol. Issues Biosoc. Factors 231.
- Kavuro, C., 2015. Refugees and asylum seekers: Barriers to accessing South Africa's labour market. Law Democr. Dev. 19, 232–260.
- Kgantsi, E.M., Geyer, H.S., Geyer Jr, H.S., 2018. Intra-metropolitan corridor development in the City of Johannesburg and the Social Welfare. Reg. Sci. Policy Pract.
- Kihato, C., 2013. Migrant Women of Johannesburg: Everyday Life in an In-Between City. Springer.
- Kihato, C.W., 2007. Invisible lives, inaudible voices? The social conditions of migrant women in Johannesburg. Afr. Identities 5, 89–110.

- Kimani-Murage, E.W., Schofield, L., Wekesah, F., Mohamed, S., Mberu, B., Ettarh, R., Egondi, T., Kyobutungi, C., Ezech, A., 2014. Vulnerability to food insecurity in urban slums: experiences from Nairobi, Kenya. *J. Urban Health* 91, 1098–1113.
- Knoll, A., Rampa, F., Torres, C., Molina, P.B., 2017. The nexus between food and nutrition security, and migration.
- Kok, P., Collinson, M., 2006. Migration and urbanisation in South Africa. Statistics South Africa.
- Kothari, C.R., 2004. Research methodology: Methods and techniques. New Age International.
- Krantz, L., 2001. The sustainable livelihood approach to poverty reduction. SIDA Div. Policy Socio-Econ. Anal.
- Kunstadter, P., 1984. Demographic differentials in a rapidly changing mixed ethnic population in northwestern Thailand.
- Lakika, D., Kankonde, P., Richters, A., 2015. Violence, suffering and support: Congolese forced migrants' experiences of psychosocial services in Johannesburg, in: *Healing and Change in the City of Gold*. Springer, pp. 101–119.
- Landau, L.B., 2006. Protection and dignity in Johannesburg: shortcomings of South Africa's urban refugee policy. *J. Refug. Stud.* 19, 308–327.
- Landau, L.B., Segatti, A.W.K., 2009. Human development impacts of migration: South Africa case study.
- Landau, L.B., Singh, G., 2008. Decentralisation, migration and development in South Africa's primary cities. *Migr. Post-Apartheid South Afr. Chall. Quest. Policy-Mak.* 163–211.
- Lee, J.J., 2017. Neo-nationalism in higher education: case of South Africa. *Stud. High. Educ.* 42, 869–886.
- Legard, R., Keegan, J., Ward, K., 2003. In-depth interviews. *Qual. Res. Pract. Guide Soc. Sci. Stud. Res.* 138–169.
- Lombard, M., Crankshaw, O., 2017. Deindustrialization and racial inequality: Social polarisation in eThekweni? *Cities* 60, 221–233.
- Makandwa, T., Vearey, J., 2017. Giving Birth in a Foreign Land: Exploring the Maternal Healthcare Experiences of Zimbabwean Migrant Women Living in Johannesburg, South Africa. Presented at the Urban Forum, Springer, pp. 75–90.
- Makoni, S.B., 2017. Language planning, security, police communication and multilingualism in uniform: The case of South African Police Services. *Lang. Commun.* 57, 48–56.
- Marchand, J., Bouillon, A., 1985. La propagande de l'apartheid: comment l'Afrique du Sud se crée une image de marque. Karthala.
- Marfleet, P., 2006. Refugees in a global era. Palgrave Macmillan.
- Matsinhe, D.M., 2016. Apartheid Vertigo: the rise in discrimination against Africans in South Africa. Routledge.
- Mattila-Wiro, P., 1999. Economics theories of the household: A critical review. UNU-WIDER.

- Maxwell, D., 1999. Urban food security in sub-Saharan Africa. *Hunger-Proof Cities Sustain. Urban Food Syst.*
- Maxwell, D., Watkins, B., Wheeler, R., Collins, G., 2003. The coping strategies index: A tool for rapidly measuring food security and the impact of food aid programs in emergencies. Nairobi CARE East. Cent. Afr. Reg. Manag. Unit World Food Programme Vulnerability Assess. Mapp. Unit.
- Maxwell, S., 1996. Food security: a post-modern perspective. *Food Policy* 21, 155–170.
- Maxwell, S., Smith, M., 1992. Household food security: a conceptual review. *Househ. Food Secur. Concepts Indic. Meas.* 1–72.
- McIntyre, L., Rondeau, K., 2004. Food insecurity. *Soc. Determinants Health Can. Perspect.* 188–204.
- Measuring food insecurity: the frequency and severity of “coping strategies” - ScienceDirect [WWW Document], n.d. URL <https://www.sciencedirect.com/science/article/pii/S030691929600005X> (accessed 3.1.18).
- Misago, J.P., 2016. Migration and Socio-Economic Development in African Cities: The Dual Challenge to the Aerotropolis Project of South Africa’s Ekurhuleni Metropolitan Municipality.
- Misselhorn, A.A., 2005. What drives food insecurity in southern Africa? A meta-analysis of household economy studies. *Glob. Environ. Change* 15, 33–43.
- Mitlin, D., Satterthwaite, D., 2013. *Urban poverty in the global south: scale and nature.* Routledge.
- Mohlakoana, N., de Groot, J.R., Knox, A.J., 2017. Post-apartheid spatial inequalities and the built environment: Drivers of energy vulnerability for the urban poor in South Africa, in: *Energy Poverty and Vulnerability.* Routledge, pp. 61–79.
- Moore, H.L., 1994. *A passion for difference: Essays in anthropology and gender.* Indiana University Press.
- Morrill, W.T., James, A.V., 1990. Modernization and Household Formation on St. Bart: Continuity and Change. *Hum. Ecol.* 18, 457–474.
- Moser, C.O., 1998. The asset vulnerability framework: reassessing urban poverty reduction strategies. *World Dev.* 26, 1–19.
- Moyo, I., Nicolau, M., Gumbo, T., 2016. Johannesburg (South Africa) inner city African immigrant traders: pathways from poverty? Presented at the Urban Forum, Springer, pp. 329–345.
- Murray, M.J., 2011. *City of extremes: The spatial politics of Johannesburg.* Duke University Press.
- Myburgh, A., 2004. Explaining Emigration from South Africa. *South Afr. J. Econ.* 72, 122–148.
- Naicker, N., Mathee, A., Teare, J., 2015. Food insecurity in households in informal settlements in urban South Africa. *SAMJ South Afr. Med. J.* 105, 268–270.
- Nattrass, J.S., 2002. Class, distribution and redistribution in post-apartheid South Africa. *Transformation.*

- Nelson, J.M., 2017. *Access to Power: Politics and the Urban Poor in Developing Nations*. Princeton University Press.
- Neocosmos, M., 2010. From Foreign Natives to Native Foreigners. Explaining Xenophobia in Post-apartheid South Africa: Explaining Xenophobia in Post-apartheid South Africa: Citizenship and Nationalism, Identity and Politics. African Books Collective.
- Odunayo, M.A., Asuelime, L.E., Okem, A.E., 2017. South African Policy on Migration and its Alignment with the UNO Charter on Refugee and Asylum-seekers. *J. Afr. Union Stud.* 6, 81–96.
- Okyere, A., Kita, M., 2015. Rethinking urban informality and informal settlements growth in urban Africa: A literature discussion. *J. Sustain. Dev. Afr.* 17, 101–124.
- Parappurathu, S., Kumar, A., Bantilan, M., Joshi, P., 2015. Food consumption patterns and dietary diversity in eastern India: evidence from village level studies (VLS). *Food Secur.* 7, 1031–1042.
- Patel, L., Hochfeld, T., 2011. It buys food but does it change gender relations? Child Support Grants in Soweto, South Africa. *Gend. Dev.* 19, 229–240.
- Peberdy, S., 1999. Exclusive immigration policies and inclusive identities in the “New” South Africa. Presented at the Unpublished seminar paper, University of Witwatersrand.
- Pingali, P.L., 2012. Green revolution: impacts, limits, and the path ahead. *Proc. Natl. Acad. Sci.* 109, 12302–12308.
- Pinstrup-Andersen, P., Watson II, D.D., 2011. *Food policy for developing countries: The role of government in global, national, and local food systems*. Cornell University Press.
- Pojmann, W., 2017. *Immigrant Women and Feminism in Italy*. Routledge. <https://doi.org/10.4324/9781315252612>
- Poulsen, M.N., McNab, P.R., Clayton, M.L., Neff, R.A., 2015. A systematic review of urban agriculture and food security impacts in low-income countries. *Food Policy* 55, 131–146.
- Proudlock, P., Mathews, S., Jamieson, L., 2014. Children’s right to be protected from violence: A review of South Africa’s laws and policies. *South Afr. Prog. Realising Child. Rights Law Rev. Child. Inst. Univ. Cape Town Save Child. South Afr.* 166–212.
- Rakodi, C., 2014. A livelihoods approach—conceptual issues and definitions, in: *Urban Livelihoods*. Routledge, pp. 26–45.
- Rakodi, C., 1999. A capital assets framework for analysing household livelihood strategies: implications for policy. *Dev. Policy Rev.* 17, 315–342.
- Rakodi, C., 1995. Poverty lines or household strategies?: A review of conceptual issues in the study of urban poverty. *Habitat Int.* 19, 407–426.
- Ramachandran, S., Crush, J., Tawodzera, G., 2017. Security Risk and Xenophobia in the Urban Informal Sector. *Afr. Hum. Mobil. Rev.* 854.

- Ranyane, K.A., 2015. Survivalist Entrepreneurship: An Income Generating Alternative for the Unemployed populace. *Mediterr. J. Soc. Sci.* 6, 301.
- Raphael, D., 2016. *Social Determinants of Health: Canadian Perspectives*. Canadian Scholars' Press.
- Read, B.R., 2016. A narrative exploration of migrants to South Africa and how they navigate the changing immigration landscape.
- Riley, F., Moock, N., 1995. Inventory of food security impact indicators: food security indicators and framework. *Handb. Monit. Eval. Food Aid Programs Arlingt. VA IMPACT*.
- Roger Zetter, 2014. A fragmented landscape of protection | Forced Migration Review [WWW Document]. URL <https://www.fmreview.org/dayton20/zetter> (accessed 10.7.18).
- Rudolph, M., Kroll, F., 2016. The State of Food Insecurity in Johannesburg. *Southern African Migration Programme*.
- Ruel, M.T., Garrett, J.L., Hawkes, C., Cohen, M.J., 2009. The food, fuel, and financial crises affect the urban and rural poor disproportionately: a review of the evidence. *J. Nutr.* 140, 170S-176S.
- Rugunanan, P., Smit, R., 2011. Seeking refuge in South Africa: Challenges facing a group of Congolese and Burundian refugees. *Dev. South. Afr.* 28, 705–718.
- SACN, 2004. SA Cities Network - SoCR 2004 [WWW Document]. URL <http://www.sacities.net/reports/socr-2004> (accessed 10.7.18).
- Santley, R.S., Hirth, K.G., 1992. *Prehispanic Domestic Units in Western Mesoamerica: Studies of the Household, Compound, and Residence*. CRC Press.
- Sarantakos, S., 2012. *Social research*. Macmillan International Higher Education.
- Satterthwaite, D., Tacoli, C., 2002. Seeking an understanding of poverty that recognizes rural-urban differences and rural-urban linkages. *Urban Livelihoods People Centered Approach Reducing Poverty* 52–70.
- Saul, B., Kinley, D., Mowbray, J., 2014. *The international covenant on economic, social and cultural rights: commentary, cases, and materials*. OUP Oxford.
- Saunders, D., 2011. *Arrival city: How the largest migration in history is reshaping our world*. Vintage.
- Schnitzer, P., 2016. How to Target Households in Adaptive Social Protection Systems?: Relative Efficiency of Proxy Means Test and Household Economy Analysis in Niger. *World Bank*.
- Seekings, J., 2000. Introduction: Urban studies in South Africa after apartheid. *Int. J. Urban Reg. Res.* 24, 832–840.
- Segatti, A., Landau, L., 2011. *Contemporary migration to South Africa: a regional development issue*. The World Bank.
- Sen, A., 1982a. *Poverty and famines: an essay on entitlement and deprivation*. Oxford university press.
- Sen, A., 1982b. The food problem: Theory and policy. *Third World Q.* 4, 447–459.

- Sharma, R., 2013. The Family and Family Structure Classification Redefined for the Current Times. *J. Fam. Med. Prim. Care* 2, 306–310. <https://doi.org/10.4103/2249-4863.123774>
- Shoemaker, P.J., Reese, S.D., 2013. *Mediating the message in the 21st century: A media sociology perspective*. Routledge.
- Sidenvall, B., Nydahl, M., Fjellström, C., 2000. The meal as a gift—the meaning of cooking among retired women. *J. Appl. Gerontol.* 19, 405–423.
- Sin, C.H., 2005. Seeking informed consent: Reflections on research practice. *Sociology* 39, 277–294.
- Singleton Jr, R., Straits, B.C., Straits, M.M., McAllister, R.J., 1988. *Approaches to social research*. Oxford University Press.
- Smit, R., Rugunanan, P., 2015. Transnational forced migration and negotiating emotional well-being: the case of women refugees in South Africa. *Soc. Dyn.* 41, 184–203.
- Smit, R., Rugunanan, P., 2014. From precarious lives to precarious work: The dilemma facing refugees in Gauteng, South Africa. *South Afr. Rev. Sociol.* 45, 4–26.
- Smit, W., 2016. Urban governance and urban food systems in Africa: Examining the linkages. *Cities* 58, 80–86.
- Snel, E., Staring, R., 2001. Poverty, migration, and coping strategies: an introduction. *Focaal Eur. J. Anthropol.* 38, 7–22.
- Sonnino, R., 2016. The new geography of food security: exploring the potential of urban food strategies. *Geogr. J.* 182, 190–200.
- South Africa Government, 1996. Constitution of the Republic of South Africa, 1996 | South African Government [WWW Document]. URL <https://www.gov.za/documents/constitution-republic-south-africa-1996> (accessed 10.7.18).
- Souvatzi, S., 2007. Social complexity is not the same as hierarchy. *Social. Complex. Struct. Interact. Power Archaeol. Discourse* 37–59.
- SSA, S.S., 2011. Metropolitan Municipality | Statistics South Africa.
- SSA, S.S., 2007. 2007 Community Survey | Statistics South Africa.
- Steinberg, J., 2005. A mixed reception: Mozambican and Congolese refugees in South Africa. *Inst. Secur. Stud. Monogr.* 2005, 45.
- Szabo, S., 2016. Urbanisation and food insecurity risks: Assessing the role of human development. *Oxf. Dev. Stud.* 44, 28–48.
- Tacoli, C., 2017. Food (In) Security in Rapidly Urbanising, Low-Income Contexts. *Int. J. Environ. Res. Public. Health* 14, 1554.
- Tacoli, C., McGranahan, G., Satterthwaite, D., 2015. Urbanisation, rural-urban migration and urban poverty. Human Settlements Group, International Institute for Environment and Development.
- Tawodzera, G., Zanamwe, L., 2016. The State of Food Insecurity in Harare, Zimbabwe. Southern African Migration Programme.

- Taylor, S.C., Moore, A., Thiessen, R., Bailey, C., 1985. Efficiency of food utilization in traditional and sex-controlled systems of beef production. *Anim. Sci.* 40, 401–440.
- The asset vulnerability framework: Reassessing urban poverty reduction strategies - ScienceDirect [WWW Document], n.d. URL <https://www.sciencedirect.com/science/article/pii/S0305750X97100158> (accessed 3.1.18).
- Tolan, P.H., Deutsch, N.L., 2015. Mixed methods in developmental science. *Handb. Child Psychol. Dev. Sci.*
- Tomlinson, R., 2017. *Urbanization in post-apartheid South Africa*. Routledge.
- Tourangeau, R., 1984. Cognitive sciences and survey methods. *Cogn. Asp. Surv. Methodol. Build. Bridge Discip.* 73–100.
- Turok, I., 2014. The resilience of South African cities a decade after local democracy. *Environ. Plan. A* 46, 749–769.
- Turok, I., Borel-Saladin, J., 2014. Is urbanisation in South Africa on a sustainable trajectory? *Dev. South. Afr.* 31, 675–691.
- UNHCR, 2016. unhcr south africa 2016 - Google Search [WWW Document]. URL <https://www.google.co.za/search?client=firefox-b&dcr=0&q=unhcr+south+africa+2016&sa=X&ved=0ahUKEwi3qsixpPvZAhVqAcAKHXDHDFMQ1QIIImwEoAg&biw=1280&bih=890> (accessed 3.20.18).
- UNHCR, U.N.H.C. for, 2015. UNHCR Global Appeal 2015 Update - South Africa [WWW Document]. UNHCR. URL <http://www.unhcr.org/publications/fundraising/5461e604b/unhcr-global-appeal-2015-update-south-africa.html> (accessed 3.21.18).
- UNHCR, U.N.H.C. for, 2014. UNHCR Global Appeal 2014-2015 - South Africa [WWW Document]. UNHCR. URL <http://www.unhcr.org/publications/fundraising/528a0a2916/unhcr-global-appeal-2014-2015-south-africa.html> (accessed 3.21.18).
- UNHCR, U.N.H.C. for, 2011. Refworld | UNHCR Global Report 2011, South Africa [WWW Document]. Refworld. URL <http://www.refworld.org/docid/50c737a119.html> (accessed 3.20.18).
- UNHCR, U.N.H.C. for, 2007. UNHCR Global Appeal 2007 - South Africa [WWW Document]. UNHCR. URL <http://www.unhcr.org/publications/fundraising/455443a60/unhcr-global-appeal-2007-south-africa.html> (accessed 9.30.18).
- UNHCR, U.N.H.C. for, 2005. UNHCR Global Appeal 2005 - South Africa [WWW Document]. UNHCR. URL <http://www.unhcr.org/publications/fundraising/41ab28e88/unhcr-global-appeal-2005-south-africa.html> (accessed 9.30.18).
- UNHCR, U.N.H.C. for, 2003. UNHCR Global Appeal 2003 - South Africa [WWW Document]. UNHCR. URL <http://www.unhcr.org/publications/fundraising/3ddceb8a3/unhcr-global-appeal-2003-south-africa.html> (accessed 3.21.18).

- Valodia, I., Lebani, L., Skinner, C., Devey, R., 2006. Low-waged and informal employment in South Africa. *Transform. Crit. Perspect. South. Afr.* 60, 90–126.
- Van de Walle, E., 2006. *African households: censuses and surveys*. ME Sharpe.
- Venkatesh, V., Brown, S.A., Bala, H., 2013. Bridging the qualitative-quantitative divide: Guidelines for conducting mixed methods research in information systems. *MIS Q.* 37.
- Waal, A. de, 1989. *Famine that kills: Darfur, Sudan, 1984-85. Famine Kills Darfur Sudan 1984-85*.
- Warr, P., 1987. *Work, unemployment, and mental health*, Work, unemployment, and mental health. Oxford University Press, New York, NY, US.
- Whitney, E.N., Rolfes, S.R., 2018. *Understanding nutrition*. Cengage Learning.
- Wilson, C.A., 1980. Rehearsal for a United Nations: The Hot Springs Conference. *Dipl. Hist.* 4, 263–282. <https://doi.org/10.1111/j.1467-7709.1980.tb00348.x>
- World Bank, 2017. Overview [WWW Document]. World Bank. URL <http://www.worldbank.org/en/topic/poverty/overview> (accessed 11.22.18).
- World Bank, T.W., 2007. *Rapport sur le developpement dans le monde 2008 : l’agriculture au service du developpement - abrege* (No. 41456). The World Bank.
- World Bank, W., 1986. *Poverty and hunger: Issues and options or food security in developing countries*.
- Zagorsky, J.L., 2005. Marriage and divorce’s impact on wealth. *J. Sociol.* 41, 406–424.
- Ziaei, M., Bidabadi, F.S., Eshraghi, F., Keramatzadeh, A., 2013. Food security and coping strategies case study of rural areas of Gorgan. *Int. J. Agric. Crop Sci.* 6, 225.
- Zihindula, G., Meyer-Weitz, A., Akintola, O., 2017. Lived Experiences of Democratic Republic of Congo Refugees facing Medical Xenophobia in Durban, South Africa. *J. Asian Afr. Stud.* 52, 458–470.
- Zihindula, G., Meyer-Weitz, A., Akintola, O., 2015. Access to Health Care Services by refugees in Southern Africa: A Review of Literature. *South. Afr. J. Demogr.* 16.

Appendix A: Participant Information Sheet for Household Members

Date: March 2017

Good Day

My name is **Mutuza Lupepe Jacques Mupenda**, a Msc student in the school of Geography, Archeology and Environmental Studies, University of the Witwatersrand. I am currently conducting research title: “Food Survival Strategies in Congolese Refugees and Asylum Seekers Communities in Johannesburg.” You have been identified as a representative of a household that lives in the study area and as a result I humbly invite you to participate in this study.

Indeed, access to food is a universal right and is guaranteed in the South African constitution. In addition, some public and private services such as SASSA, The Salvation Army and JRS carry out actions that guarantee access to food for poor and vulnerable people living in South Africa.

This questionnaire is strictly for research purposes; please answer the questions according to the guidelines. Your cooperation will be of great importance to this study and please note that there are no rights or wrong answers. This survey is both confidential and anonymous. Responses will be treated with strict confidence and data will not be shared with any third parties or used for commercial purposes. Please note that your participation is completely voluntary and involves no risk, penalty, or loss of benefits whether or not you participate. You may withdraw from the survey at any stage.

Thank you very much for your time and cooperation. This interview will be written on paper for research analysis purposes. This survey will not take longer than 60 minutes. If you agree to participate, kindly answer the questions.

Kind Regards

STUDY INVESTIGATOR

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Appendix B: Consent Form for Household Members

Hello, my name is *Jacques Mupenda*.

I am currently a MSc student in the School of Geography, Archaeology and Environmental Studies, at the University of the Witwatersrand.

My research focuses on food survival strategies among Congolese refugees and asylum seekers in Johannesburg. I request your participation in this study, by answering some questions about your own food survival strategies in your household. The interview will last less than an hour.

If you agree to participate in this study, you are free to remain anonymous. I reassure you that our conversation will remain confidential and your answers will be used for academic purposes only. I would like to assure that your responses will be treated confidentially.

Please, it is important to give me your real opinions. I inform you that the data from this study will be concluded by a compilation of the results of 76 household respondents.

I do agree to participate in the survey. ☐

I recognize that I may withdraw my consent at any point in this process ☐

I choose to keep my name anonymous ☐

Which is your preferred language for this interview?

STUDY INVESTIGATOR

Signature -----Date-----

Appendix C: Questionnaire for Interviews with Congolese Refugees and Asylum Seekers

The interview program

1. Date of interview. Day..... Month..... Year.....
2. Start time of the interview..... End time of the interview.....

I. Demographic profile

I would like to discuss the demographic profile of your household.

1. Can you tell me who are you in this household?
2. Where have you lived in DRC?
3. When did you arrive in South Africa?
4. The head of the household uses what identity document?
5. Why did you choose to live with your household in Rosettenville/Yeoville?
6. I would like some information on the structure, size and age of people living in your household. Also, I wonder if the household head supports others who do not live in this household.

II. Socioeconomic profile

Now I would like to discuss the socioeconomic profile of your household.

1. What is the main occupation of the household head and household members? If your household is developing alternative livelihood strategies, we can also talk about it.
2. Can you tell me about your level of education and the level of education of household members?
3. What is the main source of household income?
4. The head of the household earns how much income (monthly)?
5. Disposable income in your household is how much each month?
6. How much you spend every day for household food?

III. Information on household food

I would like to talk about the food eaten in your household during the last seven days.

1. Where are food sources?
2. What do people eat?
3. Why people eat these foods?
4. How household members appreciate these foods? (Compared to the food they ate before migration).

IV. Information on household coping strategies

I would like to talk about your experience on food coping strategies in your household. Can you tell me about how food prioritized against other need when household income is insufficient?

V. Information on the food strategies of households during the shortage

I would like to talk about your experience on food strategies used in your household during the shortage. What do you do when there are food shortages in your household and the resources are not sufficient to obtain enough food.

IV. Is there anything else important that you would like to add?

Thank you for your time and cooperation.

Signature -----Date-----