



COLLEGE OF DEVELOPMENT STUDIES  
CENTER FOR FOOD SECURITY STUDIES

ASSESSMENT OF FOOD SECURITY AND COPING STRATEGIES  
AMONG WOMEN REFUGEES IN ADDIS ABABA, ETHIOPIA

JEMAL HASSEN MUHYIE (GSE/0964/10)

A THESIS SUBMITTED TO CENTRE FOR FOOD SECURITY  
STUDIES, COLLEGE OF DEVELOPMENT STUDIES, ADDIS  
ABABA UNIVERSITY

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE  
DEGREE OF MASTER OF SCIENCE IN FOOD SECURITY AND  
DEVELOPMENT

ADDIS ABABA, ETHIOPIA  
JULY 2020



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## DECLARATION

I, **Jemal Hassen Muhyie**, do hereby declare to Addis Ababa University School of Graduate Studies that this thesis is a product of my original research work, and it has not been submitted to any other university for any academic degree. Materials and information other than my own are dually acknowledged.

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This is to certify that the above declaration made by the candidate is correct to the best of my knowledge as an advisor.

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As supervisors/co-advisers of the thesis, we certify that we have read and evaluated the thesis prepared by **Jemal Hassen** Entitled ‘Assessment of Food Security and Coping Strategies among Women Refugees in Addis Ababa, Ethiopia’ and recommend for Open Defense as fulfilling the requirement for the degree of **Master of Science Degree in Food Security and Development Studies**.

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## **Abstract**

Assessment of Food Security and Coping Strategies among Women Refugees in Addis Ababa, Ethiopia

Jemal Hassen

Addis Ababa University, 2020

*This study assessed the food security status and coping strategies among women refugees in Addis Ababa, Ethiopia. Data was collected through a review of related literature, questionnaire-based survey, and key informant interviews. Questionnaire-based survey was administered based on stratified random sampling to ensure proper representation of different refugee nationalities. About 79% of women refugees found to be severely food insecure while 8%, 6% and 7% were moderately food insecure, mildly food insecure and food secure, respectively. This was related with the limited diversification of income sources, lack of access to basic services, high cost of living that compromised consumption, and unreliable nature of remittances and aid. Refugees had limited market opportunities because of lack of work permit and business capital as well as strict government control and childcare responsibilities. Rationing strategy was found to be the most important strategy that involves altering meal size and frequency while sending children to beg, child laboring, live in poor accommodation and commercial sex were identified among the negative coping mechanisms. Food insecurity of urban refugees can be tackled through integration of refugees to the national system pertaining housing and food security programs to ease the burden of the high cost of living. Inclusion of vulnerable urban refugees to existing social security initiatives and designing of urban refugee housing program can improve well-being and tackle the oversights urban refugee food insecurity. Advocacy and promotion of decent work environment with extended access to right to work, introduction of women-centered programs that focus on building self-reliance are the key recommendations of the study.*

*Key words: urban refugees, migration, food insecurity, coping strategies, decent work*

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Jemal Hassen

July 2020

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## Acronyms

ARRA:	Agency for Refugee and Returnee Affairs
AU:	African Union
CCT:	Cumulative Causation Theory
CSI:	Coping Strategy Index
DICAC:	Development and Inter-Church Aid Commission
DLMT:	Dual Labor Market Theory
DRC:	Danish Refugee Council
ECA:	Economic Commission for Africa
FAO:	Food and Agriculture Organization
FDRE:	Federal Democratic Republic of Ethiopia
GoE:	Government of Ethiopia
GPS:	Geographic Positioning System
HFIAP:	Household Food Insecurity Access Prevalence
HFIAS:	Household Food Insecurity Access Scale
ICCPR:	International Covenant on Civil and Political Rights (ICCPR).
ICESCR:	International Covenant on Economic, Social and Cultural Rights
ICT:	Institutional Causation Theory
JRS:	Jesuit Refugee Services
MoH:	Ministry of Health
MST:	Migration System Theory
NELM:	New Economics of Labor Migration
NGO:	Non-Governmental Organization
NRC:	Norwegian Refugee Council
NT:	Network Theory
SoE:	State of Emergency
OCHA:	Office for the Coordination of Humanitarian Affairs
OCP:	Out of Camp Policy
OICE:	Opportunities Industrialization Centers Ethiopia
PIE:	Plan International Ethiopia
PSNP:	Productive Safety Net Program

RCR: Refugee Community Representatives  
ROV: Refugee Outreach Volunteers  
UDHR: Universal Declaration of Human Rights  
UN: United Nations  
UNHCR: United Nations High Commissioner for Refugees  
UNODC: United Nations Office on Drugs and Crime  
VIF: Variance Inflation Factor  
WFP: World Food Program

# CHAPTER 1: BACKGROUND OF THE STUDY

## 1.1. Introduction

Migration has become an important global issue where people migrate their home country for several reasons and reside in foreign country of destination or transit. Many countries experience migration in one way or the other as origin, transit, or destination for migrants. Most of the time, migrants in Africa seek refuge in neighboring countries where they themselves struggle because of under development, conflict, drought, and other manmade and natural calamities. These refugee hosting countries have millions of people who live below the poverty line with severe food insecurity situation. refugees are mostly sheltered in developing countries with limited job opportunities, lack of access to basic services and strict policies and administration barriers. These situations are mostly like the challenges where poor host communities must live up to. Food security can only be achieved if everyone has the physical and economic access to sufficient, nutritious, and culturally appropriate food all-round the year (FAO, 1996). Even in the most developed countries where the food insecurity prevalence for the host communities is low, it was recorded that the prevalence of food insecurity among asylum seekers was remarkably high (Henjum *et al.*, 2019).

At the end of 2019, globally there were about 79.5 million people forcibly displaced as a result of persecution, conflict, violence, or human rights violations where refugees constitute 26 million (UNHCR, 2019). More than 75% of all displaced people live outside organized camps (Cosgrave *et al.*, 2016) where over 60 per cent of the refugees reside in urban areas (Alison *et al.*, 2018).

With the increase in the humanitarian crises all over the world, the refugee situation has become more complex and its scope and scale has increased which demands a greater protection, assistance, and solutions. Millions of refugees live in protracted situations in low- and middle-income countries where these countries are challenged with poverty. The average length of stay of refugees in hosting countries has increased. According to the Global Compact on Refugees, it intends sharing of responsibility of the United Nations (UN) members states to take fair and equitable share of burden of the host governments in terms of ensuring protection of refugees. the Global Compact for Refugees (UNHCR, 2018d) also acknowledges that food and nutrition are priority basic needs, in support of host countries, States and relevant stakeholders will facilitate access by refugees and host communities to

sufficient, safe and nutritious food, and promote increased self-reliance in food security and nutrition, including by women, children, youth, persons with disabilities and older persons.

Ethiopia follows a mix of three approaches in its refugee management namely encampment, out of camp policy (OCP) and local integration where most of the refugee population are encamped in the refugee camps around the borders of the country. The country follows an open-door policy which provides opportunities and protection for refugees from neighboring countries who flee home because of persecution, conflict, and natural disasters. Following the leaders summit on refugees which was held in September 2016, Ethiopia pledges for a comprehensive refugee response to improve self-reliance and expand protection for refugees and host who are struggling to ensure their livelihoods (ARRA, 2017). The commitment of Ethiopia has been demonstrated by its initiatives to proclaim a new refugee proclamation in January 2019 which commits for expanded support including access to work permit for refugees.

Ethiopia is host to the second largest refugee population in Africa, sheltering 905,831 (UNHCR, 2018c) refugees and asylum seekers. The urban registered refugee population is composed of 22,885 (UNHCR, 2018a) individuals who were transferred from the camps on medical and protection grounds, refugees who have no camps designated for their residence in Ethiopia, such as the Yemeni refugees, university students on sponsorship programs and beneficiaries of the Out of Camp Policy (OCP) scheme. Health care, education, food, shelter, and other basic services to refugees at refugee camps are provided by United Nations (UN) agencies, government, local and international NGOs free of charge. However, in urban setting, refugees are responsible for their own basic requirements except for the very few who receives monthly allowance from the UNHCR to facilitate access to basic services. While OCP refugees are expected to be self-reliant through the support of sponsors, they nonetheless have the right to access protection and basic services by virtue of their legal status in the country.

The study assessed the food security situation of refugee women in Addis Ababa. The Household Food Security Access Scale (HFIAS) and Coping Strategy Index (CSI) were analyzed and refugee women were grouped into different categories based on the level of their food insecurity situation. The study tried to identify determinants factors of food insecurity situation and how food was accessed by refugee women in Addis Ababa.

## **1.2. Statement of the Problem**

Refugees move to cities because of the greater range of opportunities cities offer in terms of diversified livelihoods, employment opportunities, possibilities to engage in informal and formal markets and better access to basic services compared to refugee camps and isolated settlement areas (UNHCR, 2009). Progressively refugees live in urban zones, affected by lack of job opportunities, poor access to basic services and population pressure combined with governments' control of displaced people's entrance to the job market where access to the market can be additionally hindered by language obstructions, and discrimination (Buscher, 2011).

Though cities are the most preferred places by refugees to reside and exercise their rights, they are confronted with a wide range of restrictions related to administrative, financial, cultural, and social barriers. These restrictions and challenges limit the efforts of refugees to live a dignified and productive life despite the shocks and losses they have gone through (UNHCR, 2009). Most of the time refugees are formally excluded from the national legal and policy environment for the right to work and denied access to opportunities to improve their food security and livelihoods. As a result, refugees choose the informal sector as the only option to generate income where these sector is associated with protection risks, poor safety regulations, lack of social security, low salary, extended working hours and sometimes engaged in dangerous jobs including illegal trades, survival sex, drug and alcohol sale and child laboring (UNHCR, 2009).

In Addis Ababa, about 20% of urban refugees who left refugee camps because of protection cases and medical related reasons receive monthly cash assistance (UNHCR, 2017b). The amount ranging from 2,100-4,000 ETB depending on the family size of refugees. The amount is questionable if the cost of living in Addis Ababa is considered and the need for refugees to cover for food, education, housing, medical and other basic costs.

Majority of the urban refugees in Addis Ababa have generated their means of livelihoods mostly by themselves. About 79% of the refugee population in Addis Ababa who are registered under the OCP scheme do not get any humanitarian assistance from the government, UNHCR, and other humanitarian organizations. These groups of refugees are responsible for covering their basic requirements including food. Their situation has not also been well studied as they are considered capable of making a living from remittances and family connections with Ethiopians. However, the reality is that OCP refugees are among the

most vulnerable with mostly no family connection of Ethiopians, struggling with the restrictions imposed by the government of Ethiopia to penetrate the market, no access to work permit and most importantly they are the most forgotten by the humanitarian community for any meaningful assistance.

The Government of Ethiopia (GoE) has pledged to provide comprehensive services to refugees who are hosted in Ethiopia following the New York leaders summit in 2016. In addition, a progressive proclamation has been passed in 2019 that allows refugees to have access to basic services and most importantly access to work permit (Proclamation no. 1110/2019). However, as the proclamation has not been materialized yet, refugees are still dependent on the informal sector and remittances to generate income for their basic livelihoods (Alison *et al.*, 2018). The new refugee proclamation is also criticized for unclear definition of some of the provisions related to work permit and access to work at the industrial parks, development projects and self-employment aspects which are expected to be clarified in the directives and regulations.

Among the refugee community women are the most vulnerable groups. They face challenges related to lack of skills to penetrate the market, childcare responsibilities which compromise their time to engage in economic activities and vulnerable to exploitation and abuse (Krause-Vilmar 2011). Gender-based violence is a serious protection risk for refugee women, girls, and to a lesser extent, boys where these risks are often associated with the livelihood strategies as well as their social interactions (Buscher, 2011). As a result, women who are engaged in economic activities are very few according to the study conducted by Alison *et al.* (2018) despite their high level of vulnerability.

The humanitarian community has focused primarily on camp-based refugees. Little is known about the needs of the urban displaced. Despite the complexity of the city life with many challenges and limited opportunities, the food security situation of urban refugees in general and women refugees in particular has not been well explored and the different coping strategies that could be employed seldom known (Krause-Vilmar, 2011). As a result, this research explored the food security situation of refugee women in Addis Ababa. In addition, the research identified the different coping strategies of women refugees to understand how they cope with food insecurity situations.

### **1.3. Research Questions**

- How women refugees access food in Addis Ababa?
- What are the determinant factors affecting food security situation of women refugees among the different nationalities?
- How women refugees cope with food shortage in Addis Ababa?
- Why did women refugees migrate from their home country?
- What types of businesses refugee women are engaged in to support their household food security?
- What are the main income sources, expenditure categories and the proportion of food expenses of women refugees in Addis Ababa?

### **1.4. Objectives of the Study**

The general objective of the research was to assess the food security situation of refugee women in Addis Ababa and identify their consumption related coping strategies in case of difficult food security situations. The specific objectives of the research are to:

1. analyze the food security status of women refugees in Addis Ababa
2. identify coping strategies of women refugees in case of difficult food security situations in Addis Ababa
3. examine the linkages between food insecurity and onward migration of women refugees

### **1.5. Significance of the Study**

The food security situation of women refugees in Addis Ababa is a less researched area. The findings of the research would give feedback to UNHCR, national and international organizations including the GoE to know more about the food security and coping strategies of women refugees in Addis Ababa. The research result will be used for policy making purpose and organizations who are interested in refugee programming. More importantly, the research will help refugees understand the food security situation and the different coping strategies used by the refugees themselves and would probably create a learning platform.

The paper will be used as an advocacy tool to voice for refugee women so that corrective actions are taken by responsible institutions to enable refugee to exercise their rights fully by addressing administrative and policy level barriers that hamper food security. Governments and development partners will use the research findings to design appropriate interventions aiming for improvement of food security situation of women refugees considering the empirical evidence from this study. In addition, the research will add value to the academic world by giving an insight into the subject matter as the topic is among the less researched

area and will be used as reference further studies on food security of refugees. Generally, this study, aims to contribute to the existing academic knowledge by exploring the food security and coping strategies of women refugees and will serve as a reference for further studies. The study contributes to methodologically as a mobile based data collection system will be used which allows for quality data collection and remote monitoring of the data collection process.

## **1.6. Scope and Limitations of the Study**

The study was primarily to assess the food security and coping strategies of women refugees in Addis Ababa. Depending on availability of data, many refugee nationalities were represented based on their population size. The research encompassed extensive review of secondary information, key informant interviews with individuals who have specialized knowledge and information about the food security situation of women refugees, and a structured questionnaire-based survey to collect quantitative information to better understand the issue under investigation.

The study limitations were related to methodological where it was difficult to locate refugee women in Addis Ababa given the fact that they are highly mobile in search of cheap accommodation. They live at the outskirts of the city which caused logistical and administrative constraints. List of refugees was not accessible as UNHCR, ARRA or other agencies were not willing to share the list because of data protection regulations which affected the sampling process. However, the researcher tried to develop sampling frame by registering refugee women in Addis Ababa to ensure random sampling technique.

As a result of the COVID-19 pandemic and the State of Emergency (SoE) declared by the GoE which prevent gathering of people with the effort to contain the spread of the disease, the researcher had to cancel focus group discussions. As a less researched area, unavailability of empirical studies covering food security of urban refugees, most of the literatures used for this study are documents produced by different organizations working in the refuge sector. This might be a potential challenge as organizations' purpose for the different studies might influenced the outcome of their research and policy papers.

## **1.7. Ethical Considerations**

The process of data collection, analysis and reporting of findings were conducted in a way that protect respondents, maintain anonymity and confidentiality of their personalities.

Respondents were not identified by name during the research process. The researcher requested for a verbal explicit consent to check the willingness of respondents to the research process. This consent was confirmed by enumerators by signing to the questionnaire and confirmed that consent was given. The research processes were guided by informed consent, do no harm, confidentiality, and respect for privacy principles.

## **1.8. Organization of the Paper**

The thesis is organized in five major chapters. The first chapter talks about background of the study with specific topics related to statement of the problem, objectives of the study, significance of the study, scope and limitations of the study, and ethical considerations during the study process. The second part describes the theoretical and empirical foundations of the research topics in the areas of food security and women refugees and coping mechanisms. It also illustrates the conceptual framework of the study. The third chapter provides information related to the description of the study area and the overall research methods. It presents the research design, techniques of data collection and analysis. The results and discussion section are presented and illustrated under chapter four while chapter five includes the conclusion and major recommendations that came out of the study.

## **CHAPTER 2: RELATED LITERATURE REVIEW**

### **2.1. Food Security and Urban Refugee: the Concepts**

Food security is a concept whose definitions and operationalization have been numerous and varied. A sufficiently large number of terms have been used in discussing food security; this has been posing difficulties in identifying what exactly is being discussed, measured, or intervened upon with respect to food security (Jones *et al.*, 2013). This is partially so due to the multi-disciplinary and multi-sectoral nature of food security. However, the most commonly used definition of food security is based on the definition from the World Food Summit (1996) which contends that food security at the individual, household, national, regional and global levels is achieved when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life (FAO, 1996).

Food insecurity is defined as inability of a household or a nation to meet target consumption levels in the face of fluctuating production, prices, and incomes. Food insecurity has become more holistic in nature, complex and people centered (Nombo, 2007). Historically, food insecurity has been considered in terms of the food supplies and shortfalls in supply compared to requirements at all levels (Maxwell, 1996). Several researchers have observed that there is an increased disparity in the sufficiency of food intake by certain groups, despite overall adequacy of supply (Sen, 1981; Omosa, 1998). Therefore, instead of focusing on food supply only, the concept of food insecurity has been broadened to include elements of access, vulnerability, and stability. The concept has also evolved from focusing on food availability to focusing on food utilization and adequacy, which relates food to nutrition at an individual level.

Food insecurity may be chronic or transitory. In chronic food insecurity, there is continuous inadequate diet and nutrition caused by the household's inability to acquire food. Chronic food insecurity therefore afflicts households that lack the ability to either buy food or produce their own food. Chronic food insecurity is rooted in poverty (Sen, 1981). On the other hand, transitory food insecurity results from a temporary decline in household access to food mainly due to instability in food prices, production, household income or a combination of these factors (Reutlinger and Holst, 1986).

Jrad *et al.* (2010) elaborated on four dimensions of food security as food availability, food accessibility, food utilization and stability. Food availability refers to the physical presence of

food which may come from own production, purchases from internal market, or import from overseas. Similarly, Ingram *et al.* (2005) explained that food availability refers to the physical existence of food stocks for consumption be it from own production or on the markets. On national level food availability is a function of the combination of domestic food stocks, commercial food imports, food aid and domestic food production, as well as the underlying determinants of each of these factors. Household food access is the ability to obtain sufficient food of guaranteed quality and quantity to meet nutritional requirements of all household members. Here, the food should be at right place at the right time and people should have economic freedom or purchasing power to buy adequate and nutritious food (Jrad *et al.*, 2010).

On the other hand, Kuwornu *et al.* (2011) explained that food access is determined by physical and financial resources as well as by social and political factors. The HFIA score is a continuous measure of the extent and severity of food insecurity in the household in the past four weeks whereby it is computed for each household by summing up the codes for each frequency or occurrence question to categorize respondents into four food security conditions. The higher the score, the higher the severity of the food insecurity (access) the household experienced; and the lower the score, the less food insecurity (access) a household experienced (Frayne, 2010). HFIA method of food insecurity measurement is based on the fact that food insecurity causes reactions and responses that can be quantified and measured through a survey to understand households experiences related to feeling of uncertainty related to food, perception of insufficient quantity and quality of food, and reduction of food intake along with its consequences (Hamilton, *et al.*, 1997).

Households that are vulnerable to food insecurity adopt different strategies to reduce, mitigate, and cope with the risks and shocks that affect them, based on the options offered by their internal resource endowment and their access to external assistance (Maharjan and Chhetri, 2006). Coping strategies are not fixed or generic across households, but rather they do vary according to exogenous and endogenous contexts of the households' concerned (Adams, 1992). Households actively try to protect their livelihoods, adopting several actions and mechanisms when faced with shocks and stresses that affect their livelihood or livelihood outcomes, one of which is food security.

## **2.2. International Migration Theories**

Referring to the study by Jennissen (2004), Wickramasinghe and Wimalaratana (2016) provided different perspectives to reasons and types of migration. Migration is classified in to four categories, namely labor migration, return migration, chain migration and asylum migration. Labor migration is defined as cross-border movement of employment in another country where skills are involved. When labor migrants return to their country of origin, they are called return migrants. Individuals who move from one country to another for reasons of family re-unification are called chain migrant while asylum seekers who visit a foreign country to seek refuge are called asylum migrants.

Wickramasinghe and Wimalaratana (2016) indicated that studying international migration theories provides insightful understanding of the theoretical perspectives about the movement of people that are related to economic, social, legal, cultural, ethnic, and other phenomena. It also provides a scientific understanding between migration and its causes. Migration theories that explain the 21<sup>st</sup> century have been identified as Neo-classical Theory, the New Economics of Labor Migration (NELM), Dual Labor Market Theory, Network Theory, Migration System Theory, Institutional Theory and Cumulative Causation Theory.

### **2.2.1. Neo-classical theory**

The Neo-classical migration theory is the oldest migration theory which explains the impact and relationship of labor migration on economic development where the cause of international migration is justified as a result of the geographical imbalance between demand and supply of labor. People migrate from a low labor productive country to a high labor productive country (Massey *et al.*, 1993). According to the Neo-classical theory, remittances are a powerful incentive for labor sending countries which encourage out-migration and help contribute fostering production in receiving countries (Massey *et al.*, 1993). The decision to migrate is influenced by job opportunities available and migration could end by elimination of wage differentials (Harris and Todaro, 1970). Another important assumption of this theory is that rules and controls could minimize the international labor migration as it is assumed that labor migration is not influenced by other factors like civil war, conflicts, and poverty which are mostly associated with developing countries (Wickramasinghe and Wimalaratana, 2016).

### **2.2.2. The New economics of labor migration (NELM)**

As opposed to the Neo-classical migration theory, the New Economics of Labor Migration (NELM) assumed that the decision to migrate is dependent on the household and other social structures than the individuals. In addition, it is used as strategy in the context of market failures in addition to the labor market. Wage differentials and other related factors are considered by the family to decide on destination country (Wickramasinghe and Wimalaratana, 2016).

### **2.2.3. Dual labor market theory**

According to Massey *et al.* (1993), the Dual Labor Market Theory (DLMT) argues that international migration is a consequence of intrinsic labor demand of the industrialized countries to facilitate their development agendas. It looks international migration as a result of pull factors instead of push factor in labor sending countries. The theory argues that migration occurs because of the demand of the economy and not because of the individual or family decision to migrate.

### **2.2.4. Network theory**

There are many reasons for labor migration. People migrate for several reasons and migration is dependent on many factors. According to the Network Theory (NT), people migrate because of their networks to relatives and friends which provide information, financial backups, facilitate employment and accommodation which is also considered a risk minimization approach in terms of cost and risk of movement of people (Massey *et al.*, 1993). Network connections provide a wide range of advantages from reducing the risk of movement to facilitation of employment at destination countries.

### **2.2.5. Migration system theory**

The basic assumption of the Migration System Theory (MST) is that migration contributes to the change in social, cultural, economic, and institutional condition of both the receiving and sending country which is linked with the Network Theory. The remittances sent back to labor sending countries has the potential to improve the socio-economic condition of the country which in turn encourage subsequent migration (Wickramasinghe and Wimalaratana, 2016).

### **2.2.6. Institutional causation theory**

The Institutional Causation Theory (ICT) is founded based on creating a favorable and conducive policy framework to facilitate for both labor sending and receiving countries. With the increased imbalance between potential migrants and jobs available at receiving countries,

private organizations have been set up to make profile for facilitation of crossing borders and easing visa processes while not-for-profit organization mostly focus on the humanitarian aspect to provide protection which has become a major concern as profit organizations engaged in illegal activities related to labor migration (Massey *et al.*, 1993).

### **2.2.7. Cumulative causation theory**

The Cumulative Causation Theory (CCT) of migration describe the reasons why migration has become a continuous phenomenon with increased number of outgoing migrants. The theory described that migrants provide social capital to their relatives and friends in the labor sending countries which also contribute for new migrants to easily access job opportunities and reduce risk at destination countries, this encourage people to migrate from time to time (Jennissen, 2004).

## **2.3. Legal and Policy Instruments**

The right to food is globally recognized as everyone has the right to adequate standards of living whereby states are the duty-bearers and the people are rights-holders. The 1948 Universal Declaration of Human Rights (UDHR), article 25 (1) states:

Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services... (UDHR, 2015, p. 52)

The UDHR is implemented through the two main binding instruments of the International Covenant on Economic, Social and Cultural Rights (ICESCR) and International Covenant on Civil and Political Rights (ICCPR). The 1966 covenant of ICESCR clearly states that States Parties who ratified the Covenant recognizes the right of everyone to an adequate standard of living for himself and his family (article 11.1), the fundamental right of everyone to be free from hunger (article 11.2) and the rights in the Covenant to be exercised without any discrimination based on race, color, sex, language, religion, political or other opinion, national or social origin, property, birth or other status (article 2.2).

The Universal Declaration on the Eradication of Hunger and Malnutrition of the 1974 also recognizes the that everyone, man, woman, and child has an absolute right to be free from hunger and malnutrition. The declaration aims for eradication of hunger and malnutrition by ensuring the fundamental responsibilities of Governments to work together for higher food production and for efficient distribution.

The Convention Relating to the Status of Refugees of the 1951 indicates that contracting States have the obligation to provide nondiscriminatory services (Article 3) to refugees to ensure good standard of living the same as the most favorable treatment accorded to nationals of a foreign country. Under this convention, refugees have the right to engage in wage employment (Article 17) and self-employments (Article 18) by providing the right to engage on his own account in agriculture, industry, handicrafts and commerce and to establish commercial and industrial companies, public education especially relating to primary education (Article 22) and the right to lawfully to refugees lawfully staying in their territory to get the same treatment with respect to public relief and assistance as is accorded to their nationals (Article 23). Moreover, the refugee convention provides refugees with the right to freedom of movement and right to access identity documents which are vital to ensure freedom of movement within the territory of the country. Refugees shall be treated as nationals when rationing is involved in food distribution according to article 20 of the refugee convention (UN, 1951).

Ethiopia has ratified the 1951 Convention relating to the Status of Refugees and its 1967 protocol in 1969 with reservations on Articles 8, 9, 17(2) and 22(1), recognizing these only as recommendations and not legally binding obligations (UNHCR. n.d.).

Ethiopia repelled the refugee proclamation number 409/2004 believing that this proclamation is not painstaking and does not reflect the current developments and progresses made in refugee protection. In response to the need for comprehensive refugee protection and assistances, the GoE has passed a new refugee proclamation number 1110/2019 which is believed to provide better protection and enhance durable solutions compared to its predecessor.

According to article 5(1a) of the proclamation number 1110/2019 of Ethiopia, a refugee is defined as:

Owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion he is outside his country of nationality and is unable or, owing to such fear, is unwilling to avail himself of protection of that country. (FDRE, 2019, p. 4)

Among the provisions of the new refugee proclamation of Ethiopia, the right to work in wage earning, employment and self-employment sectors in agriculture and industrial sectors, vital evens registration, access to available health services, access to justice, right to form

associations, access to education-which was one of the article that Ethiopia made reservation to the 1951 Convention relating to the Status of Refugees. According to Article 26(4) of the proclamation, refugees will be benefited on urban and rural projects that will be jointly designed by the GoE and the international community to benefit Ethiopian nationals and refugees. Refugees who are residing in locations with agricultural land will also be provided with land on lease basis for agricultural activities in agreement with regional land administration authorities. In addition to the vital events registration that has already been happening for refugees, they will have access to residence permits that will facilitate the enjoyment and exercise of refugee rights to the full extent. Generally, the refugee proclamation provides extended rights compared to its predecessor in terms of expanding the opportunities for refugees to have access to work expect for few sectors like national defense, security, foreign affairs, and other political establishments.

Despite there are many international instruments that guide the right to food as a key human rights element and though there is an international convention relating to the status of refugees and stateless persons, millions of refugees are still food insecure (UNHCR, 2016).

The Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children of the UN Convention against Transnational Organized Crime, despite the fact that the presence of a variety of international instruments to tackle the exploitation of persons, women and children are the most vulnerable victims of trafficking at countries of origin, transit and destination. The protocol provides rules and practical measures to address all aspects of trafficking in persons (UNODC, 2004). Persons vulnerable for trafficking are exposed to the exploitation of the prostitution of others or other forms of sexual exploitation, forced labor or services, slavery or practices like slavery, servitude, or the removal of human organs, among others. In addition, migrants are also subject to the effect of smuggling where it is considered as a crime by the 2004 UN Convention against Transnational Organized Crime (UNODC, 2004) where migrants are put in to enormous physical, financial and emotional challenges in the course of crossing the borders of other countries.

## **2.4. Empirical Literature Review and the Gap**

The urban poor people face wide ranges of livelihoods challenges and these challenges leads them to adopt coping strategies which are mostly negative. Some of the coping strategies are also regulated by societal and government regulations which as a result compromised livelihoods and survival strategies of the poor in urban areas (Degefa, 2008). Refugees are

part of the urban community in Addis Ababa, where currently not allowed to work in the country, despite ongoing progress brought about by the Nine Pledges. Yet, they engage in the economy and interact with host communities through incentive work for local NGOs and UN agencies, the sale of rations on local markets, engagement in small business activities supported by livelihoods programming, informal trade and economic exchange with host communities, or work through informal agreements with local employers. Local economic integration strategies exist but remain informal, and under-explored. Given high levels of unemployment in Ethiopia and past dependencies of refugees that have led to low skill levels, donors and implementing partners should focus on training and livelihood programming in line with local markets and local contexts.

The main shocks that refugees face are loss of employment, reduced income and huge price increases that compromise their food security strategies (UNHCR, 2017a). A study conducted by UNHCR (2017b) showed that refugees who are dependent on remittances have the most distress level of coping strategies compared to refugees who rely on salaried work for their livelihoods. Refugees who have better asset background are less likely to be severely food insecure as food security and number of assets of a household has a direct relationship. The study also shows being a refugee woman puts households into a situation of food insecurity.

Most of the registered urban refugees are not able to meet their basic needs with the current income that they receive either from informal work or remittances (average of 2,000 ETB a month). Due to resource constraints, cash assistance to cover basic needs, including as a form of rental subsidy is only being provided to approximately 20% of the urban refugee caseload (UNHCR, 2017b).

Refugees in Addis Ababa face considerable economic difficulties and pose many challenges for urban and national authorities. Yet refugee economies are diverse and highly integrated into the city's economy, providing jobs and contributing to economic growth. The more that refugees can work, the more their communities can achieve, and the less they will depend on national and international assistance. Refugees with a right to work will also see Ethiopia as a place of welcome in which they can invest and remain (Alison *et al.*, 2018).

In line with the Sustainable Development Goals 2 and 3, investments will be made to improve the food and nutrition security of refugees, and to reduce the prevalence of undernutrition, especially women, young children and vulnerable groups including young people, the elderly and people with special needs (UNHCR, 2017b). Though there is no

refugee right to formal work in Ethiopia, informal work is generally tolerated. As a result, urban refugees engage in informal entrepreneurship and employment to supplement income from humanitarian assistance or remittances. In the absence of formal work, refugees had four main income sources in Addis Ababa: informal employment, informal enterprise, humanitarian assistance and remittances (Alison *et al.*, 2018). Refugees in Addis Ababa face considerable economic difficulties and pose many challenges for urban and national authorities. Yet refugee economies are diverse and highly integrated into the city's economy, providing jobs and contributing to economic growth.

According to data by Emergency Nutrition Network (ENN), Urban populations now exceed rural populations globally and are growing very quickly. The slum population is also growing rapidly, though there are considerable uncertainties about how many people live in slums, and how quickly they move in and out. Urban vulnerability is based on exposure to risks around markets, health and sanitation, and social and political relations which is typically more complex than the risk profiles in rural areas (ENN, 2013). Unemployment is one of the major challenges in urban areas coupled with poor development of human capital associated with large number of job seekers in an economy that has limited job creation potential (Degefa, 2008). The refugee population posed another threat to the limited employment opportunities in urban areas that might create potential hostility because of competition for limited job opportunities.

In this instance, there were adequate amounts of varied foods in urban slum markets but affordability limited access, especially in low season. Average results mask huge disparities in household expenditures and demographics within slums. A low Dietary Diversity Score amongst pregnant and lactating women correlated with a low per capita food expenditure and total expenditure, no bank account/savings, poor living conditions and lower education levels. Maternal dietary diversity was found to be a reliable predictor of child dietary diversity. Interventions to empower poor urban women in food supply chains are identified, including women's collectives and food processing. The lack of opportunities in the destination country is believed to be a contributing factor for onward migration of the urban refuge community in Addis Ababa where women are the most vulnerable. Ethiopia is the largest origin, transit, and destination of trafficked persons in Africa where the major drivers are political instability, socioeconomic and environmental factors. Onward migration is often dangerous that leads to abduction, robbery, and sexual assault among others (Messay, 2018).

Even though there are a few studies in food security, the food security situation and coping strategies of urban refugees is a less researched area. The urban life is complicated with several administrative and policy level challenges for refugees. The effect of these legal and administrative constraints on the food security situation is not well explored. This study will contribute to the study of food security in the context of women refugees which will be used as a basis for further study.

## 2.5. Conceptual Framework

In order to determine the food insecurity situation of women refugees, literature reviews indicated the following variables. These determinant variables are Age of household head, education level, connection with Ethiopian, speaking of local languages, family size, number of assets, status of external assistance, amount of monthly regular cash support, remittance income, expenditure pattern, coping strategy index, availability of refugee registration, nationality and role in the household. Therefore, the following conceptual framework was designed to better understand the interaction of food insecurity situation with the independent variables, reasons that fuel migration, macro socio-economic conditions and the coping strategies.

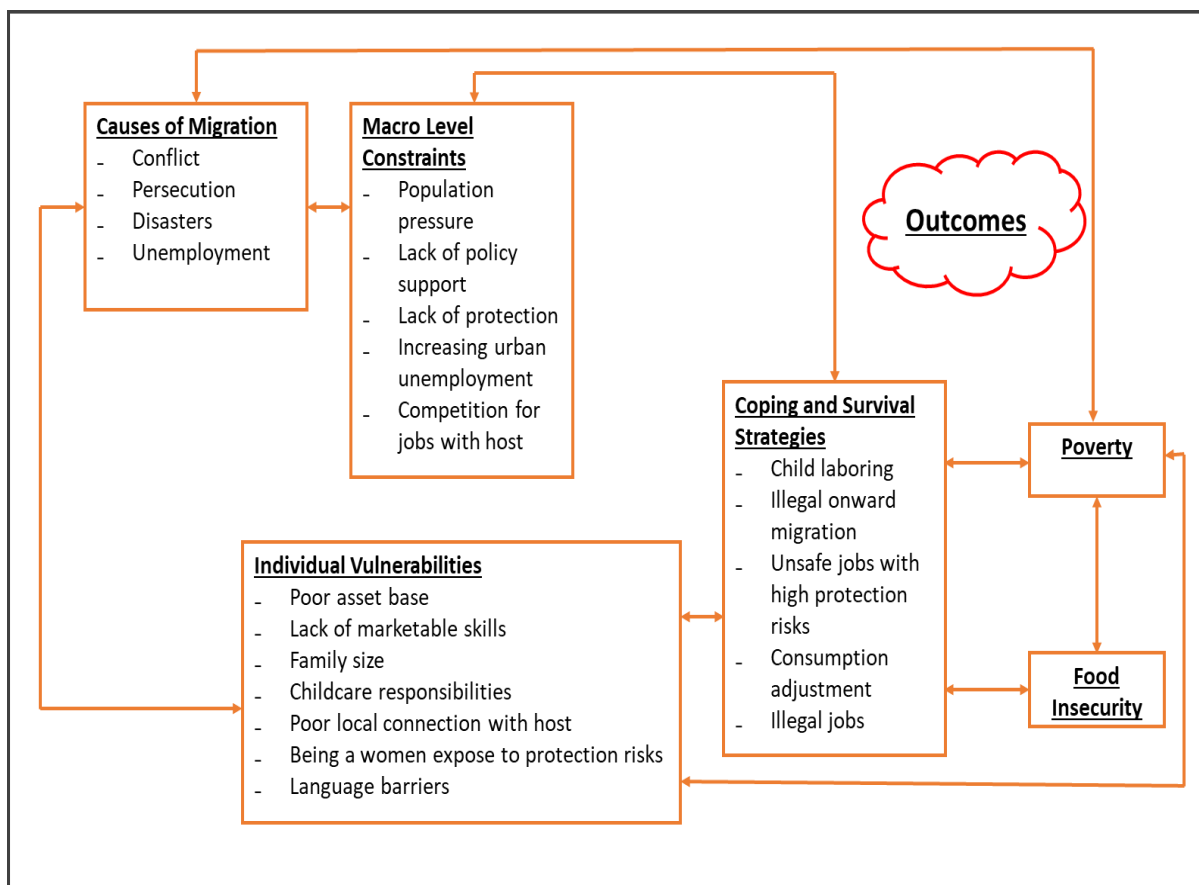


Figure 1 Conceptual framework of interacting factors that affect food security of women refugees - adapted by the researcher, from Degefa (2008).

As indicated in figure 1, Refugees left their home country because of conflict, fear of persecution, natural disasters and in search of better opportunities. However, because of the geopolitical characteristics and economic nature of the neighboring host countries that are overwhelmed by population pressure, high unemployment rate among urban youth. In addition, there is no sufficient national level policy support for refugees in host countries that promote the integration of refugees for better food security outcomes. These Macro level socioeconomic conditions interacted negatively with the individual and collective vulnerabilities of refugees like poor asset base, large family size with significant number of vulnerable and dependent groups, lack of skills to penetrate the market, poor social cohesion which is reflected as a result of language barriers, the lack of policy support for refugees in the hosting countries, lack of good administrative and legal support that ensure protection of refugees against exploitation and abuse specially for refugee women and girls, and childcare responsibilities that hinder refugee women from engaging in economic activities. These individual and collective vulnerabilities will leads to a short term coping strategies by refugees to address the constraints and ensure household food security is guaranteed by engaging in consumption adjustment, child laboring, engaging in unsafe jobs with lack of proper protection, involve in illegal activities, and onward migration of family members to other countries. These coping strategies are negative and further deteriorate the food security and wellbeing of the household and lead to a situation of food insecurity and poverty. Appropriate intervention at any stage of the cycle is relevant to break the vicious nature of the problem either at root causes which instigate migration, policy level interventions or building individual capacity to reduce vulnerability of refugee women to bring designed food security outcome which would not lead to the implementation of negative coping mechanisms.

# CHAPTER 3: DESCRIPTION OF THE STUDY AREA AND THE RESEARCH METHODS

## 3.1. Description of the Study Area

Addis Ababa, the capital and largest city of Ethiopia and where the African Union (AU) is headquartered, hosts the headquarters of various continental and international organizations. Addis Ababa is therefore often referred to as "the political capital of Africa" for its historical, diplomatic, and political significance for the continent. The city lies a few miles west of the East African Rift Valley which splits Ethiopia into two (Yohannes, 2013).

Addis Ababa lies at an elevation of 2,200 meters, located at a GPS coordinates of 9°1'48"N 38°44'24"E (MoH, 2019). The city is divided into ten sub cities. Addis Ababa has a subtropical highland climate with precipitation varying considerably by the month. The city has a complex mix of highland climate zones, with temperature differences of up to 10 °C, depending on elevation and prevailing wind patterns. As such the climate would be maritime if its elevation were not considered, as no month is above 22 °C in mean temperatures. The city hosts 22,885 urban refugees from different countries (UNHCR, 2018a).

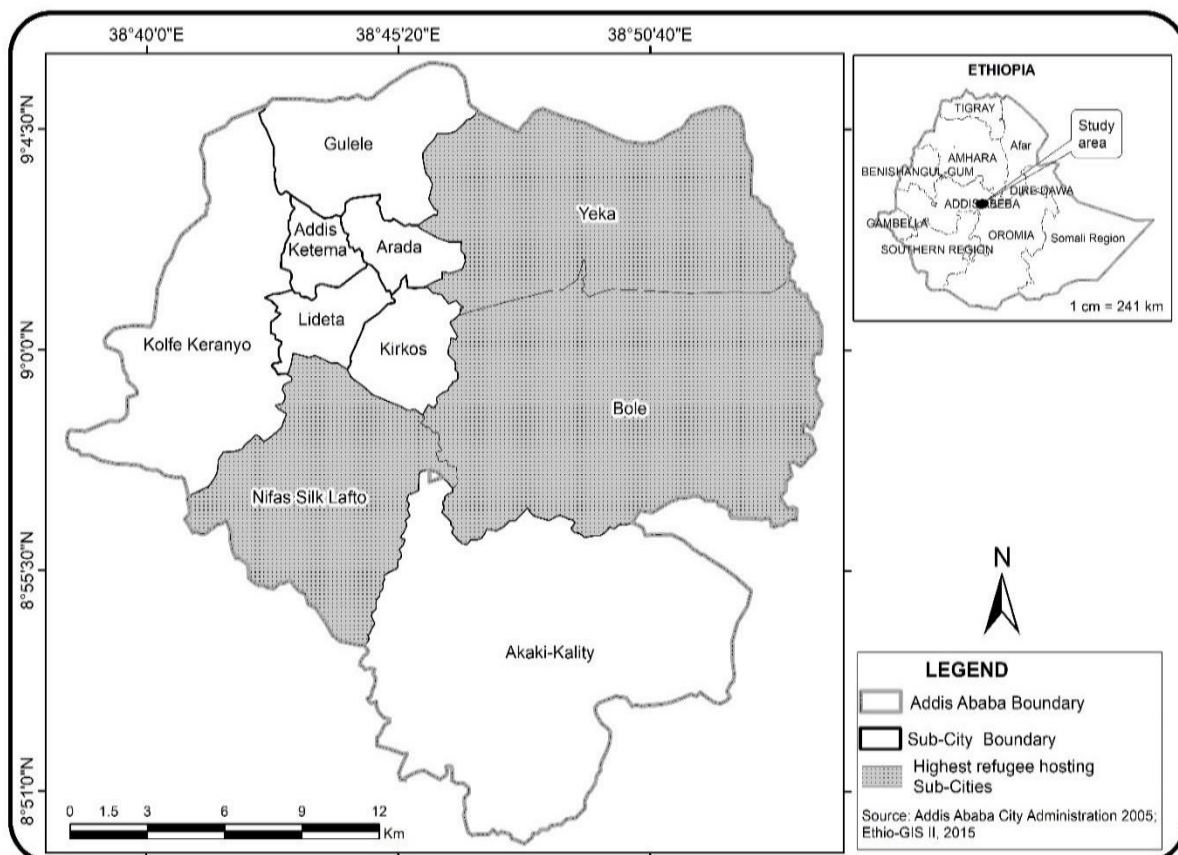


Figure 2: Map showing Addis Ababa Sub cities and refugee concentration (Source: Adapted from Addis Ababa City Administration 2005; Ethio-GIS II, 2005)

## 3.2. Research Methods

### 3.2.1. Research design and approach

The study used a combination of descriptive and explanatory research designs. The main purpose of descriptive research design is to describe the characteristics of a group (Inaam, 2016) where the food security situation and coping strategies of women refugees were assessed. As the main theme of descriptive statistics, as a less researched topic, the study tried to describe the characteristics of refugee women in light of their food insecurity situation and established association between the food insecurity situation and selected variables that drive food security of refugee women in Addis Ababa. Inferential statistics was used to explain the key aspects of women refugees from food security perspective and to explain key variables. The research applied both quantitative and qualitative research approaches which utilized multiple methodologies to gather and analyze data to understand the food security situation and coping strategies of women refugees in Addis Ababa. Both quantitative and qualitative research approaches were used to balance the limitation of using only one type of method which helped triangulating the research results from different sources and methods.

### 3.2.2. Sampling technique and sample size determination

An unpublished data from NRC indicated that 53% of the total refugee population in Addis Ababa are females while refugees above the age of 18 years constitute 65% (NRC, 2017) which makes the population of refugee women who are above the age of 18 years is 7,884. Hamed (2017) recommends the following formula for categorical data collected randomly from respondents to minimize errors. A confidence interval of 93% with a 7% margin of error was considered to determine the sample size assuming time and resource limitations.

$$n = \frac{p(100-p)z^2}{E^2} = 167 \dots\dots\dots (1)$$

Where, n is the required sample size and p is the percentage occurrence of a state or condition. Bartlett *et al.* (2001) suggest that researchers should use 50% as an estimate of P, as this will result in the maximization of variance and produce the maximum sample size. E is the percentage maximum error required (0.07). Z is the value corresponding to level of confidence required (z is 1.81 at 93% confidence interval and 0.07 margin of error).

The study applied a stratified random sampling technique where the sampling frame was divided according to nationalities of refugees based on population proportion. A proportion

of each nationality was identified to divide the sampling frame into mutually exclusive strata. Once the sampling frame was arranged by strata, the samples were selected from each stratum using a systematic sampling technique. Since the population was first divided into various strata, and then samples were from each stratum there is little possibility of any essential group of the population being completely excluded which ensures a better cross-section of the population is represented in the sample (Goel, 2014).

According to UNHCR Urban Refugees’ Factsheet (2018a), 79.8% of urban refugees were Eritreans, 8.2% Yemenis, 4.1% Somalis, 2.2% South Sudanese and other nationalities represent 5.7% of the total urban refugee population. “Other Nationalities” represent the refugee community from Democratic Republic of Congo (DRC), Burundi, Rwanda, Djibouti, Syria, Ivory Coast, Iraq, and Sudan to mention, among others. Therefore, the sample strata consisted of each nationality in the sampling frame where samples were determined based on population proportion.

Table 1: Total urban refugee population per nationality and sample size determined by stratified random sampling

Nationality	Total Population	Percentage of the population Proportion by nationality	Number of females (53%)	Number of females above 18 years old (65%)	Sample Size (167 distributed as per the total population ration by nationality)
Eritrean	18,125	79.8	9,606	6,244	132
Yemeni	1,922	8.2	1,019	662	14
Somali	1,007	4.1	534	347	7
South Sudanese	526	2.2	279	181	4
Other nationalities (Sudan, Syria, Burundi, Ivory Coast, Iraq, Djibouti, etc.)	1,305	5.7	692	450	10
Total	22,885	100	12,130	7,884	167

Source: UNHCR. (2018a). Fact Sheet, August 2018. Addis Ababa.

### 3.2.3. Data collection techniques

The study used primary and secondary data sources. Primary data was collected through individual interview of women refugees through a structured questionnaire and key informant interview of people who have in-depth knowledge of the urban refugees in Addis Ababa. Questionnaire survey was administered using a Kobo Toolbox which is a free open-source software for mobile data collection. It allows to collect data in the field using mobile devices such as mobile phones or tablets, as well as with paper or computers. It is being continuously improved and optimized particularly for use in emergencies and difficult field environments

to support data collection (OCHA, n.d.). The mobile data collection system allowed to minimize error in data collection process as data validation set up to the mobile system. In addition, it was possible to remotely monitor the data collection process and ensure quality of data as data cleaning was conducted on daily basis where feedback was provided to enumerators accordingly. As a result of the COVID-19 Pandemic, the Government of Ethiopia declared State of Emergency (SoE) on 8 April 2020 which restricts gatherings and movement unless for essential activities to contain the spread of the virus. The SoE affected this research as public gathering was not allowed. Therefore, the researcher was forced to cancel the FGDs to prevent potential exposure of the research team and FGD participants to corona virus. A thorough review of related literatures review was conducted to collect secondary data. Relevant literatures of both theoretical and empirical nature were the focus of the literature review to understand the subject matter from a theoretical and empirical foundation.

#### **3.2.3.1. Questionnaire survey**

Questionnaire-based survey was administered to gather quantitative data from sample refugee women to statistically analyze responses (Kabir, 2016). With this data collection technique, 167 sample respondents were surveyed to collect data related to demography, socioeconomic, food security situation and consumption related coping strategies. Enumerators were selected from the refugee community and trained on the questionnaire to enable good understanding of the questions. The questionnaire was uploaded to Kobo Toolbox mobile application to ensure data quality and for monitoring of data collection process remotely (OCHA, n.d.) and the Kobo mobile application was installed to the mobile phones of enumerators. The Kobo application of enumerators was granted access to the questionnaire sign-in credentials. Enumerators synchronized the collected questionnaire data on daily basis so that the researcher has accessed remotely. Another importance of using the Kobo mobile application for data collection is that it does not require internet connectivity to collect data as it works offline. Internet is required only to synchronize the collected data to the server at the end of each day or even once data collection is completed. After the completion of the data collection, it was possible to download the data in different formats for analysis.

#### **3.2.3.2. Key informant interview (KII)**

In addition to the questionnaire-based survey, key informant interview of key personnel from Agency for Refugee and Returnee Affairs (ARRA), UNHCR, Norwegian Refugee Council (NRC), Jesuit Refugee Services (JRS), Development and Inter-Church Aid Commission

(DICAC), Danish Refugee Council (DRC), Refugee Community Representatives (RCR), Refugee Outreach Volunteers (ROV), Plan International Ethiopia (PIE), ZOA, Opportunities Industrialization Centers Ethiopia (OICE) and Bureau of Labor and Social Affairs Offices of Addis Ababa City Administration was conducted. KIs provided important information about the food security and coping strategies of women refugees. According to Guest *et al.* (2006), 12 interviews are sufficient to reach 92% of saturation meaning that 92% of the issues under discussion can be covered by only interviewing 12 key informants. A list of potential key informants was prepared, and contact addresses identified at the initial stages of the research. Therefore, the KII checklist was sent to all potential key informants by email to be in compliant with the WHO recommendation to prevent exposure to COVID-19 by avoiding physical contact. Besides, because of the SoE when the data was collected, Government and NGO employees were working from home which make face to face interview impossible. Twelve KII responses were received by email which was used to triangulate the findings of the quantitative analysis.

#### **3.2.3.3. Focus Group Discussion (FGD)**

FGDs were not conducted because of the SoE declared by the GoE to contain the spread of the COVID-19 following an international Emergency declared by WHO after recognizing the disease as Pandemic. the SoE prohibits public gathering which made it impossible to gather participants for FGD. Therefore, the FGDs could not be conducted.

#### **3.2.3.4. Secondary data review**

A desk review of related literatures was one of the techniques that the study applied to thoroughly understand previous works in the areas of refugees' food security in urban context. Different books, journal articles, reports, reviews, working papers, guidelines, dissertations, and internet sources were reviewed. Resources from UNHCR, ARRA, NRC, CARE, World Food Program (WFP) and Food and Agriculture Organization (FAO) were included in the desk review process. Policies, proclamations, and program papers of the GoE pertaining refugees were also thoroughly reviewed.

#### **3.2.4. Techniques of data analysis**

Quantitative data was analyzed using Stata software to describe key findings for the HFIAS and CSI scores. Measures of central tendency (mean, median and mode) and measure of dispersion (variance and standard deviation) were the key descriptive statistics. Ordered logit regression model was applied for HFIAS analysis to categorize women refugees based on their food insecurity status. Both qualitative and quantitative outputs of the analysis are

systematically presented, tabulated, and triangulated for better understanding in the result section of the paper.

According to Jennifer *et al.* (2007), the HFIAS indicator provides information on food insecurity (access) at the household level. Four types of indicators will be calculated for the sample to help understand the characteristics and change in household food insecurity situation. The ordered logit regression model classified refugee women based on their food security situation where food security situation of women refugees is categorized into food secure, mildly food insecure, moderately food insecure and severely food insecure.

Household Food Insecurity Access-related Conditions: this indicator provides specific, disaggregated information about the behaviors and perceptions of the surveyed households. The indicator presents the percent of households that responded affirmatively to without considering frequency of the experience to measure the percent of households experiencing a condition at any level of severity.

$$HC = (\sum_{k=0}^n(Q7)/n) * 100 \dots\dots\dots (2)$$

Where, HC is HFIAS-related conditions, Q<sub>7</sub> is question number 7 of the HFIAS questionnaire, n is number of respondents provided response to the question (Jennifer *et al.*, 2007).

Household Food Insecurity Access-related Domains: this indicator provides summary information on the prevalence of households experiencing one or more behaviors in each of the three domains reflected in the HFIAS - - Anxiety and uncertainty, insufficient Quality, and insufficient food intake and its physical consequences (Jennifer *et al.*, 2007).

Household Food Insecurity Access Scale Score: the HFIAS score variable is calculated for each household by summing the codes for each frequency-of-occurrence question. The maximum score for a household is 27 (the household response to all nine frequency-of-occurrence questions is “often”, coded with response code of 3); the minimum score is 0 (the household responded “no” to all occurrence questions, frequency-of-occurrence questions were skipped by the interviewer, and subsequently coded as 0 by the data analyst.) The higher the score, the more food insecurity (access) the household experienced. The lower the score, the less food insecurity (access) a household experienced.

$$X = (\sum_{Q=1}^9(Qa) \dots\dots\dots (3)$$

Where X is the individual HFIAS score, Q is the HFIAS question as indicated on the HFIAS questionnaire, a is the frequency of the food insecurity situation reported by respondents corresponding to each HFIAS questions (Jennifer *et al.*, 2007).

$$\text{Average HFIAS Score} = \sum_{Q=1}^n X \dots\dots\dots (4)$$

Household Food Insecurity Access Prevalence (HFIAP): this indicator is a categorical indicator of food insecurity status. The HFIAP Status indicator can be used to report household food insecurity (access) prevalence. The HFIAP indicator was used to categorize households into four levels of household food insecurity (access): food secure, mildly food insecure, moderately food insecure and severely food insecure. Households are categorized as increasingly food insecure as they respond to more severe conditions of more frequently while a food secure household experiences none of the food insecurity conditions related to food access (Jennifer *et al.*, 2007). The four categories will be divided according to the households' response to the nine questions designed to calculate the HFIAS score as indicated in the formula indicated below.

$$H = 1 \text{ if } (q1a = 0 \vee q1a = 1) \wedge q2 = 0 \wedge q3 = 0 \wedge q4 = 0 \wedge q5 = 0 \wedge q6 = 0 \wedge q7 = 0 \wedge q8 = 0 \wedge q9 = 0 \dots\dots\dots (5)$$

$$H = 2 \text{ if } (q1a = 2 \vee q1a = 3 \vee q2a = 1 \vee q2a = 2 \vee q2a = 3 \vee q3a = 1 \vee q4a = 1) \wedge q5 = 0 \wedge q6 = 0 \wedge q7 = 0 \wedge q8 = 0 \wedge q9 = 0 \dots\dots\dots (6)$$

$$H = 3 \text{ if } (q3a = 2 \vee q3a = 3 \vee q4a = 2 \vee q4a = 3 \vee q5a = 1 \vee q5a = 2 \vee q6a = 1 \vee q6a = 2) \wedge q7 = 0 \wedge q8 = 0 \wedge q9 = 0 \dots\dots\dots (7)$$

$$H = 4 \text{ if } (q5a = 3 \vee q6a = 3) \vee (q7a = 1 \vee q7a = 2 \vee q7a = 3 \vee q8a = 1 \vee q8a = 2 \vee q8a = 3 \vee q9a = 1 \vee q9a = 2 \vee q9a = 3) \dots\dots\dots (8)$$

Where H is the HFIAS categories, q is the HFIAS questions and their affirmative frequency response.

where hfias-1 represents food secure, hfias-2 for mildly food insecure, hfias-3 for moderately food insecure and hfias-4 represents severely food insecure households.

For the food insecurity categories, an ordered logistics regression was used in Stata to identify the odds of a Y categories versus the combined lower level categories is higher or lower by the odds ratio. For a Y ordinal outcome with J categories, ordered logistics

regression was used to identify the odds of  $P(Y \leq j)$  is the cumulative probability of Y less than or equal to a specific category  $j=1, \dots, J-1$ .

$$\frac{P(Y \leq j)}{P(Y > j)} \dots\dots\dots (9)$$

Where Y is an ordinal outcome (food insecurity situation) with J categories (food secure, mildly food insecure, moderately food insecure and severely food insecure). The ordered logistics model that was used to parameterize the estimation in Stata was:

$$\text{logit}(P(Y \leq j)) = \beta_j0 + \beta_j1x_1 + \dots + \beta_jpx_p \dots\dots\dots (10)$$

for  $j=1, \dots, J-1$  and p are predictors (independent variables). The ologit command was used in Stata as appropriate estimation for categorical outcome Y which is food insecurity situation of refugees categorized into four food insecurity groups.

Where hfias-1 represents food secure, hfias-2 represents mildly food insecure, hfias-3 represents moderately food insecure, hfias-4 represents severely food insecure, X are the HFIAS questions, 1a, 2a, 3a...represent the frequency of each HFIAS questions, X (Jennifer *et al.*, 2007).

The research has identified consumption related coping strategies with a recall period of the past seven days. According to CARE/WFP (2003), 12 consumption related questions were weighted differently considering severity of the strategies. The CSI questions were used to explore what people do when they do not have enough food or do not have enough money to buy it. The four types of consumption coping strategies that are used by food insecure households are related to dietary change, short term measures to increase household food availability, short term measures to decrease numbers of people to feed and rationing or managing the shortfall by adjusting portion size or skipping the whole day without food (CARE/WFP, 2003).

In the seven-days recall period information on how often respondents experience the 12 coping strategies to fulfil their food requirement for their household was gathered. The frequency of the responses multiplied by the standard severity weight to calculate the CSI score and mean CSI score was calculated by summing up the CSI score of each respondent and divide by the number of respondents responded to the CSI questions. A cross triangulation analysis was conducted to establish the relationship between CSI score and food insecurity status on the HFIAS.

A logit estimation was used to analyze how onward migration trend is impacted by the food insecurity situation of women refugees. The dependent variable is the motivation or incentives for onward migration to a third destination country whereas the independent variable will be food security situation. the result of the ologit estimation was triangulated by key informant interviews.

### 3.2.5. Variables and method of quantification

Table 2: Variables description and method of quantification for the HFIAS ordered logit estimation

Variable description with variable code	Coding and method of quantification	Type of variable
HFIAS categories-food insecurity status (hfias)	1 for Food Secure, 2 for Mildly Food Insecure, 3 for Moderately Food Insecure and 4 for Severely Food Insecure	Dependent variable
Age of the household head (age)	Continuous variable	Independent variable
Role in the household (role)	1 for HH Head, 2 for Spouse, 3 for Child, 4 for Relative and 5 for Housemate	Independent variable
Nationality (nation)	1 for Eritrea, 2 for South Sudan, 3 for Somalia, 4 for Yemen, 5 for Sudan, 6 for Burundi, 7 for DRC and 8 Syria	Independent variable
Education level of the household head (educ)	1 for No Education, 2 for Primary (1-8 class), 3 for Secondary (9-12 class), 4 for Diploma, 5 for Bachelor, 6 for master's and 7 for PhD	Independent variable
Do you have connection with Ethiopians? (connect)	0 for no and 1 for yes	Independent variable
Do you speak Amharic? (elang_amh)	0 for no and 1 for yes	Independent variable
Family size of the household (fmsz_t)	Continuous variable	Independent variable
Do you get NGO assistance? (assist)	0 for no and 1 for yes	Independent variable
Amount of monthly cash support in Birr (mcash_amt)	Continuous variable	Independent variable
Amount of income from remittances (inc_remit)	Continuous variable	Independent variable
total monthly expenditure (exp_tot)	Continuous variable	Independent variable
Do you have refugee ID? (vera_id)	0 for no and 1 for yes	Independent variable
total CSI score (csi_t)	Continuous variable	Independent variable
Number of assets (asset)	Continuous variable	Independent variable

Table 3: Variables description and method of quantification for linear regression of income

Variable description with variable code	Coding and method of quantification	Type of variable
total monthly income (inc_tot)	Continuous variable	Dependent variable
Age of the household head (age)	Continuous variable	Independent variable
Education level of the household head (educ)	1 for No Education, 2 for Primary (1-8 class), 3 for Secondary (9-12 class), 4 for Diploma, 5 for Bachelor, 6 for master's and 7 for PhD	Independent variable
Family size of the household (fmsz_t)	Continuous variable	Independent variable
Nationality group (national)	0 for Major nationality and 1 for Minority group	Independent variable
total CSI score (csi_t)	Continuous variable	Independent variable

Table 4: Variables description and method of quantification for logit regression for decision to migrate onward

Variable description with variable code	Coding and method of quantification	Type of variable
Do you have plan for onward migration? (plan)	0 for no and 1 for yes	Dependent variable
HFIAS categories -food insecurity status (hfias)	1 for Food Secure, 2 for Mildly Food Insecure, 3 for Moderately Food Insecure and 4 for Severely Food Insecure	Independent variable

## CHAPTER 4: RESULTS AND DISCUSSION

This chapter of the thesis consists of the results of the quantitative and qualitative analysis and the elaboration of the results. The organization of this chapter is based on the themes of the specific objectives and result questions. The chapter starts with information on the demographics of the research respondents, present statistical analysis and provide explanation for statistical outputs. Descriptive and inferential statistics are included depending on the requirement of each topic under discussion accompanied with triangulation of variables and results to provide a detail perspective on the food security and coping strategies of women refugees in Addis Ababa. The food insecurity situation of women refugees on the household food insecurity access scale and the coping strategies of these group when they do not have food or do not have money to buy it are elaborated. In addition, major skills and income sources, expenditure pattern and proportion of household food expenditure, factors affecting the decision for onward migration, determinant of food insecurity and income or refugee women are systematically presented in this chapter.

### 4.1. Demographics of the Sample

#### 4.1.1. Nationality and residential areas

In the study, 167 respondents were surveyed through a structured questionnaire to enable understand the food security situation and coping strategies of women refugees. All respondents were women of the age of 18 from different nationalities who have family responsibilities to ensure household's food security.

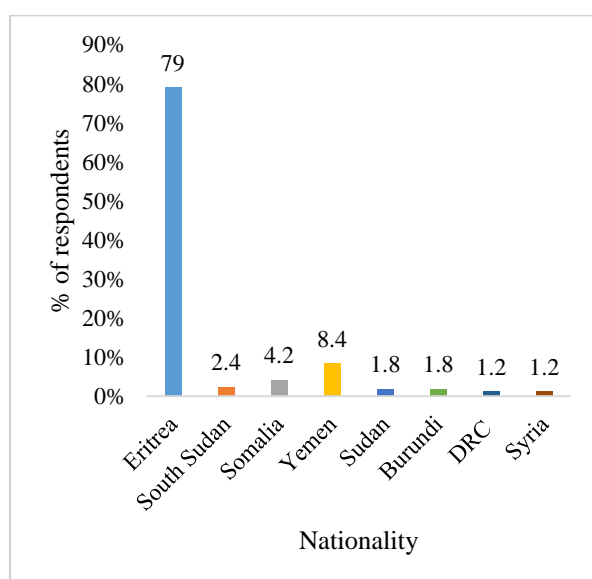


Figure 3 Respondents by nationality

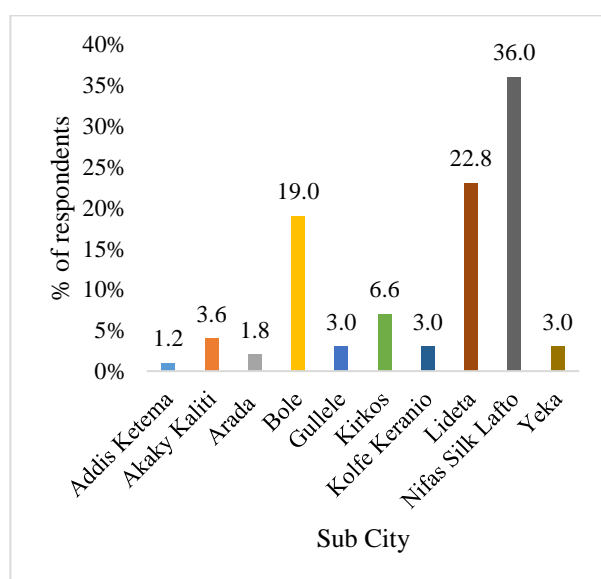


Figure 4: Respondents by sub city

#### **4.1.2. Age, sex, and family size**

The lowest age of respondent was 18 years while the highest age was 65 years with the mean age of 33.29 years. For the study, the age group of respondents (where 77% were household heads directly interviewed through the questionnaire survey), were grouped into three age categories. The proportion of respondents between the age of 18-30 years, 31-40 years and above 41 years of age represented 49%, 25% and 26% respectively. This indicates that the refugee household heads were predominantly of the age of below 40 years with a representation of 74%. The mean family size was 2.6 with the minimum size of the household was one and the maximum number of members in a single household were 12. The research indicated that female represented 65% of the refugee population among the sample respondents while male constituted 35%. An analysis of the age breakdown of the total population (of the sample respondents) indicated that children under the age of 18 years dominated the refugee population with 47% proportion while people between 19-35 years, and between 35-65 years and above 65 years of age represented 41%, 11% and 1% respectively. Among the 167 sample respondents, 129 women household heads, 35 housemates, two spouses and one relative were contacted to answer the household questionnaire. As the research targets were refugee women, female headed households represented 77% of the total sample who were directly interviewed. In case of absence of the head of the household, housemates and other family members were asked to provide the household information according to the household questionnaire. In both cases, data was collected for the household to analyze the food security situation. All respondents were refugee women who reside in Addis Ababa with legal refugee registration.

#### **4.1.3. Ethiopian connection and type of accommodation**

Among the respondents, only 17% mentioned that they have connection with Ethiopians in terms of relationship by blood, marriage, and friendship. However, only 55% of refugees who have Ethiopian connection believed that their connection helped them as a refugee. However, though refugees mentioned that connection with Ethiopians helped them as a refugee, it seems like their connection's contribution to the attainment of food security status is non-existent. Among the 29 respondents who believed Ethiopian connection helps, only 20% are categorized as food secure households while 80% households experience either mild, moderate, or severe food insecurity. In contrast, among the respondents who have said that Ethiopian connection did not help them in achieving food security, 86% are categorized as severely food insecure households in the HFIAS category where the Chi-square test confirms

statistical significance of food insecurity situation (in the HFIAS category) and Ethiopian connection of refugees. This sums up the conclusion that regardless of refugees' connection to Ethiopian, majority of the refugee women are severely food insecure.

Individual or group rental accommodation was the most common type of accommodation for refugees with 66% of respondents confirmed the use of rental houses. This was also triangulated that the cost of house rent is the number one expenditure category for refugees. 27% of respondents live in accommodation of free of charge while 7% own their own accommodation, where these groups of respondents are all Eritreans. The access for free accommodation and owning own houses was explained by a key informant that the closeness of the culture of Ethiopia and Eritrea, given the fact that Eritreans have Ethiopian connection better than the other refugee nationalities and Eritreans speak the two local languages, *Amharic* and *Tigrigna*, makes it easy for 30% respondents who are Eritreans to have the privilege of free accommodation.

#### 4.1.4. Education level and type of skills

Among the respondents, it was evident that 86% of the refugee women have at least attended primary education (43% attended secondary education, 37% attended primary education, 4% have diploma, 1% have bachelor's degree and 1% have master's degree). 88% of the refugee women in Addis Ababa possessed one or more types of skills that could support their food security and livelihoods while 12% did not have any type of skills trainings. The high number of educated refugees (with 86% at least attended in primary education) and 88% of refugee women possessed at least one type of skills, this research shows interesting results which seems to be further investigated for the high level of food insecurity situation among the research groups.

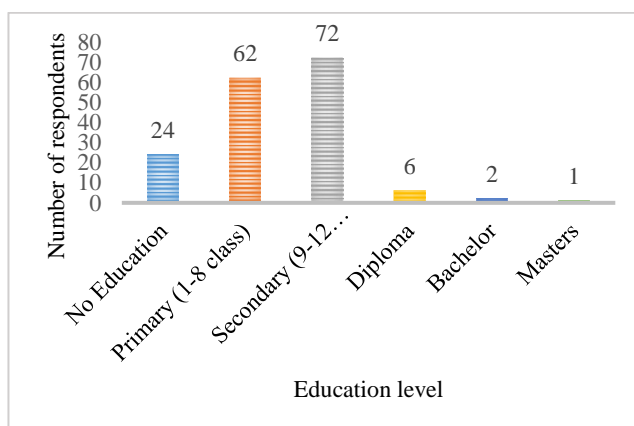


Figure 5: Respondents by level of education

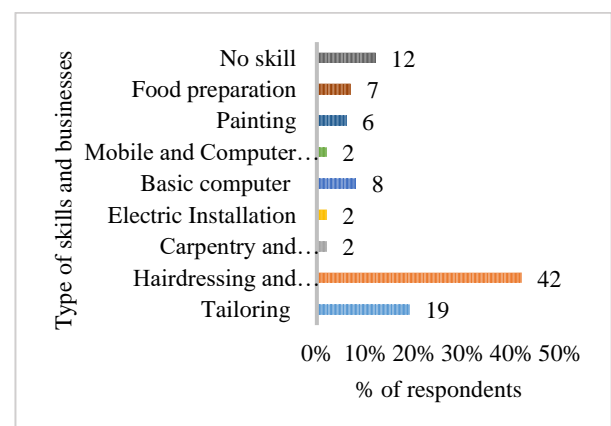


Figure 6: Refugee women by type of skills

#### 4.1.5. Markets and market barriers

Among the refugees who reported that they have skills, 57% confirmed that there is available market for their skills. The unavailability of the market is not mainly related to the lack of demand for the services that would be provided by refugees. However, refugees faced multiple legal and policy related challenges which restricted them from engaging in business activities.

It is evident from the research that there was sufficient demand for the services and products that refugees could potentially bring to the market with only 1% of respondents indicated that there was lack of market demand for their skills, services and products. While lack of work permit was the most important challenge (69% of respondents) for refugees, the strict government regulation of the informal market by the enforcement of regulations through the *denb Askebari* was mentioned as the second most important challenge with 14% respondents reported while 8% reported lack of business start-up capital to penetrate the market. These restriction hinder refugees from living a dignified and productive life despite the difficulties they have gone through, and the result is comparable with UNHCR (2009). Refugee women, in addition to the aforementioned challenges, they also faced challenges related to household responsibilities which takes most of their time which prevent them from engaging in economic activities to generate income. Childcare responsibility was reported by 8% of the respondents as one of the livelihoods challenges which restricted active economic engagement to secure household food security. It is confirmed that childcare responsibilities prevented refugee women from engaging in economic activities and the result compares with Krause-Vilmar (2011).

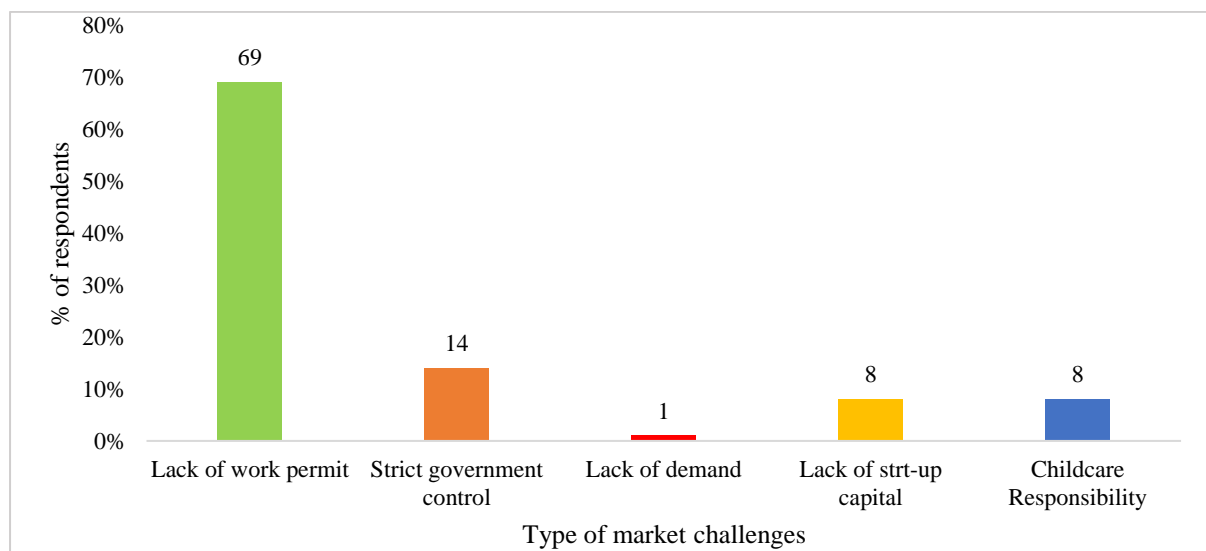


Figure 7: Market related challenges

## 4.2. Food Security Status and Determinant Factors of Food Security

### 4.2.1. Household food insecurity access -related conditions

The respondents' food security situation was assessed against the nine HFIAS questions recommended by FAO and they were categorized into four food security categories. The study explored the behaviors and perceptions of the surveyed population in terms of HFIAS related conditions and domains. Table 5 indicates the number of respondents who affirmatively answer that they had experienced food insecurity conditions within the past 30 days of the reference period.

Table 5: Affirmative responses to items on the Household Food Insecurity Access – related conditions

HFIAS Questions	Affirmative responses		Frequency of responses (%)		
	Number of responses*	% (Yes)**	Rarely (1-2 times/month)	Sometimes (3-10 times/month)	Often more than 10 times/month)
1: Worry about food	143	86%	80%	11%	8%
2: Unable to eat preferred food	140	84%	62%	32%	6%
3: Eat a limited variety of foods	136	81%	66%	26%	7%
4: Eat food that you did not want to eat	137	82%	73%	20%	7%
5: Eat a smaller portion of meal	136	81%	66%	29%	5%
6: Eat fewer meals in a day	138	83%	70%	25%	5%
7: No food of any kind to eat	98	59%	89%	7%	4%
8: Go to sleep at night hungry	104	62%	89%	9%	2%
9: Go a whole day and night without eating	31	19%	84%	6%	10%

\* n is total number of respondents who answer all the nine HFIA questions were 167 which is the sample size of the study. \*\* percent of respondents who affirmatively answered the GFIA question, n/167

### 4.2.2. Household food insecurity access – related domains

Respondents behavior and perception of food insecurity situation was categorized into the three HFIAS-related domains namely anxiety and uncertainty about household food supply; insufficient quality (includes variety and preferences of the type of food); and insufficient food intake and its physical consequences. HFIAS question 1 was related to anxiety and uncertainty, questions 2, 3 and 4 were related to insufficiency of food quality while questions 5, 6, 7, 8 and 9 are related to insufficient food intake. A model was designed to systematically group respondents based on the HFIA domains on Stata. The following table indicates the number of respondents who experienced each food insecurity domains in the 30 days reference period.

Table 6: Affirmative responses to items on the Household Food Insecurity Access – related domains

HFIAS Domains	Number of affirmative responses*	% of respondents experiencing the food insecurity domains
Anxiety and uncertainty about the household food supply:	2	1.29
Insufficient Quality (includes variety and preferences of the type of food)	9	5.81
Insufficient food intake and its physical consequences	144	92.90

\* number of respondents who affirmatively answer the HFIAS domain questions which is equal to the number of respondents who experienced food insecurity.

#### 4.2.3. Household food insecurity access Scale

The HFIAS scale was calculated by summing up the frequency of occurrence of each question. The mean HFIAS score was 8.41 while the minimum and maximum scores were 0 and 27, respectively. The less the HFIAS score is the less the level of food insecurity while high HFIAS score depicts a remarkably high severity in the food insecurity situation.

#### 4.2.4. Household food insecurity access - prevalence

The HFIAS prevalence, a categorical indicator of food insecurity access scale was computed for the study target groups.

Table 7: HFIAS prevalence

HFIAS category	Number of respondents	% from the total respondents
Food secure	12	7.19
Mildly food insecure	10	5.99
Moderately food insecure	13	7.78
Severely food insecure	132	79.04

As indicated in the above table, many of the urban refugees are severely food insecure with 79.04% fall under this category while only 7.19% are food secure. There are many reasons for the deteriorated food security situation of the study population. An ordered logit regression was run on Stata to identify the determinant factors that affect the food security situation of the study population after relevant statistical tests were conducted to evaluate validity of the ologit model.

Table 8: Ordered logistics regression of food insecurity status on the HFIAS scale against predictor variables

Variables	Coef.	SE	z	p> z
Age of household head	-0.0153	0.0361	-0.42	0.671
Education level	0.0745	0.3148	0.24	0.813
Connection with Ethiopian	-1.2417	0.5963	0.92	0.037*
Speaking Amharic Language	0.5301	0.5768	0.92	0.358
Family size	0.5473	0.2335	2.34	0.019*
Number of assets	0.1821	0.1889	0.96	0.335
Status of assistance	2.0448	1.1273	1.81	0.070**
Amount of monthly cash support	-0.0004	0.0002	-2.22	0.027*
Remittance income	0.0005	0.0001	3.8	0.000*
Total monthly expenditure	-0.0004	0.0001	-3.59	0.000*
CSI score	0.2246	0.0512	4.38	0.000*
Availability of refugee ID	1.0384	1.6758	0.62	0.536
Nationality	-0.1617	0.2360	-0.69	0.493
Role in the HH	-0.0596	0.1873	-0.32	0.750

Where Coef. Represents coefficients of the ordered logistics regression of the predictors, SE for standard error, z is the z-score for the statistics and p is probability. \* represents statistically significant variables at 95% confidence interval and \*\* represents statistically significant variables at 90% confidence interval

Ordered logistics regression model uses maximum likelihoods estimations where in the iteration zero, a point where no predictors are used, shows the likelihood of the null model. The iteration increased until the successive iterations was small where the log likelihood for the sixth and seventh iteration were equal (-85.4537) which indicated that the difference is zero which satisfies the maximum likelihood estimation.

The probability of the overall model was zero which indicated that the overall ordered logistics regression model was statistically significant whereby it also confirmed at least one of the predictors' coefficient was not equal to zero. At 95% confidence interval, LR Chi-squared of 77.06 was the Likelihood Ratio (LR) Chi-Square test that indicated at least one of the independent variables in the ologit regression coefficient was not equal to zero. The number in the parenthesis showed the degrees of freedom of the Chi-Square distribution used to test the LR Chi-Square statistic explained by the number of independent variables (14 predictors used) used in the model. The LR Chi-square was statistically significant as the probability of the overall model was zero.

After confirming the significance of the overall model (with probability of zero), statistically significant predictors (independent variables) were identified. The statistically significant variables at 95% confidence level were whether refugees had connections with Ethiopian relatives, friends or through marriage (connect); family size (fmsz\_t); amount of monthly cash (mcash\_amt), amount of income from remittances (inc\_remit); total expenditure

(exp\_tot); and coping strategy index (csi\_t), with the probabilities of the respective z-value was less than 0.05.

The HFIAS categories are ordered in the ordered logistics model from the less food insecure (food secured) to a high level of food insecurity (severely food insecure). With the food security situations are ordered in terms of orders of severity of food insecurity situation, the coefficients of the predictors should be interpreted accordingly. This indicates that the negative sign in the coefficient means that with an increase in one unit of the predictor would result in a reduction in the ordered log-odds of being in severe food insecurity by the rate of the coefficient while other independent variables held constant. Whereas the positive sign in the coefficient tells us that with a unit increase in the predictor would result is a higher ordered log-odds of being in severe food insecurity category is higher by the coefficient while other independent variables held constant.

Refugee women who have family connection with Ethiopians would have reduced food insecurity category by 1.2417 in the ordered log-odds scale while the other variables in the model held constant. When the monthly cash amount that refugees receive as support from NGOs increase by one unit would result in a 0.0004 reduction in the ordered log-odds of being in a severe food insecurity category while all other predictors held constant. When the monthly amount of expenditure increase by one unit would result in a 0.0004 reduction in the ordered log-odds of being in a severe food insecurity category while all other predictors held constant. This also indicates that as expenditure increases, refugees demonstrated an increased expenditure in food (36.38% of the total expenditure represents food cost which is the second most important expenditure for refugee households) which contribute to the reduction of food insecurity situation.

When family size increases by one unit, this would result in a 0.5473 increase in the ordered log-odds scale of being in a severe food insecurity category while all other predictors held constant. When the amount of remittance increases by one unit, it would result in an increase in the ordered log-odds of being in a higher HFIAS category (food insecurity) by unit of 0005 while other variables kept constant. Despite remittance is the most important source of income for refugee, it seems like it is a less promising source of income with reduced contribution to food security. This finding contradicts with the finding that refugees who get regular assistance has a low CSI and reduced food insecurity. A study by UNHCR (2017a and 2017b) indicated that given the shocks and challenges refugees have to deal with in the

context of lack of employment opportunities, reduced income and high cost of living in urban areas, refugees who are dependent on remittances have the most distress level of coping strategies compared to refugees who rely on salaried work for their livelihoods. The other reality is that salaried job opportunities are limited with no respondent reported formal employment as source of income. In addition, government and NGO assistances use remittance as a criteria for targeting without proper analysis of the amount and regularity of remittance. Therefore, refugees who reported that they receive remittance are most likely to be excluded from such projects which aggravate the food insecurity situation. The seemingly negative interaction between remittance and food security might be because of the irregularity of remittance supports, remittance assistance mainly goes to cover other basic needs and limited opportunities for refugees for livelihoods diversification.

A coping strategy index score was also found to be a statistically significant predictor of food security situation. A one unit increase in the CSI score results in 0.2246 in the ordered log-odds scale increase in level of household food insecurity while other independent variables held constant. This is also an indication that the more households involve in dangerous coping strategies, the more their food security situation is deteriorated. The result can also be compared with the food security HFIAS categories and the mean CSI score of the respondents. The mean CSI for food secure household was 6.75 while the mean CSI score for severely food insecure households is 13.42 which is the highest. With an increased level of household food insecurity, it was found that the CSI score was high.

The ordered logit model estimates one equation over all levels of the dependent variable. This pose a question whether the one-equation model is valid or not. To validate if the one-equation model in ologit is valid or not, the model was checked for the proportional odds assumption which is one of the assumptions that must be validated for ologit estimation. The ologit model was critically examined to check if the ologit assumptions are fulfilled. These assumptions are the dependent variable is ordered (which is in this case the food security status labelled as HFIAS), one or more of the independent variables are either continuous, categorical, or ordinal, no multicollinearity, proportional odds. As the dependent variable is categorized into the four food security categories (food secure, mildly food insecure, moderately food insecure and severely food insecure) and there are continuous and categorical independent variables in the model, the first two assumptions were fulfilled. Therefore, a multicollinearity test and proportional odds test was conducted. The multicollinearity test was conducted to check if there was a strong relationship among the

independent variables using a correlation matrix and verified by a VIF (Variance Inflation Factor) test to know if the VIF values are less than 10 for all independent variables. There was no multicollinearity problem in the data as independent variables had no strong relationship and the VIF values were less than 5 for all independent variables. The omel logit test was undertaken to evaluate proportionality of odds assumption. The test indicated that the Chi2(1) was not statistically significant with probability of 0.3482 which concludes that the proportional odds approach was reasonable.

The proportional odds ratios in the below table were obtained by adding the OR option in the ordered logistic regression model on Stata. As the ordered logit estimation coefficients estimated a single equation over the level of influence on the dependent variable, the odds ratios informed us the change in the dependent variable in a cumulative sense. Proportional odds ratio tells, for a one unit increase in the independent variable, the odds of severe food insecurity versus the combined mildly food insecure, moderately food insecure and food secure is greater or lower by the proportional odds.

Table 9: Odds ratio of the Ordered logistics regression of food insecurity status on the HFIAS scale against predictor variables

Variables	OR	SE	z	p> z
Age of household head	0.9848	0.0355	-0.42	0.671
Education level	1.0773	0.3391	0.24	0.813
Connection with Ethiopian	0.2889	0.1723	0.92	0.037*
Speaking Amharic Language	1.6990	0.9799	0.92	0.358
Family size	1.7286	0.4035	2.34	0.019*
Number of assets	0.8335	0.1574	0.96	0.335
Status of assistance	7.7274	8.7113	1.81	0.070**
Amount of monthly cash support	0.9995	0.0002	-2.22	0.027*
Remittance income	1.0005	0.0001	3.8	0.000*
Total monthly expenditure	0.9995	0.0001	-3.59	0.000*
CSI score	1.2519	0.0641	4.38	0.000*
Availability of refugee ID	2.8246	4.7335	0.62	0.536
Nationality	0.8507	0.2007	-0.69	0.493
Role in the HH	0.9421	0.1765	-0.32	0.750

Where OR Represents Odds ration of the ordered logistics regression, SE for standard error, z is the z-score for the statistics and p is probability. \* represents statistically significant variables at 95% confidence interval and \*\* represents statistically significant variables at 90% confidence interval

For the independent variable connection with Ethiopians, when people have relationship either through blood, friendship or marriage, the odds of high food insecurity categories are .2889 times lower than people who do not have connection, given the other predictors are held constant. Similarly, for refugees who have Ethiopian connection, the odds of the combined severe and moderate category of food insecurity versus the combined mildly food

insecure and food secure are 0.2889 times lower, given the other independent variables are held constant.

For a one unit increase in amount of monthly cash assistance, the odds of the high food insecurity categories versus the combined middle and low level of food insecurity are 0.9995 times lower, given other predictors kept constant. Likewise, for a one unit increase in monthly cash assistance, the odds of the combined severe and moderately food insecurity versus the low level of food insecurity (better food security) are 0.9995 lower, given other variables kept constant.

The proportional odds ratio of a one unit increase in total expenditure of severely food insecurity versus the combined middle and low level of food insecurity are 0.9995 lower, keeping other variables constant. Similarly, the odds of a one unit increase in total expenditure for the combined severely and moderately food insecurity versus the low level of food insecurity are 0.9995 lower if other predictors are kept constant.

For a one unit increase in family size, the odds of the high food insecurity categories versus the combined middle and low level of food insecurity are 1.7286 times higher, given other predictors kept constant. While, for a one unit increase in family size, the odds of the combined severe and moderately food insecurity versus the low level of food insecurity (better food security) are 1.7286 higher, given other variables kept constant.

For a one unit increase in amount of remittance, the odds of the severe food insecurity category versus the combined mild food insecurity, moderate food insecurity and food secure households are 1.0005 times higher, given other predictors kept constant. While, for a one unit increase in amount of remittance, the odds of the combined severe and moderately food insecurity versus the low level of food insecurity (better food security) are 1.0005 higher, given other variables kept constant.

For the coping strategy index, the odds of a one unit increase of the score of the severe food insecurity versus the combined mildly food insecure, moderately food insecurity and food secure households are 1.2519 times higher, given all other independent variables are kept constant. Equally, for a one unit increase in the CSI score, the odds of the combined severe and moderately food insecurity versus the low level of food insecurity (better food security) are 1.2519 higher if all other variables are held constant.

### 4.3. Coping Strategies and Food Security of Women refugees

The mean coping strategy index (CSI) score for the sample was 12.49 while the minimum score and the maximum scores were zero and 55, respectively. The research explored the different coping strategies practiced by refugees when they did not have food or did not have money to buy food in the past seven days of the reference period.

Table 10: Consumption related coping strategies identified by the study with proportion of respondents who affirmatively answer for each CSI questions.

Coping strategies	CSI response	
	Number of affirmative responses	(% yes) *
Rely on less preferred and less expensive foods	154	92.22
Borrow food, or rely on help from a friend or relative	113	67.66
Purchase food on credit	118	70.66
Gather food from garbage or collect from leftovers	6	3.59
Do labor work for friends, relatives, neighbors in exchange for food	8	4.79
Send household members to eat elsewhere	22	13.17
Send household members to beg	4	2.40
Limit portion size at mealtimes	137	82.04
Restrict consumption by adults for children to eat	71	42.51
Feed working members at the expense of non-working members	39	23.35
Reduce number of meals eaten in a day	87	52.10
Skip entire days without eating	17	10.18

\* % yes, was calculated against the total number of observation (167) who affirmatively answered the coping strategy questions

The most common consumption related coping strategies are relaying on less preferred food, borrow food, purchase food on credit, limiting portion size and reducing the number of meals eater in a day with the highest response rate. In addition to consumption related coping strategies, a key informant interview with refugee representative indicated that refugees send children to beg for food or money, engaged in child labor activities, live in poor accommodation at the outskirts of the city to save money for food, engaged in unusual activities like shoe shining, labor work and commercial sex, and consider sending family members for onward migration. In addition to searching for accommodation at the outskirts of the city where the living condition is poor, refugees also consider sharing apartments which save the cost of rental of accommodation that enable them purchase food to their families. Women tend to prioritize family members who are young, elderly, and working in the labor work with ultimate exposure to more vulnerability. A KII indicated that, in case of absence of job opportunities in the informal market, refugee also explore the opportunities of enrolling to a skill training initiatives organized by NGO where they would be able to receive some

allowance for their transport though they make a choice of spending the money to cover household food cost and other basic expenditures.

A comparative analysis indicated that there is a marked relationship between coping strategies and food security situation. The study confirmed that when the food security situation is deteriorated, the higher the coping strategy index will be. This indicated that when food security is endangered, refugee women tend to practice coping strategies which are mostly negative and could further compromise the safety, health, and food security situation of the family. A Pearson chi-square test also indicated that the food security situation is statistically significant variable in determining the coping strategy index with chi2 test probability of 0.0000.

Table 11: HFIAS categories and coping strategy index score

HFIAS category	Number of respondents	Mean CSI score	Std. Dev.	Min	Max
Food secure	12	6.75	10.69	0	39
Mildly food insecure	10	8.20	4.66	3	19
Moderately food insecure	13	11.69	6.87	1	29
Severely food insecure	132	13.42	8.11	4	55

A relationship was established to determine the major coping strategies of the research groups and the food insecurity status. The coping strategies were categorized in to four major strategies namely dietary change, increase short-term household food availability, decrease numbers of people and rationing strategies. Chi-square test indicated that food insecurity status and coping strategies are statistically significant with probability of zero. In case of shortage of food or lack of money to buy it, 86.67% of respondents applied rationing coping strategies where the focus of the strategy is reduction of amount of consumption by altering number of meals or amount consumed at mealtimes. The second most common coping strategy was that 9.09% of respondents applied a strategy of increasing of short-term food availability at household level where the focus of the strategy is to seek help from others and purchase food on credit. Dietary change and decrease number of people eating at the household constitutes 2.42% and 1.82% respectively. It was determined that rationing strategies are the most common coping strategies by urban refugee families in Addis Ababa regardless of the food insecurity status. A chi-square test indicated that the more people are food insecure, they likely practice negative coping strategies that deteriorate food security. Rationing coping strategy is highly linked with the HFIAS domain of insufficient food intake. 98% of food insecure HHs experience insufficient food intake domain at the same time apply rationing coping strategy. In addition, 89% of HHs are severely food insecure as well as

develop rationing coping strategy which indicates a strong relationship between food insecurity, dangerous coping strategies and severe HFIAS domain that involves reduction of consumption.

Key informant interview confirmed that borrowing money from family and friends, trying to enroll to trainings organized by NGOs in order to get the transport and per diem allowances which they could use to buy food, living in shared accommodation, women living with men transacting shelter and food in favor of sex, asking for remittances from friends and relatives abroad, begging on the street and at religious institutions, and engaged in commercial sex work activities are among the serious non consumption coping strategies. These findings are comparable with the UNHCR (2009) findings where refugees face protection risks and experience negative coping strategies of extended working hours, engaged in illegal activities, child laboring and survival sex in the informal sector. Most of the coping strategies are experienced by female member of the household which put them under more vulnerability and the risks of gender-based violence are related with the type of coping strategies experienced by the refugee women as also confirmed by Buscher, (2011). This also limit the active involvement of women refugee in economic activities. Alison *et al.* (2018) reported similar finding where the challenges refugee women face in urban areas coupled with legal and administrative barriers limit their economic participation. Coping strategies are different for different households depending on access to external assistance. The study findings confirmed that refugees who get assistance has mean CSI score of 2.635 while refugees who do not get assistance has a higher CSI score of 2.875 which indicates higher vulnerability and food insecurity whereby the findings are comparable with Maharjan and Chhetri (2006) and Adams (1992) that reported coping strategy is related with endogenous and exogenous factors, resource endowment and access to external support. .

#### **4.4. Migration and Food Insecurity**

##### **4.4.1. Reasons for migration**

The urban refugee population in Addis Ababa shared common reasons for leaving their home country with 88% of the study population left their home country because of political instability and civil war that sustains for long period of time while 9%, 2% and 1% of the refugees left their home country in search of better life economically, in fear of persecution and because of the effects of natural disasters respectively.

According to the definition of migration by Wickramasinghe and Wimalaratana (2016), 90% of the urban refugees in Addis Ababa are asylum migrants who are forced to flee their home because of political instability and fear of persecution instigated in their home country and wanted to seek asylum and protection in a foreign country. However, their objective has changed through time as opportunities are limited for refugees in Ethiopia, who aspire for onward migration to another destination country where they perceived opportunities are available for a better life. Only 10% of respondents left their home country as in search of either better economic opportunities or they lost their livelihoods because of natural disaster who aspire to rebuild their livelihoods in a foreign country and hence considered as labor migrants. This study indicated that women refugees in Addis Ababa, because of the limited opportunities and restrictive legal and administrative system, has developed secondary plan of aspiring for onward migration with either to look for better opportunities abroad or for reasons of family unification. These administrative and social constraints promoted people choosing onward migration as mitigation strategy which also aggravated the food insecurity situation which was in comparable with the study conducted by (Degefa, 2008).

The chain migrants who aspire to migrate to another destination are motivated by the information they have got from relatives and friends about the better opportunities in developed countries. This makes the Network Migration theory describe them well and relates with Massey *et al.* (1993) as they receive information, financial backup to cross borders, facilitate accommodation and employment. This research confirmed that majority of the urban refugees are not labor migrant in a sense that the reason for many of them flee their home was in fear of persecution, war, and political instability. They are mostly asylum migrants. However, through time and because of the limited legal and administrative support to establish their livelihoods in Ethiopia, they adapt their plan and anticipate to migrate to developed countries motivated by the information and financial support they received from friends and relatives. Looking at the decision to migrate, for urban refugees, it is taken either individually or collectively at the household level which proves the theory of Neo-classical theory and New economics of labor migration (NELM), respectively where the results are comparable with Wickramasinghe and Wimalaratana (2016). This indicated that there is not a single migration theory that generalizes the behavior of women refugees in relation to the decision to migrate onward.

#### 4.4.2. Food insecurity and onward migration

Among the respondents, 93% of them have a plan for onward migration to a third country preferably in Europe, USA, and Canada. The most important reasons for their plan to migrate to another destination (mostly they consider Ethiopia as a transit point) were that 5% indicated opportunities in Ethiopia are limited, 39% are looking for family unification of family members or relatives who migrated before them, and 55% are planning to migrate in search of better opportunities in developed countries while 1% mentioned that their plan for onward migration was as a result of the unimproved situation at their home country.

A Pearson Chi-square test indicated that food security situation is statistically significant ( $p < 0.003$ ) in determining the decision of refugees to foresee possibilities of onward migration. Given the lack of work permit and strict government control of the market systems where refugees are not allowed to operate any business, they tend to incline looking for opportunities for onward migration to a third country either in legal resettlement programs or illegally which can expose them to potential danger and exploitation including potential loss of life along the journey.

Table 12: Food insecurity and onward migration

HFIAS category	Respondents who have plan for onward migration	
	Number of respondents	% (yes) *
Food secure	8	66.67
Mildly food insecure	9	90.00
Moderately food insecure	13	100.00
Severely food insecure	125	94.70

\* Pearson  $\chi^2 = 14.1285$  Pr. = 0.003

A logit regression analysis indicated that with an increase in the severity of the food insecurity status of refugee women, the decision to migrate onward is increased by a rate of 0.6799 with the overall regression model is statistically significant and food insecurity situation is a statistically significant independent variable determining the decision of considering onward migration. Though food insecurity is a determinant factor for onward migration, it seems like there is no difference on respondents plan for onward migration in relation to their specific food insecurity category. At each HFIAS category, majority of respondents indicated that they have plan for onward migration. However, the plan to migrate to another country is highly related to the factor that initiated the plan to move onward. A linear regression of the plan for onward migration indicated that family unification and searching for better opportunities were statistically significant predictors.

Key informants witnessed the noticeably clear interplay between onward migration and food insecurity. Majority of women refugees have no or limited economic prospect to reside in Ethiopia due to the restrictive legal framework and the delay in the implementation of the revised proclamation which creates psychological and physical restraint on refugees access to economic, social and basic needs. Therefore, refugee women see onward migration as the ‘best’ solution to settle in developed countries. However, though there are a clear link between onward migration and food insecurity, there are also other factors that trigger onward migration.

#### 4.5. Sources of Income and Expenditure Pattern

Refugee women have limited sources of income where majority relied on external support. 82% of respondents reported that they were dependent on remittances, NGO support and begging with remittance was the most important source of income. 2% got their income from joint venture businesses with either Ethiopians or refugees while 7% and 6% respondents earn income from informal employments and informal businesses, respectively. Credit was also recorded as an important aspect of income where 4% of respondents mentioned that they relied on credit as a source of income to fulfill household basic needs. The mean income of the respondents was 6,658.08 birr per month. The income pattern of respondents showed high variability with remarkably high standard deviation of 3,491.69. The monthly amount of income of respondents ranges from 500 birr to 22,000 birr which might be because of the difference in amount of remittance received as remittances were the major source of income (52% income was gained from remittances).

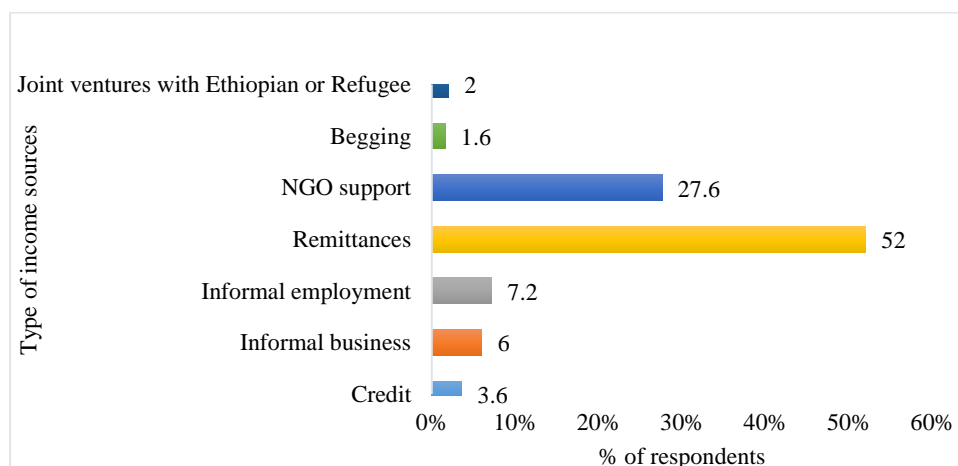


Figure 8: Respondents by sources of income

Age, family size, nationality and CSI score were found to be statistically significant independent variables that explained the total income of the household, the dependent

variable. The overall model in the linear regression analysis for income was statistically significant. The R-square indicated that the independent variables included in the estimation model explained the dependent variable by a rate of 58.9%. Other important variables which were not included in the model could also determine income which was confirmed by the statistical significance of the constants in the linear regression model.

When age of the respondent increases by one unit, income of the household increases by 64.91 units which demonstrates the positive relationship between age and income of the household. Family size and income of the households also show a positive relationship. When family size increases by one, income of the household increases by 708.32 units. This might be attributed to with an increase in family size, it also means that an increase in working force in the household. In addition, the monthly Government and NGOs (particularly UNHCR's) support are calculated based on the size of the family where remittances and NGO assistances were found to be important contributors to household income.

Refugee nationalities were grouped into two categories as 'major' and 'minority' refugee groups based on their population proportion in Addis Ababa. Major refugees represented refugees from Eritrea, Somalia, South Sudan, and Yemen while Sudan, Burundi, DRC, and Syria were considered minority groups as their number was smaller. According to the linear regression analysis, the refugee category as minor and major was statistically significant where zero and one were assigned to major and minority groups, respectively. Therefore, as the refugee category changes from major to minor, the income of the household reduces by 5,819.98 units. Nationality was found to be the most important variable that determine income of the household. This might be explained as that the major refugee categories have more social connection because of family connection, shared cultures and speaking of the local languages. The CSI score was also statistically significant variable that determine amount of income. The mean CSI score for major refugee groups was 11.71 while it was 24.80 for minority refugee groups. This summarizes that refugees from minority nationality groups (Sudan, DRC, Burundi, and Syria) experiences more severe coping strategies which shows high level of food insecurity with reduced amount of household income. With an increase of the CSI score by one unit, income of the household reduces by 70.08 units. Therefore, the more the households practice dangerous coping strategies, the less the income amount and the severe the household food insecurity in the HFIAS scale.

Table 13: Determinants of household income, linear regression

Total income of the household	coef.	SE	T	p >  t
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Age of household head	64.9140	21.2414	3.06	0.003*
Education level	-499.9834	271.2247	-1.84	0.067**
Family size	708.3241	125.0422	5.66	0.000*
Nationality	-5819.9770	1092.6190	-5.33	0.000*
CSI score	-70.0770	29.8696	-2.35	0.020*
_constants	5055.5260	1124.7850	4.49	0.000*

\* Statistically significant independent variables at 95% confidence interval and \*\* statistically significant variables at 90% confidence interval

The mean monthly expenditure was 5,700.89 birr. The two most important expenditure categories for women refugees were house rent and food costs with mean monthly expense of 2,161.38 birr and 2,073.95 birr. Medical and education expenditures were even less than the cost of transportation and cooking expenses (gas, electricity, etc.) with a proportion of 0.33% and 1.51% of the total expenditure, respectively. 83% of respondents indicated that they get free medical support from government and NGOs. This might be the reason for the less amount of medical expenditure by refugees. A KII interview with refugee representative indicated that many refugees send their children to public schools where education is provided for free despite the challenges school children face like language and cultural shocks.

Table 14: Mean monthly total expenditure in Birr per expenditure categories

Expenditure category	Number of observations	Mean	% of the mean total expenditure *
House rent	167	2,161.38	37.91%
Food	167	2,073.95	36.38%
Cloth	167	817.37	14.34%
Transportation costs	167	292.93	5.14%
Cooking expense (gas, electricity, etc.)	167	249.88	4.38%
Education	167	86.23	1.51%
Medical	167	18.56	0.33%
Debt Repayment	167	0.59	0.01%

\* the monthly mean total expenditure is 5,700.89 Birr

#### **4.6. Available Services and Threats to Food Security of Urban Refugees in Addis Ababa**

The GoE and its local and international partners provide different services to urban refugees. These services include vital events registration, medical services, education, vocational and business development trainings, and business start-up supports, employability and life skill trainings. Assistance modality varied from organization to organization where cash and in-kind assistances are the most widely adopted modalities. UNHCR also facilitates resettlement program and protection interventions for refugees as its core mandate though resettlement opportunities are shrinking from time to time. The targeting in most cases was done with due

focus on the most vulnerable putting into consideration of large family size, households who have pregnant and lactating women, people with disability for the food, education, medical, business start-up and psychosocial supports.

However, considering the limited number of actors who are currently supporting refugees in Addis Ababa; the limited legal provisions for the right to work; and only few refugees get assistance and the assistance is quite criticized for not covering most of their basic needs given the high cost of living in urban areas. Among the respondents, 40% mentioned that they receive regular monthly assistance from NGO and relatives where most of the assistance hardly cover the cost of accommodation for many. In the context of absence of the right to work, refugees struggle to cover the other basic needs including food, medical, transport and education, among others. A projection of the severity of the food and livelihoods insecurity of undocumented urban refugees comparing the situation with documented refugees who hold refugee ID card, refugees who do not possess refugee ID are not even eligible for the limited available assistances from the government and NGOs which put them in unprecedented food insecurity.

The study found out that there is a positive relationship between coping strategies and assistance of refugee who get monthly assistance and who do not. This finding confirmed the result reported by Maharjan and Chhetri (2006) that different people apply different coping strategies depending on their internal and external capacity. However, food insecurity situation and assistance proved by this study to have no strong relation as the food insecurity situation has been demonstrated to be very severe regardless of access to regular assistance. This might be because of the less contribution of such assistance to food expenditure given competing priorities for their basic needs.

Key informant interviews indicated that the enactment of the new refugee proclamation (Jan 2019) is an important opportunity for refugees which is expected to expand the rights of and services available for refugees in the country. Refugees will be allowed to engage in self-employment and will also be supported in a joint government and non-governmental projects like the industrial parks where 100,000 jobs are going to be created on 70% and 30% for host communities and refugees, respectively. Refugees will enjoy freedom of movement and will be able to integrate with the national system with more focus on out of camp initiatives. The open door policy of the country will remain available to refugees which allow humanitarian access.

Though the new refugee law is a hope to many refugees, its practicability is dependent on the interpretation of the law into directives and procedures. There are ambiguous terms in the new refugee law which are open for interpretation. It states that refugees will be treated as ‘most favorable foreign citizen’ regarding the right to work. This statement is ambiguous and may affect the implementation of the directives and regulation. Therefore, just by looking at the law, one could not be sure if the practical implementation of the law would be as understood as in the law. The lack of proper integration between ARRA and line ministries would be a potential barrier for the successful implementation of the law as its successful implementation is dependent on how best stakeholders work together for the betterment of refugees. The lack of integration of actors is even more visible when we see the policies that are designed in the country hardly reflect refugee issues. ARRA is the top agency overseeing refugee matters with UNHCR. These institutions have no evident coordination with line ministries except for the recent integration of ARRA and VERA for refugee vital event registration processes and few consultations that involved national and regional authorities during the design of the CRRF.

There is no food security policy found pertaining urban refugees. However, it was indicated that the CRRF initiative which was followed by the new refugee proclamation highlighted the importance of multi-sector level coordination and promote for the integration of refugees to the national system. Therefore, in the subsequent development of directives for the implementation of the new refugee proclamation, it is expected that ARRA will work with relevant ministries that the food security of urban refugees will hold attention in the food security policy and social safety net programs. Urban refugees are not linked to the existing national system for their food security. Though, there are visible indications that refugees are integrating in the health and education sector, the food security aspect has not been well thought yet.

Key informant interviews confirmed that refugees face enormous challenges to lead a decent and dignified life. Lack of job opportunities, inadequate access to basic services like shelter, water, education, and healthcare are among the prominent challenges that refugees face in Addis Ababa. Job opportunities in the formal sector has been a no-go zone for refugees and they have limited access only in the informal sector where they are exposed to discrimination, abuses that involve sexual harassment and low wage payment. Lack of legal protection, language barrier, lack of sufficient information about services and rights, lack of access to justice and legal representation, and limited access to skill trainings and higher education are

the critical constraints that challenge refugees' life. Moreover, restriction of movement, coupled with high cost of living in the city put additional pressure to the wellbeing of urban refugees where psychosocial support services are nonexistent. Though host communities are welcoming and refugees enjoy the hospitality, it has also been one of the challenges related to host communities as they are not aware of the presence of refugees and it came out as a surprise whenever they are aware of refugees living in the city. In addition, refugees face an increasing cost of rental for accommodation and are exposed to forced eviction if they could not afford the ever increasing rental cost by insensible landlords.

## **CHAPTER 5: CONCLUSION AND RECOMMENDATIONS**

### **5.1. Conclusion**

Women refugees live in a devastating food insecurity situation with limited opportunities to generate income where they are mostly dependent on external assistance from government, NGOs, and relatives. These supports lack focus of self-reliance and have little contribution to the food security of refugee women given these group of people face multiple administrative and social constraints coupled with the high cost of living in urban areas. Urban refugees are excluded from the formal administrative and legal processes with the assumption that they can support themselves.

The research finds out key opportunities and challenge women refugees face to lead safe and dignified life while ensuring improved food security status. As a less researched area, little has been known about women refugees and the study provides a new perspective to understand their food insecurity situation, linkages between food insecurity and onward migration, income and expenditure patterns and coping strategies. It provides policy recommendations for government, the international community and NGOs who are operating in Ethiopia to help design evidence-based food security interventions for urban refugees.

The urban refugee population in Addis Ababa is dominated by female. In the absence of the right to work, these refugees are experiencing abuse in the informal sector and are exposed to further vulnerabilities with significant population practicing both consumption and non-consumption related coping strategies. The study provides insights to the need to study the differential needs of refugees of different nationalities, gender, economic status, living condition, age, and presence of vulnerable groups in the household to design need-based interventions to ensure self-reliance sustainably. The one-size-fit-all approach has been a common approach by many agencies which this study revealed it is a failed approach in helping refugees achieve food security.

## 5.2. Recommendations

Urban refugees should be integrated to the national system where their needs, capacities and constraints are put into consideration. This integration should happen with proper consultation of local authorities and the host community at large for sustainable solution. It is recommended to have urban refugee food security policy or strategy that is linked to existing policies that are designed for host communities. Extreme poor refugee women, who are under the OCP scheme can be integrated with the urban Productive Safety Net Program (PSNP) with a proper analysis of household food insecurity situation. Besides, this research exposed that refugees who get monthly uninterrupted cash assistance are also severely food insecure as most of their assistance goes to cover other basic needs than food. Therefore, the food security strategy should encompass all refugee women with a proper household level food security analysis with focus on women headed households. This can be achieved through a strong and joint advocacy at national and international level by all stakeholders working in the areas of refugees. There is also a need for the international community to support social safety net initiatives of the host government so that refugees are integrated into the national system sustainably. Food insecurity is the hard reality for host communities as well specially in crowded cities like Addis Ababa where many live below the poverty line. Therefore, joint program initiative should be launched that will support host communities and refugees.

Integration of refugees to the national system is imperative to ease refugees' burden to access basic services. The high level of food insecurity among refugee women demonstrated that the limited refugees' income has been used to cover the cost of accommodation. Improved access to basic services such as shelter, water, electricity, and education is imperative to ensure food security. Access to these services together with food purchasing power increased by access to stable income could allow regular access to safe, nutritious, and preferred food for urban refugees.

Vocational skill training initiatives should be provided based on a detail market analysis of the demand and supply side factors. The skills should be selected based on interest at the same time availability of demand for the services and products in the market. It is also important to integrate such trainings with life skills and psychosocial support to prepare refugee women for the market after the completion of their trainings. All governmental and NGO initiative that aim for the development of business for refugees should look into advocacy for refugee's integration into the formal economy. Despite an important sector in the face of legal restriction, the informal market is ineffective for refugees as it involves

exploitation and protection risks, and as it is too controlled by the government with the principle of “formalizing the informal” business. Vocational skill trainings should not be considered as an end as a long term achievement. However, there must be an ambition to link refugees with job opportunities either through formal employment or self-employment opportunities.

Women centered projects are required as they are majority at the same time highly vulnerable to promote decent job opportunities backed by access to work permit that enable them generate income to support household food security. Women and girl’s protection should come at the center of the food security response to minimize negative coping strategies and to ensure protection of women refugees from abuse and exploitation. Refugee women are not only poor and vulnerable, but also hold a huge responsibility of taking care of the family, particularly taking care of children, and other vulnerable family members. As a result, they have limited time to engage in outdoor income generation, rather they are exposed for ‘short cuts’ that leads to practicing negative strategies. Considering this, it is recommended to organize child day-care centers in Addis Ababa where it allows refugee women engage in economic activities as the daycares could take of their young children during the day. Promotion of decent work opportunities for refugees will help them settle in the hosting country and will lead to a sustainable investment to improve their education, involve in productive economic activities, and to improved food security. This can also potentially reduce the dangers of onward migration which increase exploitation and put refugees’ life further at risk.

Government and NGO supports should focus on promotion of self-reliance. Refugees dependence on income from aidis not sustainable as they are diminishing over the years. Therefore, achieving self-reliance is a sustainable approach to tackle food insecurity. Refugees should be supported to be self-reliant through diversification of income sources. Self-reliance activities should consider the individuals socioeconomic position, vulnerability, level of food insecurity, family status, age, gender, and nationality of refugees as different refugees have different needs and capacities. It is generally wrong to consider every refugee is same in terms of capacity and need as it involves several factors to determine household’s food security status.

Social dialogue to promote social cohesion between refugees and the host community members is required. People with more connection feel safe and it promotes peaceful

coexistence. These social dialogues should also include government authorities at City administration, sub city and woreda level to reinforce sustainability by promoting brotherhood between Ethiopians and refugees.

The severe food insecurity is associated with the high cost of accommodation among other factors. Refugees tend to spend most of their hard-earned income which is highly associated with help from the government, NGOs, and remittances, is spent on accommodation. Refugee housing program can shift the expenditure pattern and has a long-term improvement in food security situation by promoting consumption of safe, adequate, and nutritious food. The shift from high cost of accommodation to covering food requirement, medical, school, and other important basic needs are highly linked to food security status. Unlike camp refugees where people are sheltered in free accommodation and get free basic services, the situation of many urban refugees has been devastating given the strain caused by the difficulty and costly nature of urban life. Therefore, urban refugee housing programs can be implemented to support urban refugees with focus on women refugees to improve accommodation and food security.

Advocacy for improvement of the legal restrictions and the implementation of the new refugee proclamation. There is an optimistic understanding of the potential impact of the new refugee law in the lives of urban refugees which could expand refugees' rights and access to basic services. If it is materialized and implemented, refugees will have guaranteed better economic opportunities whereby, through meaningful livelihoods engagement, refugees can be able to ensure self-reliance, protection, and food security at household level. However, there is a long way to go as directives and regulation, mechanisms to implement the law will be a time taking process. A collective advocacy at national and international level is required for the materialization of the new refugee law. Therefore, the success of the proclamation will highly depend on how it is interpreted into the directives and regulations. The advocacy work should be founded on the great actions that have been taken by the GoE to materialize the provision of vital event registration, access to education, access to healthcare services and bank services have been implemented which refugees have started enjoying these rights.

Refugee food security is a less researched area though there are few assessments and research work in the area of urban refugees with more focus on livelihoods and markets by NGOs. Food security is a sector that has not been deeply explored area where organizations and individuals including the academia are recommended to further explore to understand refugees' food security in urban areas.

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## **Appendices**

### **Appendix 1: Household questionnaire for Women refugees in Addis Ababa**

Introduction, Confidentiality and Consent:

My name is *[name of the enumerator]* and I am collecting this data on behalf of Jemal Hassen, a M.Sc. in Food Security and Development student at College of Development Studies of the Addis Ababa University. The purpose of this research is to understand the food security situation and coping strategies of refugee women who reside in Addis Ababa.

This survey will be conducted for selected refugee women in Addis Ababa and I am going to ask you few questions regarding you and your family. Your answers are completely confidential and will not be shared to third party and you will not be identified by name in any way. If You do not have to answer any questions that you do not want to answer, and you may end this interview at any time you want to, you are free to do so. Your honest answers to these questions will help us better understand the existing situation. We would greatly appreciate your help in responding to this survey. The survey will take about 30 minutes to an hour.

Would you be willing to participate knowing that you will be doing so voluntarily and there will not be any monetary returns?

---

*dd/mm/yyyy*

*(Signature of interviewer certifying that informed consent has been given verbally by the respondent)*

No.	Questions	Coding categories	Skip Options (Skip to)
1	General information		
101	Gender of the respondent	Male Female	0 1
102	Age of the respondent	[_____]	
103	Role of the respondent in the household	Household Head Spouse Child Other (Specify)	1 2 3 4
104	Marital Status of the respondent	Single Married Divorced/separated Widow	1 2 3 4
105	Nationality	Eritrea South Sudan Somalia Yemen Djibouti Sudan Kenya Uganda Rwanda DR Congo Ivory Cost Syria Iraq Other (specify)	1 2 3 4 5 6 7 8 9 10 11 12 13 14
106	Reasons for migration	[_____ [_____ [_____]	
107	Address: City	Addis Ababa	
108	Address: Sub City		
109	Address: Woreda		
110	What is the highest level of school you completed?	No Education Primary (1-8 class) Secondary (9-12 class) Diploma Bachelor's degree Master's degree PhD Other specify	1 2 3 4 5 6 7 [_____]

No.	Questions	Coding categories	Skip Options (Skip to)
111	What language do you speak?	English Arabic French Somali Tigrigna Kiswahili Other (Specify)	1 2 3 4 5 6 7
112	Do you speak local languages of Ethiopia?	Yes No	1 0
113	If yes, which languages do you speak?	Amharic Somali Oromiffa Tigrigna Nuer Anuak Other (specify)	1 2 3 4 5 6 7
114	Household Family Size by gender <i>[write the number of male and female in the boxes]</i>	Male Female	[____] [____]
115	Household age composition	under 18 years	Male [____] Female [____]
		19-35 years	Male [____] Female [____]
		36-65 years	Male [____] Female [____]
		above 65 years	Male [____] Female [____]
116	Number of vulnerable persons in the household <i>[write number of vulnerable persons in the box]</i>	Persons with Disabilities Pregnant or Lactating Women Chronically ill Elderly (age above 65 years)	[____] [____] [____] [____]
117	Do you have children currently attending school?	Yes No	1 0
118	If yes, how many boys and girls?	Boys Girls	[____] [____]
119	Do you have school drop-out children?	Yes No	1 0
120	If yes, what are the reasons for dropout?	Lack of food Lack of school material Lack of school uniform School is far and no money for taxi Other (specify)	1 2 3 4 5
121	Types and number of assets of the household <i>[if yes, indicate the number of assets otherwise indicate NA]</i>	Phone Dishwasher Refrigerator Oven Computer (desktop and laptop)	[____] [____] [____] [____] [____]

No.	Questions	Coding categories	Skip Options (Skip to)
		Mobile phone/smart <input type="checkbox"/> Car <input type="checkbox"/> Microwave <input type="checkbox"/> Digital camera <input type="checkbox"/> Television <input type="checkbox"/> Sewing machine <input type="checkbox"/> Other (Specify) <input type="checkbox"/>	
122	Type of accommodation	Free of charge 1 Contribution of other expenses 2 Shared rental 3 Squatting 4	
123	Do you get assistance from UNHCR, government or NGOs?	Yes 1 No 0	
124	If yes, what type of assistance do you get from these actors?	Monthly cash 1 Business start-up cash 2 Business start-up in kind 3 School materials/uniform in kind 4 Cash for school material/uniform 5 Food assistance 6 Medical assistance 7 Other (specify) 8	
125	If there is monthly cash, please indicate the monthly amount	<input type="text"/>	
126	What skills do you have?	Tailoring 1 Hairdressing and beautification 2 Carpentry 3 Electric installation 4 Basic computer 5 Computer/mobile maintenance 6 Auto mechanic 7 Painting 8 Other (Specify) 9	
127	Income sources and amount of monthly average income	Informal small business <input type="checkbox"/> Labor work <input type="checkbox"/> informal employment by Ethiopian (salaried) <input type="checkbox"/> Remittance from relatives and friends <input type="checkbox"/> NGO support <input type="checkbox"/> Begging <input type="checkbox"/> Formal business <input type="checkbox"/> Joint venture with Ethiopians <input type="checkbox"/> Joint venture with Refugees <input type="checkbox"/> Credit/borrow cash from others <input type="checkbox"/>	
128	Types and amount of average monthly expenditure	Food cost <input type="checkbox"/> Educational Expenses <input type="checkbox"/> Medical fees <input type="checkbox"/> Clothing <input type="checkbox"/> Rent (house, ...) <input type="checkbox"/> Cooking fuel/gas/electricity bill <input type="checkbox"/>	

No.	Questions	Coding categories	Skip Options (Skip to)
		Transport [__] Debt repayment [__] Others (Specify) [__]	
129	What are your reasons to flee (Why did you leave your country of birth)?	Political instability 1 War 2 Persecution 3 Economic reasons 4 Natural disasters 5 Diaspora link 6 Education 7 Religious reasons 8 Marital status (separation of spouse) 9 Other (Specify) 10	
130	Do you have plan to migrate to a third country?	Yes 1 No 0	
131	If yes to 130, why you are planning to move to another country?	Opportunities are limited to integrate in Ethiopia 1 Family unification 2 Search of better opportunities 3 The situation in country of origin has not improved 4 Other (Specify) 5	
132	Have you been subject of human traffickers and/or smugglers?	Yes 1 No 0	
133	If yes to the above question, how human trafficking and/or smuggling affected your life? (multiple answer option)	Financial exploitation-smuggling cost 1 Robbery/theft 2 Sexual exploitation and abuse including harassment 3 Organ harvest 4 Loss of the life of a family member by smugglers 5 Other (specify) 6	
134	Do you think market is available for your skill?	Yes 1 No 2	
135	What market related challenges you are facing?	No work permits 1 Strict government control 2 Unsatisfactory market demand 3 Lack of start-up capital 4 Childcare responsibility 5 Other (Specify) 6	
136	Which of the following documents do you or either of your family member possess?	Refugee ID given by ARRA and UNHCR 1 Passport of country of origin 2 Birth Certificate given by ARRA/VERA 3 Marriage certificate by ARRA/VERA 4 Divorce certificate by ARRA/VERA 5 Death certificate of passed family members 6 Lease agreement for accommodation 7	

No.	Questions	Coding categories	Skip Options (Skip to)
		Other (Specify)	8

### HFIAS questionnaire

No.	Question	Response options	Code
1.	In the past four weeks, did you worry that your household would not have enough food?	0= No (skip to Q2) 1=Yes	.... __
1.a	How often did this happen?	1= Rarely (once or twice in the past four weeks) 2= Sometimes (three to ten times in the past four weeks) 3= Often (more than ten times in the past four weeks)	.... __
2.	In the past four weeks, were you or any household member not able to eat the kinds of foods you preferred because of a lack of resources?	0= No (skip to Q3) 1=Yes	.... __
2.a	How often did this happen?	1= Rarely (once or twice in the past four weeks) 2= Sometimes (three to ten times in the past four weeks) 3= Often (more than ten times in the past four weeks)	.... __
3.	In the past four weeks, did you or any household members have to eat a limited variety of foods due to a lack of resources?	0= No (skip to Q4) 1= Yes	.... __

3.a	How often did this happen?	1= Rarely (once or twice in the past four weeks) 2= Sometimes (three to ten times in the past four weeks) 3= Often (more than ten times in the past four weeks)	.... ___
4.	In the past four weeks, did you or any household members have to eat some foods that you really did not want to eat because of a lack of resources to obtain other types of food?	0= No (skip to Q5) 1= Yes	.... ___
4.a	How often did this happen?	1= Rarely (once or twice in the past four weeks) 2= Sometimes (three to ten times in the past four weeks) 3= Often (more than ten times in the past four weeks)	.... ___
5.	In the past four weeks, did you or any household members have to eat a smaller meal than you felt you needed because there was not enough food?	0= No (skip to Q6) 1= Yes	.... ___
5.a	How often did this happen?	1= Rarely (once or twice in the past four weeks) 2= Sometimes (three to ten times in the past four weeks) 3= Often (more than ten times in the past four weeks)	.... ___

6.	In the past four weeks, did you or any other household members have to eat fewer meals in a day because there was not enough food?	0= No (skip to Q7) 1= Yes	.... ___
6.a	How often did this happen?	1= Rarely (once or twice in the past four weeks) 2= Sometimes (three to ten times in the past four weeks) 3= Often (more than ten times in the past four weeks)	.... ___
7.	In the past four weeks, was there ever no food to eat of any kind in your household because of lack of resources to get food?	0= No (skip to Q8) 1= Yes	.... ___
7.a	How often did this happen?	1= Rarely (once or twice in the past four weeks) 2= Sometimes (three to ten times in the past four weeks) 3= Often (more than ten times in the past four weeks)	.... ___
8.	In the past four weeks, did you or any household members go to sleep at night hungry because there was not enough food?	0= No (skip to Q9) 1= Yes	.... ___
8.a	How often did this happen?	1= Rarely (once or twice in the past four weeks) 2= Sometimes (three to ten times in the past four weeks) 3= Often (more than ten times in the past four weeks)	.... ___

9.	In the past four weeks, did you or any household members go a whole day and night without eating anything because there was not enough food?	0= No (questionnaire is finished) 1= Yes	.... ___
9.a	How often did this happen?	1= Rarely (once or twice in the past four weeks) 2= Sometimes (three to ten times in the past four weeks) 3= Often (more than ten times in the past four weeks)	.... ___

Coping Strategy Index (CSI) questions

No.	Coping Strategies (In the past 7 days, if there have been times when you did not have enough food and do not have enough money to buy food, how often has your household had to	Frequency (no. of days a household experienced the following coping strategies in the past 7 days)	Universal Severity Weight	Weighted Score = Frequency x Weight
A	Dietary Change Strategy			
1	Rely on less preferred and less expensive foods?		1	
B	Increase Short-Term Household Food Availability			
2	Borrow food, or rely on help from a friend or relative?		2	
3	Purchase food on credit?		2	
4	Gather food from garbage or collect leftovers from hotels or somewhere		4	
5	Do labor work for friends, relatives, neighbors etc. in exchange of food		3	
C	Decrease Numbers of People			
6	Send household members to eat elsewhere?		2	
7	Send household members to beg?		4	
D	Rationing Strategies			
8	Limit portion size at mealtimes?		1	

9	Restrict consumption by adults in order for small children to eat?		2	
10	Feed working members at the expense of non-working members?		2	
11	Reduce number of meals eaten in a day?		2	
12	Skip entire days without eating?		4	
	Total			

## **Appendix 2: Key Informant Interview (KII) Guide**

Dear Respondent,

My name is Jemal Hassen, a M.Sc. in Food Security and Development student at College of Development Studies of the Addis Ababa University. The purpose of this research is to understand the food insecurity situation and coping strategies of refugee women who reside in Addis Ababa. The overall research consists of survey of selected refugee women, focus group discussions and key informant interviews to collect primary data while secondary data review will be conducted in order to understand the research subject in depth.

The main objective of this key informant interview is to collect primary data from individuals who have in-depth understanding of the food security situation and the general context of refugee women in Addis Ababa. Therefore, as a key informant interview, I believe that you will provide relevant information that will contribute to the success of this research which will be used by academic community for further study. In addition, the research findings will be used to inform government and non-governmental organizations strategies and program development. Your answers will be held completely confidential and will not be shared to third party and you will not be identified by name in any way. If You do not have to answer any questions that you do not want to answer, and you may end this interview at any time you want to, you are free to do so. However, your responses to my questions are valuable, and will help us better understand the existing situation. We would greatly appreciate your help in responding to this interview which will take about 30 minutes.

Would you be willing to participate knowing that you will be doing so voluntarily and there will not be any monetary returns?

Thank you in advance and please “tick” one of the boxes below

Consent given

Consent declined

1. What are the major challenges urban refugees face in Addis Ababa? What are the specific challenges refugee women are facing?
2. What do you see the policy level opportunities and constraints related to livelihoods and food security of urban refugees?
3. What are the services/assistance that the government, UNHCR and other non-

governmental organizations provide to urban refugees, in particular for refugee women? What proportion of the urban refugees receive consistent assistance? What are the criteria for targeting refugees for such assistance? Do you think the assistance is sufficient to fulfil their basic requirement including food?

4. Is there any specific guideline pertaining food security of urban refugees? What are the provisions to enhance their food security?
5. What is your knowledge of the major income sources for refugee women in Addis Ababa?
6. In case of food shortage or lack of enough money to buy food, what would you think refugee women strategies would be? Who practice these coping mechanisms among the family members?
7. Do you know any study that have been conducted to explore food security situation of women refugees in Addis Ababa? what are the name of these studies?
8. Are urban refugees integrated to the national system, example the Urban Productive Safety Net Program (PSNP)?
9. What would the new refugee proclamation mean to refugee food security?
10. Has the new proclamation materialized? Do you have any idea regarding the development of the relevant directives to implement the new law?
11. What differentiate refugee women as food secured and food insecure? What are these important criteria?
12. What is the status of food insecurity among women refugees? Would you categorize them in to four categories (%) based on their food security situation?
  - 12.1. Food secure
  - 12.2. Mildly food secure
  - 12.3. Moderately food secure
  - 12.4. Severely food insecure
13. What would you recommend to improve the food security situation of women refugees in Addis Ababa?

Thank you very much for your time and professional contribution to the study!

Jemal Hassen, M.Sc. in Food Security and Development, College of Development Studies, Addis Ababa University, Email address: [jemal.muhyie@yahoo.com](mailto:jemal.muhyie@yahoo.com) or [jemalhassen@gmail.com](mailto:jemalhassen@gmail.com); Mobile numbers: +251-912-689400 or +880-1310-589640

**Appendix 3: Ordered logistic regression for the dependent variable (food insecurity status on the HFIAS scale)**

log likelihood = -85.454					Number of observations	167
					LR chi2 (14)	77.060
					Prob > chi2	0.000
					Pseudo R2	0.311
Variables	Coef.	SE	Z	p> z	(95% confidence interval)	
Age	-0.015	0.036	-0.420	0.671	-0.086	0.055
Education level	0.074	0.315	0.240	0.813	-0.543	0.691
Ethiopian connection	-1.242	0.596	0.920	0.037	-2.410	-0.073
Speaking Amharic language	0.530	0.577	0.920	0.358	-0.600	1.661
Family size	0.547	0.233	2.340	0.019	0.090	1.005
Number of assets	0.182	0.189	0.960	0.335	-0.552	0.188
Do you get assistance?	2.045	1.127	1.810	0.070	-0.165	4.254
Amount of monthly cash assistance	0.000	0.000	-2.220	0.027	-0.001	0.000
Remittance income	0.000	0.000	3.800	0.000*	0.000	0.001
Total expenditure	0.000	0.000	-3.590	0.000*	-0.001	0.000
Coping strategy index	0.225	0.051	4.380	0.000*	0.124	0.325
Do you have refugee ID	1.038	1.676	0.620	0.536	-2.246	4.323
Nationality	-0.162	0.236	-0.690	0.493	-0.624	0.301
Role in the household	-0.060	0.187	-0.320	0.750	0.427	0.307
	cut1	0.895	2.256		-3.526	5.317
	cut2	2.044	2.246		-2.359	6.447
	cut3	3.060	2.271		-1.392	7.511

Where Coef. Represents coefficients of the ordered logistics regression of the predictors, SE for standard error, z is the z-score for the statistics and p is probability. \* represents statistically significant variables at 95% confidence interval and \*\* represents statistically significant variables at 90% confidence interval

**Appendix 4: Odds ratio of the ordered logit for the dependent variable (food insecurity status on the HFIAS scale)**

log likelihood = -85.454					Number of observations	167
					LR chi2 (14)	77.060
					Prob > chi2	0.0000
					Pseudo R2	0.311
Variables	Odds ratio	SE	z	p> z	(95% confidence interval)	
Age	0.985	0.036	-0.420	0.671	0.918	1.057
Education level	1.077	0.339	0.240	0.813	0.581	1.997
Ethiopian connection	0.289	0.172	0.920	0.037	0.090	0.930
Speaking Amharic language	1.699	0.980	0.920	0.358	0.549	5.262
Family size	1.729	0.404	2.340	0.019	1.094	2.732
Number of assets	0.833	0.157	0.960	0.335	0.576	1.207
Do you get assistance?	7.727	8.711	1.810	0.070	0.848	70.406
Amount of monthly cash assistance	1.000	0.000	-2.220	0.027	0.999	1.000
Remittance income	1.000	0.000	3.800	0.000*	1.000	1.001
Total expenditure	1.000	0.000	-3.590	0.000*	0.999	1.000
Coping strategy index	1.252	0.064	4.380	0.000*	1.132	1.384
Do you have refugee ID	2.825	4.733	0.620	0.536	0.106	75.405
Nationality	0.851	0.201	-0.690	0.493	0.536	1.351
Role in the household	0.942	0.176	-0.320	0.750	0.653	1.360
cut1	0.895	2.256			-3.526	5.317
cut2	2.044	2.246			-2.359	6.447
cut3	3.060	2.271			-1.392	7.511

Where OR Represents Odds ration of the ordered logistics regression, SE for standard error, z is the z-score for the statistics and p is probability. \* represents statistically significant variables at 95% confidence interval and \*\* represents statistically significant variables at 90% confidence interval

### Appendix 5: Determinants of household income, linear regression

Source	SS	df	MS	Number of observations		
				167		
				F (5,161)	16.780	
Model	693319508	5	138663902	Prob > F	0.0000	
Residual	1.3305e+09	161	8264174.4	R-squared	0.3426	
				Adj R-squared	0.3222	
Total	2.0239e+09	166	12191877	Root MSE	2874.7	
Household income (dependent variable)	coef.	SE	t	p >  t	(95% confidence interval)	
Age	64.914	21.241	3.060	0.003*	22.966	106.862
Education level	-499.983	271.225	-1.840	0.067**	-1035.600	35.633
Family size	708.324	125.042	5.660	0.000*	461.390	955.259
Nationality	-5819.977	1092.619	-5.330	0.000*	-7977.690	-3662.263
CSI	-70.077	29.870	-2.350	0.020*	-129.064	-11.090
_cons_	5055.526	1124.785	4.490	0.000*	2834.292	7276.759

\* Statistically significant independent variables at 95% confidence interval and \*\* statistically significant variables at 90% confidence interval, SS is sum of square, df is degree of freedom and MS is mean of sum of square, Coef. Are the change in the dependent variable as a result of a unit change in the independent variable, SE is standard error