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*Erasmus*

**Surviving violent conflict: Food insecurity coping strategies in  
conflict-affected settings in the Democratic Republic of Congo  
(DRC).**

Research Paper

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## ABSTRACT

Violent and protracted conflict has been a prevalent and recurring phenomenon in many parts of the DRC. Such conflicts continue to affect household's food security in various ways. Food insecurity in conflict zones is a major concern that requires an in-depth understanding of coping strategies adopted by households. However, this dimension is often neglected in the existing literature. This Research Paper fills this gap by exploring household responses to food insecurity in conflict settings in the Democratic Republic of Congo (DRC), more specifically in the Minembwe Plateau. Qualitative data were collected from July to August 2023 from three localities in the high plateau, a region affected by violent protracted conflict since 2017. Thematic analyses through a semi-structured interview guide and storytelling, involving 25 respondents revealed a wide range of coping strategies, both formal and informal, short- and long-term. Some of the coping strategies adopted reflected those informed in the global literature. However, certain strategies were unique and reported as conflict-driven coping strategies. Furthermore, several strategies, while vital to household survival, also contributed to the perpetuation of existing conflict and exposure to violence. How coping strategies emerge in the context of conflict, how they fuel existing conflicts, and what effective interventions to mitigate food insecurity in such an environment are key questions that need further critical investigation in different contexts.

**Keywords:** Food insecurity, Conflict, Democratic Republic of Congo, coping strategies, Minembwe high plateau

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## LIST OF ACRONYMS

CEDIER	Centre de développement intégral de l'enfant rural
DFID	Department for International Development
DFID	Department for International Development
FAO	Food and Agriculture Organization of the United Nations
WFP	World Food Program
FARDC	Forces armées de la république démocratique du Congo
FC	Franc Congolais
FSIN	Food Security Information Network
GRFC	Global Report on Food Crises
HAZ	Height-for-Age Z Score
IFAD	International Fund for Agricultural Development
UNICEF	United Nations Children's Fund
WHO	World Health Organization
SRLA	Sustainable Rural Livelihood Approach
ISS	International Institute of Social Studies
DRC	Democratic Republic of Congo
IDPS	Internally Displaced Persons
AFES	Agrarian, Food and Environment Studies
MONUSCO	United Nations Stabilization Mission in the Democratic Republic of Congo
NUFFIC	Netherlands Universities Foundation for International Cooperation.
PCNI	Presidential, Committee on the Northeast Initiative
SAFECO	Synergie des Associations Féminines du Congo
SAID	United States Agency for International Development
CSI	Coping Strategies Index
NGO	Non-Governmental Organization
STDS	Sexually transmitted diseases
TPO	Transcultural psychosocial organization

UGEAFI	Union des groupes d'études et d'actions pour le développement de Fizi-itombwe.
UNDP	United Nations Development Program
UNHCR	United Nations High Commissioner for Refugees
WCED	World Commission on Environment and Development.
MPA	Mahoro peace Association



# CHAPTER ONE

## INTRODUCTION

### 1.1 Background to the study

Violent and protracted conflict has been a recurring phenomenon in most post-independence DRC and continues to be particularly so in the twenty-first century. Since the 1960s, millions of people have been forced to leave their homes due to wars and violence (Mkhize, 2016). By December 2022, the DRC was home to 5.5 million internally displaced persons (IDPs) as a result of conflict, while almost 1.1 million had fled the country across borders in search for asylum (UNHCR, 2022). The causes, scale, character, and manifestations of the conflicts are many and complex involving a range of actors such as the government, rebels, warlords, militias, and other actors (Young, 2006). One of the common forms of conflict is inter-ethnic conflict over the control of power, natural resources, and identity (Amungwa, 2011). The implications of these conflicts for local food security are considerable, leading directly to food insecurity and famine by disrupting and destroying food systems (Weldegiargis *et al.*, 2023). In turn, food insecurity could perpetuate conflict and trigger violence (Messer and Cohen, 2007). Although food insecurity is complex and often has many causes, violent conflict poses threats to local food security and efforts at addressing food insecurity. Violent conflicts cause disruption in the daily activities in rural settings and contribute to the destruction of food systems, reduces farming populations, destroys infrastructure, reduces resilience, increase vulnerabilities, causes disruptions in access to the market, increases food price, and makes goods and services unavailable altogether (Weldegiargis, 2023 ). Ultimately, conflicts bring a breakdown to socio-economic systems as well as governance structures. Humanitarian food aid is one of the common and crucial responses to address urgent food needs in conflict-affected areas (Mary & Mishra, 2020).

Although the violent conflict in DRC has been the subject of extensive research for a long time, how people cope with food insecurity in conflict-affected settings (and how conflict shapes local coping strategies) remains less explored and understood. Households affected by food shortages rely on multiple formal/informal and short/long-term coping strategies to deal with subsistence crises as well as to rebuild their livelihoods. However, the relationship between food insecurity and conflicts, and the interventions or strategies adopted by households to strengthen families in times of violent conflicts are all areas that are less researched but that hold great promise for making future policies more relevant and effective (Sassi, 2021). Thus, it is important to analyze and understand the dynamics of coping strategies to food insecurity in conflict-affected contexts so as to guide interventions in such contexts.

### 1.2 Problem Statement

Minembwe region is characterized by persistent ethnic tensions and clashes that have divided and continue to split communities. Since the 1960s, the Democratic Republic of Congo (DRC) has experienced a series of conflicts that have marked its difficult transition from colonial rule to indigenous leadership (Englebert, 2016).

Conflicts are partly ingrained in the Belgian colonial era, even though there are many other contributing factors at play. Yet, they are closely related to the extension of traditional authorities. During the colonial era, the Belgium implemented a structure of indirect authority through indigenous chiefs as government mediator to control large territories without fixing a full administrative apparatus

(Verweijen and Vlassenroot, 2015). Verweijen and Vlassenroot (ibid) argued that the system was based on the perceived traditional legitimacy of chiefs to create administratively manageable units, in which the colonizers established fixed chiefdoms that were supposed to correspond to distinct ethnic groups, although the reality was more complex with intermingled and heterogeneously organized groups. In the same way, colonial land policies further reinforced the link between ethnicity and territory, with land in customary governance units considered exclusive to specific tribes, creating a dichotomy between outsiders and insiders (Mathys, 2017). Subsequently, groups without a tribal homeland had to pay tribute to the chiefs of other communities to gain access to land, which led to tensions (Vlassenroot, 2003). Colonial history has created divisions and rivalries between different ethnic groups and communities over land ownership and management of natural resources, particularly agricultural and grazing lands which have fostered current tensions. On the other hand, issues of identity and its politicization have been among the determining factors in conflicts between different ethnic groups. More specifically, negative perceptions of other Congolese towards Rwanda origin communities and stereotypes have fueled inter-ethnic tensions. They gave rise to an insurrection marked by violence around issues of belonging and exclusion (Jackson, 2006). Furthermore, political interests, at both local and national level, have influenced conflicts, as certain political players manipulate ethnic rivalries during elections to consolidate their power and to boost their popularity (Autesserre, 2006). This renewed tensions along ethnic lines. Moreover, other Studies in the same region show further that local conflict dynamics are also shaped by broader sub-regional dynamics. Explicitly, foreign armed groups operate in the Democratic Republic of Congo from Burundi, Rwanda and Uganda, whose presence is influenced by several factors including regional conflicts, coveted natural resources, and divergent political objectives in their countries (Morvan and Nzweve, 2010).

As for the historian Jacques-Marie Depelchin, a conflict researcher specialist in the great lakes region emphasizes the economic supremacy of cattle owners over cultivators, pointing out that rural groups in the Minembwe highlands pursue distinct strategies to gain privileged access to economic resources and dominant social positions within South Kivu society (Brabant and Nzweve, 2013). Agricultural activities in that region took various forms of cohabitation, but generally conflictual. For example, crop damage caused by free-roaming cattle and tensions linked to cattle theft and attacks on herders by armed groups are frequent.

Conflicts have spread to various ethnic groups for instance, the Bafuliru, Banyindu, Babembe and Banyamulenge, and are mainly concentrated in the mountainous regions of Minembwe, Mibunda, Rurambo and elsewhere. Since 2017, the “MaiMai” armed groups formed by different ethnic groups other than the Banyamulenge have formed coalition to carry out targeted attacks against the Banyamulenge (Tutsi community ) who have distant origins in Rwanda and other neighboring countries (Rukundwa, 2004). They are seen by other Congolese as invaders who want to take over their land while they have been living in the DRC before 1885 (Vlassenroot and Huggins, 2005; Ntanyoma, 2020). Furthermore, according to the article 6 of the 1964 Constitution, Congolese nationality is granted on June 30, 1960, to any person whose ancestor is or was a member of a tribe or part of a tribe, established on the national territory before October 18, 1908.

Consequently, clashes evolved between ethnic groups up to today and have resulted in significant material damage and the deterioration of basic community and social infrastructure, including destruction of food systems; market disruptions and increases in food price; burning of houses, schools and hospitals; forced displacements; the destruction of farmers' fields and the systematic looting of livestock (TPO, 2019). Although these latent crises are of considerable importance, people in Minembwe are still alive, through formal and informal ways. Against this backdrop, it is essential to explore how conflict is shaping households coping strategies to food insecurity, and how the coping strategies adopted are perpetuating existing conflicts and exposure to violence?

### **1.3 Justification and Relevance of the Research**

This research topic is part of the literature that examines agrarian transformations with a particular focus on rural conflicts and their relation to food insecurity. In development studies, it is important to understand the relationship between food insecurity and violent conflict. Food insecurity is a major development issue affecting the livelihoods and well-being of rural households in many developing countries. Therefore, by examining the coping strategies in conflict-affected regions, the research sheds light on the initiatives and decisions taken by households to ensure their survival. Furthermore, analyzing the implications of coping strategies in the escalation of violence and existing conflict can provide insights into the complex dynamics between food security, conflict, and development. By exploring my research questions, the study contributes to a better understanding of how interventions can effectively be guided in conflict-affected areas.

### **1.4 Research Objectives**

The aim of this study is to explore in detail, conflict-induced mechanisms that households in conflict-affected areas rely on to cope with food insecurity and maintain access to food. This includes the study of dietary practices, diversification of food sources, social networks influencing their ability to adapt. It analyses further, how the coping strategies adapted potentially impact on the perpetuation of violence and conflict. This will involve looking for links between coping strategies and factors that contribute to the escalation of conflict. The analysis could help to better understand how responses to food insecurity may unintentionally influence local conflict dynamics.

### **1.5 Research Questions**

This study seeks to answer the following main research questions: How do households cope with conflict-induced food insecurity, and how and to what extent are food insecurity coping strategies shaped by conflict and vice versa?

#### **1.5.0 Sub-Questions**

1. How does conflict in the Minembwe high plateau influence households' decisions regarding their access to food and the management of their food resources?
2. How do food insecurity coping strategies contribute to the perpetuation of existing conflicts and exposure to violence?

## CHAPTER TWO

### LITERATURE REVIEW AND THEORETICAL FRAMEWORK

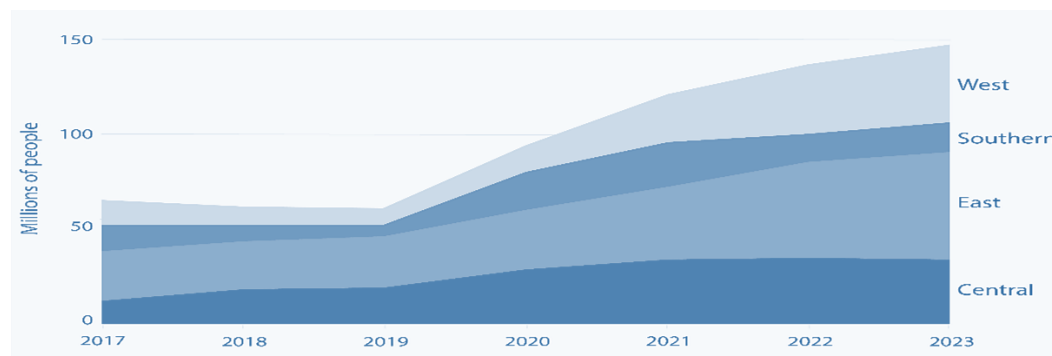
#### 2.0 Overview of Global Food Insecurity

“The need to eat food is the most important biological drive in all living species.” (Peng, Dernini, and Berry, 2018, p.1). However, its lack is one of the major development challenges of the current era (FAO, 2017).

Food security exists when all members of a household have permanent physical, social, and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life (World Food Summit, 1996). In contrast, when people do not have constant access to sufficient, safe and nutritious food to meet their dietary needs and lead a healthy life, they are considered food insecure. Despite the availability of enough food to feed the global population, food insecurity is gripping many countries. It has been reported that by mid-2022, the number of people facing the highest levels of acute food insecurity had reached the highest level in the six-year history of the Global Food Crisis Report (GFCR). The report's latest biannual update shows that around 205.1 million people in 45 of the 53 countries and territories included in the report will require urgent humanitarian assistance and are in a food crisis or even more severe situation (Global Food Crisis Report, 2022).

The intricate puzzle of food insecurity is woven with several contributing factors, including population growth, climate change, disasters, poor governance, poverty, and today, conflict has also been added as a determinant of food insecurity ( Unicef & World Health Organization, 2017). Furthermore, according to the Food and Agriculture Organization of the United Nations, the International Fund for Agricultural Development, the United Nations Children's Fund, the World Food Program, and the World Health Organization, around 60% of the world's chronically food-insecure and malnourished people and 75% of stunted children live in countries affected by conflict in Sub-Saharan Africa, with the highest levels of food insecurity (FAO, IFAD, UNICEF, WFP and WHO, 2022).

**Figure 1. Trends in acute food crises in Africa by region**



**Source:** Africa Center for Strategic Studies, 2023

The eastern and central African countries are the most affected by acute hunger as illustrated in the above figure.

## **2.1 Conflict and food insecurity nexus**

The interaction between armed conflict and food insecurity is an essential element in understanding contemporary food crises. Many food crises have their origins in wars and violent conflicts (Kemmerling, Schetter and Wirkus, 2022). In conflict-affected countries, many households are made up of small-scale farmers who face high income uncertainty, even outside periods of conflict, mainly due to climatic shocks (Maccini and Yang, 2009). In such a context, armed conflict acts as an additional disruptive factor that increases pressure on people's livelihoods and well-being, contributing to worsening food insecurity. Thus, conflict and food insecurity are closely linked, as conflict disrupts both food production and access to food resources, exacerbating the already precarious situation of many vulnerable communities. Conflict situation has led to chronic undernourishment and widespread hunger in conflict-prone countries (Breisinger, Ecker, and Trinh Tan, 2015).

In Burundi, children aged 0-5 born in areas affected by civil war, have significantly lower Height-for-Age Z Score (HAZ) than children born in other areas (Bundervoet, Verwimp and Akresh, 2009). Follow-up studies have reported consistent negative effects on anthropometric outcomes in children from a range of conflict-affected contexts, including Angola, Colombia, Côte d'Ivoire, Eritrea, Ethiopia, India, Iraq and Mexico (Arcand, Rodella and Rieger, 2015; Duque, 2016).

The multifaceted challenge of food insecurity brought about by armed conflict or violent uprisings poses consequences for human security and societies' ability to bounce back and jeopardize development, as the number of people suffering from food insecurity continues to rise. This is particularly true in regions where adaptation methods are rudimentary and support systems are lacking (Badewa and Dinbabo, 2023).

For instance, the conflict in the northeast Nigerian region related to attacks by Boko Haram has had a direct impact on food insecurity, and this has led to the displacement of over 2.5 million people. As a result, access to agricultural land has been hampered, leading to a loss of assets and a serious humanitarian crisis (PCNI, 2016). The underlying causes of most of these violent conflicts in Nigeria are associated with competition for productive resources, economic inequality and ethno-religious tensions (Olanrewaju and Balana, 2023). Similarly, in the central Sahel, ongoing violent conflicts have plunged 24.8 million people into a food crisis, the hotspots are the Lake Chad Basin, which includes the borders of Cameroon, Chad, Niger and northern Nigeria, and the Central Sahel (Burkina Faso, Mali and Niger). In both regions, the combination of jihadist expansion, state failure and criminality has led to a massive increase in violent incidents and population displacement, as well as the collapse of productive activities (Benjaminsen and Boubacar, 2019). In Côte d'Ivoire, youth militias have fought to maintain a social order based on lineage, and in Sierra Leone, conflicts have pitted different social classes against each other, herders against farmers (Chauveau and Richards, 2008). The repercussions that these conflicts have in one way, or another affect the livelihoods of rural populations in conflict zones. By disrupting the institutional foundations needed to ensure the peaceful production and distribution of food, violence breaks vital supply chains and hinders the peaceful transactions that are essential to ensuring an adequate food supply (Muriuki et al, 2023).

Food insecurity, in turn, is likely to foster and perpetuate armed conflict (Pinstrup-Andersen and Shimokawa, 2008; Rudolfson, 2020). Due to the rising and volatile food prices, frustrations linked to hunger and the struggle for access to available vital resources and high levels of inequality between groups coincided with large-scale protests and violence.

Conflicts and wars in the Democratic Republic of Congo (DRC), as well as in other African nations and around the world, share important similarities, while also presenting differences in the way affected populations adapt to complex situations. Similarities can be seen in the destruction of infrastructure, mass population displacement, violence against civilians, social division, and the deterioration of agricultural infrastructure such as farms, irrigation systems and crop storage facilities. This limits the ability of rural families to produce sufficient food. Conflict-induced mass displacement also disrupts agricultural activities, forcing farmers to abandon their land and leading to reduced food production and increased dependence on food aid. In addition, violence against civilians, including farmers, makes agricultural areas unsafe and unstable, discouraging investment in agriculture and limiting access to fertile land.

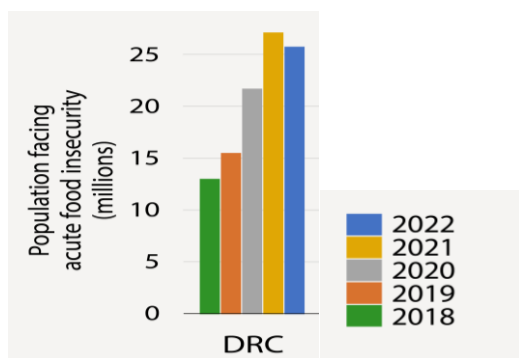
Finally, conflict and war fragment communities and disrupt social structures, which ultimately undermines agricultural productivity.

Further researches have analyzed food consumption patterns in conflict regions more comprehensively, establishing a correlation with conflict (Brück et al., 2016). The results, as expected, confirm that households located close to conflict zones frequently experience reductions in consumption in a variety of contexts (ibid).

## 2. 2 Food Insecurity in the DRC

The Democratic Republic of Congo is one of the world's biggest with hunger crises. According to the latest Integrated Food Security Phase Classification (IPC), an estimated 25.8 million people are experiencing crisis and emergency levels of food insecurity, including 6.7 million in the three eastern provinces of Ituri, North Kivu and South Kivu, and more than 1.3 million children under the age of five need treatment for severe wasting (WFP, 2023).

**Figure 2. Population facing acute food insecurity in The DRC**



**Source:** (FAO, FSIN, IPC)

The above figure shows that the Democratic Republic of Congo (DRC) maintains its position as home to the world's largest food-insecure population, with an estimated 25.9 million people affected.

Food fragility is mainly localized in the eastern region of the DRC where a multitude of around 120 armed groups continue to maintain prolonged instability.

Food security in the eastern part of the DRC has been significantly affected by several interconnected factors. Firstly, the combination of persistent armed conflict and massive population displacement has created growing insecurity in rural areas. In addition, the region suffers from poor or non-existent infrastructure, further limiting the ability of households to access typical subsistence activities. The provinces of Kasai, Sud-Kivu, Nord-Kivu, Ituri, Maniema and Tanganyika are particularly affected by these population movements, which exacerbate the situation. These massive movements limit the economic stability of households and expose large numbers of people to the risk of food insecurity (Bapolisi et al., 2021).

The South Kivu province has an average food consumption score that is low, bordering on alarming (47.1%), and is experiencing repeated shocks in several localities, as well as structural problems that negatively affect the community's dietary diversity (RDC-Ministère de l'Agriculture et du Développement Rural, 2014).

In Minembwe, food security remains a challenge. The different armed confrontations that have taken place there have prevented population's food security from remaining stable. The persistence of hostilities has increased insecurity among the population, leading to a reduction in agricultural production and limited access to other sources of food. There is much less food available to meet their needs. Access to food, i.e., the economic and social capacity of households to obtain food through their purchasing power or ability to produce food, has been limited due to soaring food prices during the conflict and the lack of social networks to provide food in times of distress. (Mulumeoderhwa et al,2020).

### **2.3 Coping strategies**

According to Devereux (2001), coping strategies are defined as responses to adverse events or shocks. Snel and Staring (2001) provide an encompassing definition of this notion, describing coping strategies as "all the strategically chosen acts that individuals and households in precarious socio-economic situations use to restrict their spending or generate additional income. This enables them to meet their basic needs (food, clothing, housing) while avoiding falling significantly behind their society's level of well-being" (Snel and Staring, 2001).

Ellis (2000) defines coping strategies as the methods households deploy to survive in the face of unforeseen livelihood failure. These strategies vary in several ways, both within and between households (Maxwell et al., 2003). Due to disparities in wealth between households, distinct coping behaviors are observed at different levels of poverty. Nevertheless, certain coping strategies are shared by all households, although the effectiveness of these strategies in keeping a household afloat depends on the assets available to it (Devereux, 2001).

Many of the strategies adopted in various contexts such as floods, drought, and other disaster affected contexts are similar, they have been observed in Food Rationing and Compromise, Changes in diets, spending whole day without eating, harvest immature crops, consume seed stocks, send some household members to eat elsewhere and Dependence on food assistance, sending some household members to beg, collecting wild food, consuming on credit ( Akukwe *et al.*, 2023; Yohannes *et al.*, 2023;

Chagomoka *et al.*, 2016; Danso-Abbeam, Asale and Ogundeji, 2023; Maxwell and Watkins, 2003; Maxwell and Caldwell, 2008; Rademacher, Schraven and Salifu Mahama, 2014).

## **2.4 Coping Strategy Index (CSI)**

Dan Maxwell, Ben Watkins, Robin Wheeler and Greg Collins in collaboration with CARE and WFP in 2003, developed the coping strategy index (CSI) tool to assess coping strategies for food insecurity during emergencies. This initiative was first implemented in Uganda and Ghana, and subsequently extended for early warning and assessment of food security in various other African countries, including Zimbabwe, Kenya, Ethiopia, Malawi, Zambia, Burundi and Eritrea. The fundamental idea of CSI is based on the question: “What do you do when you don’t have enough food, and don’t have enough money to buy food?” This research showed that households facing food insecurity generally adopt one or more of four adjustment strategies regarding their food supply.

Firstly, households can modify their diets by replacing favorite foods with less expensive and less popular alternatives.

Secondly, households may attempt to temporarily increase their food stocks by resorting to methods that are not sustainable in the long term, such as borrowing money or buying on credit. In more extreme cases, this may even involve begging or eating wild foods, or even consuming seed reserves.

Thirdly, households may consider reducing the number of people they need to feed by sending some of them elsewhere, ranging from simply sending children to neighbors' homes for meals, to more complex medium-term migration strategies. Finally, the fourth and most common option is to manage the shortage by rationing available food resources. This may involve reducing portion sizes or the number of meals, favoring certain family members over others, or even skipping entire days without eating (Maxwell and Watkins, 2003).

CARE and WFP, relied on the following 13 strategies to develop the standardized food insecurity assessment tool called Coping strategy index (CSI) by analyzing household’s decisions in the past 30 days, when they did not have enough food or money to buy food.

Households often had to:

1. Rely on less preferred and less expensive foods?
2. Borrow food, or rely on help from a friend or relative?
3. Purchase food on credit?
4. Gather wild food, hunt, or harvest immature crops?
5. Consume seed stock held for next season?
6. Send household members to eat elsewhere?
7. Send household members to beg?
8. Limit portion size at mealtimes?
9. Restrict consumption of adults for small children to eat?
10. Feed working members of household at the expense of non-working members
11. Ration the money you had and buy prepared food?



12. Reduce number of meals eaten in a day?

13. Skip entire days without eating?

(CARE and WFP, 2003)

### **2.5 Sustainable Rural Livelihood Approach (SRLA)**

The SRL is defined as a complex network of actions and connections that emphasizes the diversity of approaches to securing livelihoods (Scoones, 2009). Sustainability implies self-sufficiency and is associated with an implicit ideology of self-limitation and long-term self-sufficiency (Chambers and Conway, 1992; Scoones, 2009).

Combating hunger and poverty in rural areas, especially those affected by armed conflicts, offers multiple approaches. Most rural households derive their means of survival from agriculture and animal husbandry. However, there are many other alternative survival options influenced by the conflict context. Exploring the various survival methods or livelihoods, fits within the sustainable rural livelihood framework. The changing and protracted context of conflict in the Minembwe highlands has had a substantial impact on the livelihoods of local populations. Therefore, the present research has opted to use this specific analytical framework to better understand the strategies adopted and exploring how vulnerable households have astutely combined the various means of survival at their disposal to face the challenges imposed by the conflict, thus highlighting their food resilience in the face of adversity.

The complex interplay between poverty and available resources is fundamental to the Sustainable Rural Livelihoods framework (Scoones, 1998). This framework emphasizes the notion of livelihoods, a concept whose origins can be traced back to the work of researchers such as Chambers and Conway. They defined livelihoods as encompassing "people, their capabilities and their means of subsistence, including food, income and tangible and intangible assets" (Chambers and Conway, 1992). This definition is based on four fundamental elements: people, their capabilities, their resources, and their activities, all of which play a crucial role in shaping livelihoods. Ellis (2000) also emphasizes the importance of institutions and social relations. He characterized livelihoods as encompassing "the resources (natural, physical, human, financial and social), activities, and access to these resources (modulated by institutions and social relations) that collectively determine an individual's or household's livelihood." According to Ellis (*ibid*), natural resources relate to the environment and natural resources such as land, water, forests, and minerals. Physical resources, man-made, are acquired through economic activities, including equipment, machinery, and infrastructure. Human resources include population, health, education, and individual capabilities. Financial resources include cash, credit, savings, and remittances. Finally, social resources embrace the benefits derived from associations or networks, which can contribute to livelihoods. In the context of conflict and its various implications on the everyday life of households in the Minembwe highlands, it is essential to examine these resources and the social networks that are crucial to the construction of livelihoods (for instance access to food), as they influence the choices involved in adopting different survival strategies in a complex and constantly changing environment.

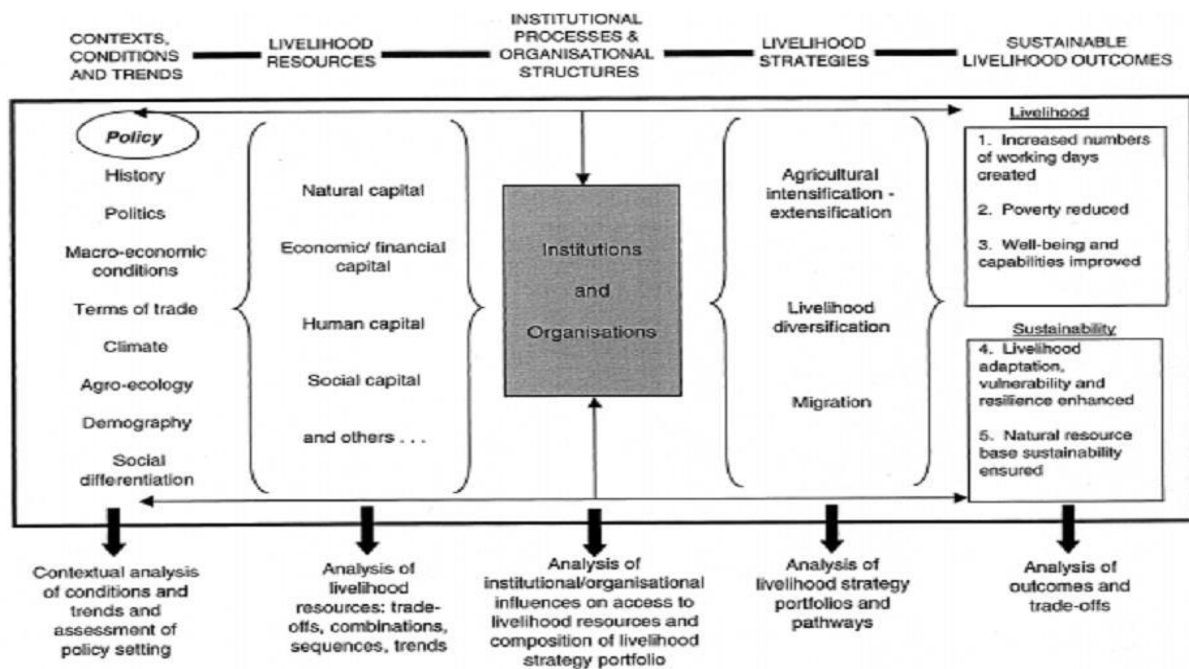
In armed conflict context, food resilience is crucial, given the extreme challenges and shocks households face. Thus, the ability to adapt and survive, becomes the cornerstone of livelihood survival in an environment marked by instability and violence (Davies, 1996).

Davies (ibid) conducted a study along the lines of sustainable rural livelihood, she examined the sequences of actions taken by households in the Malian Sahel in the face of actual or anticipated food shortages. Following Corbett's (1988) research, she identified various coping strategies, including reducing consumption, collecting wild foods, inter-household lending and migrating to find work. In addition, there were data on the disposal of productive assets and destitution behaviors, such as distress migration. Sequences of responses to shocks or stressful events have been identified by Chambers and Conway (1992), Moser (1998), Gom and Ellis (2000).

In this context, temporary adjustments in the face of sudden change and longer-term adaptations to livelihood strategies are crucial aspects of resilience in communities affected by armed conflict. Households unable to cope with temporary adjustments or adapt to longer-term changes inevitably become increasingly vulnerable, with limited prospects for achieving sustainable livelihoods in a hostile environment.

Assessing resilience and the ability to adapt positively or cope successfully requires an in-depth analysis of experiences of responses to shocks and stresses caused by conflict. Different types of shock, such as forced displacement, loss of resources, or destruction of infrastructure, lead to different responses. These responses include mechanisms of avoidance, resistance, or tolerance (Payne and Lipton, 1994). Understanding these mechanisms becomes crucial to developing effective food-based livelihood strategies in a context of conflict, where the ability to cope with critical situations can make the difference between survival and vulnerability.

**Figure3. Mapping Household Livelihoods: An Assessment Model**



Source: Ian Scoones, IDS working paper 72.

The above framework shows the assessment of sustainable livelihoods at different levels, whether individual, household, or group of households, regional or even national. It describes the interactions between these levels in relation to the overall effects of livelihoods.

In this research, the major focus was to see what strategies were taking shape to access and secure food as a major livelihood component, since violent conflict has disrupted access to traditional means of subsistence (agricultural, animal husbandry, and others are problematic due to reasons already highlighted in the problem statement). This research examines how conflict has prompted households to implement various strategies to cope with food insecurity. It also explores how these strategies to alleviate food insecurity have resulted in the escalation of existing conflict.

## CHAPTER THREE

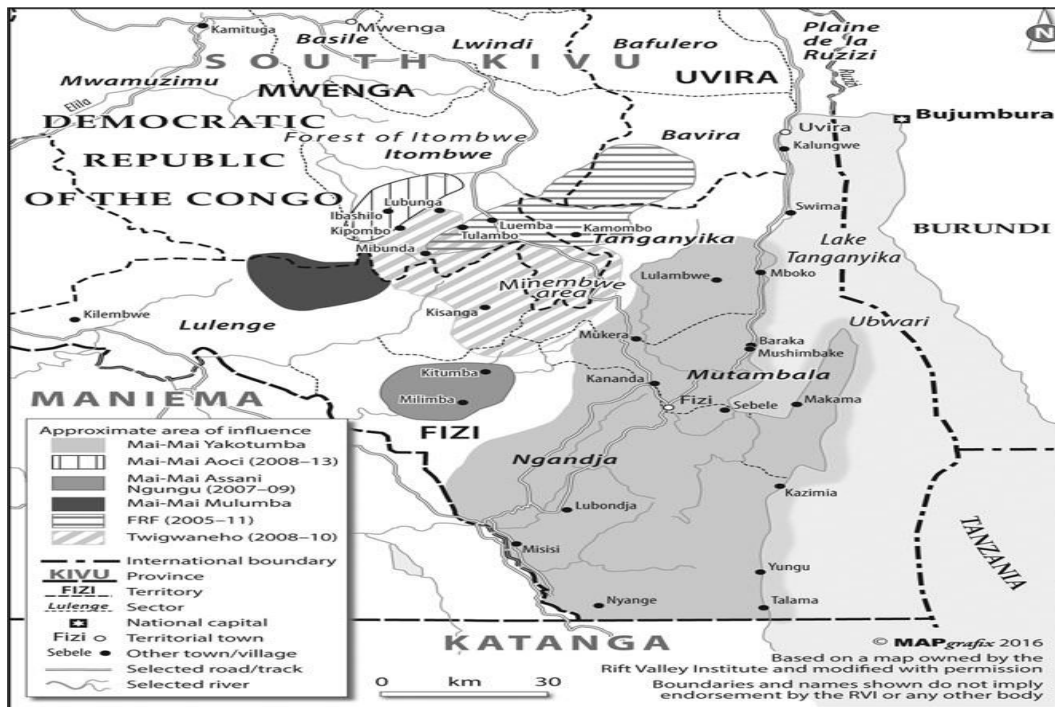
### METHODOLOGY AND METHODS

#### 3.0 Background of the Study Area

Minembwe high plateau is the area covered by this study. It is a group of several villages and localities located in the highlands of Fizi and Mwenga territories in the South Kivu province in the Democratic Republic of Congo. It lies at an altitude of around 2700 meters above sea level (Hiernaux,1965). Minembwe offers a cool, pleasant climate all year round, and is characterized by rolling hills, vast green meadows in the rainy season that provide excellent grazing land for livestock, and magnificent deep valleys formed by swampy terrain that are used for agriculture. The region is surrounded by imposing mountains and a long chain of mountains to the east that form the Mitumba Mountains. The plateau is fertile, with well-drained soils, this enables flourishing agriculture, with crops such as corn, beans, potatoes, and vegetables.

#### 3.1. Study Location

Map 1. Geographical location and Areas under militia control



Source: (Verweijen and Brabant, 2017)

#### 3.2. Research Design

This research is based mainly on qualitative interviewing methods and the collection of secondary information. The research took place from July to August 2023 in three localities within Minembwe plateau (Mikenge, Madegu and Bijombo), as well as with six households that had fled to neighboring countries (Uganda, Burundi, and Kenya) in the last twelve months. The methodological approach adopted to explore my research was based on household in-depth interviews and life stories (Hennink, Hutter, and Bailey, 2020; Boyce and Neale, 2006). A semi-structured interview guide, including

interview questions and topics (Russell, 2014) helped me to collect data.

### **3.3. Choice of the study location**

The choice of Minembwe high plateau stems from its reputation as a particularly conflict-prone area within the province of South Kivu, where inter-ethnic armed groups involved in clashes for many years. The population of this region depends mainly on agriculture, livestock, and small-scale trade for its livelihood. However, their activities have been severely disrupted by the security crises that have plagued that region. During the first periods of intense conflict, 2017 to 2020, my family and I were in Minembwe, and we directly experienced the consequences of these crises, including the theft of our herds, the loss of family members and forced displacement. Having worked in food security sector in the area, I found that the repeated clashes, which intensified after I left, severely deteriorated the lives of many people, wiping out existing initiatives aiming at promoting food security for the local population. People began to wander, desperate and having lost their basic means of subsistence. That's why I was motivated by curiosity to understand the dynamics of the mechanisms they put in place to find and manage the available food in such a difficult context.

The three localities involved in this research (Madegu, Mikenge, and Bijombo), although also exposed to conflict as reported by MONUSCO in 2020, are important settlements known primarily as IDPS host areas. In addition, my personal experience as a native of the region played a crucial role in facilitating access to information and participants and to locations where I already had contacts simplified the set-up of online interviews, while geographical representativeness and ease of online communication were other key criteria contributing to the selection of these localities.

### **3.4. Respondents**

In this research, participants were carefully selected from among household representatives and key informants. Household representatives, as members directly involved in family decisions, provided a valuable perspective on day-to-day realities. At the same time, key informants, chosen for their expertise or in-depth knowledge of the context, provided strategic insights and specialized information.

#### **3.4.1. Households**

In this study, the unit of observation is the household. It is defined as a single person or a group of people, whether related by family ties or not, living together in the same residence or in separate residences, but having common arrangements for food, regularly consuming their meals from the same pot or sharing the same stock of provisions, or pooling their income for the purpose of buying food (United Nation, 1967).

Households' selection followed purposive and convenient sampling techniques (O'Leary, 2017). The 20 selected households were from a variety of occupations and situations, including herders, farmers, teachers, carpenters, unemployed, and small traders, households of displaced persons as well as host households. The reasons behind this choice were motivated by the desire to obtain a comprehensive and nuanced perspective of the situation. The inclusion of various professions among the households was intended to deepen understanding of how different social groups cope with food insecurity.

Household representatives are predominantly women, as they often play a central role in managing food and caring for family members, which increases the credibility of the responses they would give in terms of coping strategies to food insecurity. Secondly, women of Minembwe experience a disproportionate impact of food insecurity due to their vulnerability and family responsibilities, warranting special attention to their experiences. Some men were also interviewed, as they play an essential role in family dynamics and decision-making within the household. Their point of view is necessary to get the full picture. It was therefore important to ensure a balance between the roles of men and women in the research, to avoid perpetuating gender stereotypes or prejudices.

I deliberately chose six refugee households among my respondents because of the considerable communication difficulties I faced, preventing me from establishing easy contact with my respondents located in Minembwe. Due to the massive population movements to neighboring countries caused by conflict, several households have settled as refugees, benefiting from improved communication networks in their host countries. This situation offered me the opportunity to interview a significant number of households who had fled Minembwe during the conflicts, and who still retain vivid memories of the events of the crisis in question. The period of the last 12 months is recent, enabling me to gather up to date information.

#### **3.4.2. Key informants**

Key informant interviews were conducted with respondents comprising an agricultural extension worker, a medical doctor, one humanitarian agent, a traditional chief and one military officer. They played an essential role in providing an in-depth overview of the many facets of the situation. Their diversity of skills and perspectives enriched my understanding of the complex situation and strategies adopted in these regions, where food security and conflicts are closely intertwined. Their expertise and knowledge of the field enabled me to gather crucial data.

The choice of key informants reflects a holistic approach aimed at gathering diverse information on the different dimensions of my topic. This encompasses the challenges faced by households in times of conflict and the strategies they adopt to access food. It also includes an understanding of the health problems associated with malnutrition and the efforts being made to mitigate these consequences, as well as information on current interventions, humanitarian needs, and strategies implemented to deal with food insecurity during conflict. The informants' perspective also provides insight into the impact of conflict on traditional structures and the means employed to maintain food. It also sheds light on the dynamics of armed conflict, encompassing military strategies and the repercussions on local populations. Finally, the specific contribution of each informant enriches the understanding of coping strategies for food insecurity in a conflict context, as well as their possible contribution to the perpetuation of existing conflicts.

#### **3.5. Data collection**

Data were collected through online interviews and storytelling, using audio recordings of dialogues, involving a total sample of 25 respondents. The sample comprises 20 households with a total of 103 members (14 households residing in Minembwe and 6 living in refugee camps abroad) and 5 key informants living in Minembwe. The interview guide was administered to all key informants, as well as to some household members with secondary education. The remaining households, who had not

benefited from formal education, provided a life story. Participant narratives reflect everyday experiences, facilitating a better understanding of strategies adopted to cope with food insecurity during conflict. This approach created a participatory atmosphere conducive to the free expression of participants, especially those without formal education, thus contributing to rich, contextual data. Unlike semi-structured interviews used with key informants and educated heads of household, this method relies on a written interview guide, promoting control of the interview while leaving the freedom to explore new leads. Russell (2014) shows that this approach is effective particularly with bureaucrats or elite members of a community, accustomed to managing their time efficiently (Russell, 2014).

This method demonstrates a perfect understanding of interview expectations, while allowing myself and my interlocutors the freedom to explore new directions, without seeking to impose excessive control, it is also the method par excellence in contexts where I didn't have the chance to interview a respondent more than once (ibid).

The combination of methods adapted to each specific group ensures comprehensive and meaningful data collection for understanding coping strategies to food insecurity in the region. The use of narrative techniques and semi-structured interviews with a questionnaire guide offered me an inclusive approach to collecting data from individuals and households of varying educational levels.

The advantages of these methods lie in the fact that, they enabled to obtain detailed information, capture spontaneous responses and tailor interviews to participants' needs, all of which can be invaluable for an in-depth understanding of the study. However, the narratives I used to collect data are likely to lack structure, while semi-structured interviews would also have run the risk of a loss of control. It was essential to weigh the advantages and limitations against the specific objectives of the research.

### **3.6. Data Analysis**

After data collection, the audio recordings made with my respondents were transcribed from local language (Kinyarwanda) into English.

Data analysis was carried out using the thematic technique. This qualitative method involves organizing data into meaningful themes and categories, enabling patterns, trends, and structures to be identified in the information collected (O'Leary, 2013). The thematic technique is based on inductive analysis, meaning that themes emerge from the data itself. This enables an in-depth, nuanced exploration of the experiences and perceptions of the respondents (Russell, 2014).

Once the themes had been identified, analyses were carried out to examine the findings and to gain a better understanding of conflict-related coping strategies. The approach sought to find patterns of outcomes in relation to existing literature (Hennink, Hutter, and Bailey, 2020; Boyce and Neale, 2006).

### **3.7. Ethical Considerations**

Survival in an environment marked by violent conflict poses considerable ethical challenges. In the context of the Democratic Republic of Congo (DRC), and in Minembwe where armed and inter-ethnic conflicts are recurrent, populations are often faced with extremely precarious food situations.

Ethical challenges arise when individuals are forced to make difficult decisions to ensure their survival and that of their families, often compromising fundamental moral principles. For example, some may be led to engage in illegal activities or participate in illicit trade to obtain basic foodstuffs. In such situations, moral choices are often influenced by the urgent need to subsist, raising complex questions about individual and collective ethical values. As a researcher conducting research on coping mechanisms, I demonstrated this ethical sensitivity to ensure the quality of my research.

Above all, I recognized and respected the dignity and fundamental rights of interviewees, I also took steps to minimize potential harm to research participants by guarantying the confidentiality and anonymity of the information gathered and ensure that I obtain the informed consent of those involved.

### **3.8. Limitations**

The limitations of this research are linked to different factors. Firstly, the internet networks in the rural study area proved extremely unstable, making communication with respondents particularly difficult. To alleviate this, households recently settled in neighboring countries, where communication networks are stable were also interviewed.

In addition, the area is plagued by recurrent conflicts, which complicated the planning and organization of focus groups, as the safety of participants was often compromised. Consequently, no research assistant was recruited, and the study had to rely on key informants as well as household representatives, who participated in online interviews from their homes to guarantee their safety.

### **3.9. Positionality.**

Given the context of this research and the unit of analysis constituted by households (IDPS, host and refugee households) and key informants, it is important to reflect on how my personal background, ethnicity and prejudices would have affected the research process and the quality of my interpretations.

My position would have been affected by my choice of participants. Most of my participants are mono-ethnic, as the context of violent conflict between ethnic groups in the region did not allow me access to other ethnic groups. It was mainly the "Banyamulenge" ethnic group to which I belong who were more inclined to cooperate with me as we share similar cultural and social backgrounds, while others were wary of me except for two key informants who agreed to share information with me. It is therefore important to understand that not being sensitive to ethnic diversity deprives me of the opportunity to understand the experiences of households outside my own community. This could lead to a partial understanding of the reality of coping strategies and influence the quality of the data collected.

#### **3.9.0. Structure**

The first chapter introduces the context of the study by highlighting the persistence of violent conflict in the Democratic Republic of Congo (DRC), with a focus on the Minembwe region. It highlights the devastating consequences of these conflicts on food security, leading to massive displacement, the destruction of food systems and complex implications. The importance of the link between conflict and food insecurity is highlighted, as is the crucial role of household coping strategies in this context.

The problem is then developed by focusing on the persistent ethnic tensions in Minembwe, dating back to the Belgian colonial era, and the multiple factors fueling current conflicts, including



land ownership, identity, and regional influences. The rationale for the research is established by highlighting the need to understand how households cope with food insecurity in conflict zones, and examining how these coping strategies may contribute to perpetuating conflict. Finally, specific research questions are outlined, focusing on how households cope with food insecurity in a conflict context and the links between coping strategies and conflict perpetuation.

In Chapter 2, this work discusses global food insecurity, highlighting that despite sufficient food availability worldwide, many countries face high levels of food insecurity. It mentions various factors contributing to insecurity. Emphasis is placed on the link between armed conflict and food insecurity, highlighting how wars disrupt food production and access, and exacerbate the precarious situation of vulnerable communities. Concrete examples are provided, to explain the implications of war in worsening hunger. This chapter also focuses on the Democratic Republic of Congo (DRC) as a case study, describing the major food crisis in the country, particularly in the eastern provinces. It explains how armed conflict and massive population displacement have contributed to food insecurity. Next, this chapter introduces the Sustainable Rural Livelihoods Approach (SRLA), as an approach to understanding how households access sources of livelihood in the context of conflict in Minembwe. The chapter then explores existing coping strategy assessment tool highlighting the Coping Strategy Index (CSI).

The third chapter is devoted to the methodology and methods employed in this study. The research methodology is based on qualitative interviews and the collection of secondary information. Elements addressed include the choice of study location, the data collection process, ethical considerations, identified limitations, as well as the author's positioning within the framework of this research.

The fourth chapter deals with the presentation of findings, their analysis, and interpretation. Finally, the fifth chapter present the conclusion and recommendations.

## CHAPTER FOUR FINDINGS AND ANALYSIS

This chapter offers an in-depth exploration and analysis of the findings. The data collected through in-depth online interviews and storytelling provide an overview of the implications of conflict on the everyday life of households, the different conflict-driven coping strategies adopted by households, and the role of coping strategies in perpetuating conflict and violence. The findings highlight emerging trends in household coping strategies in a context of violent conflict and discussed in the light of the sustainable rural livelihood framework and existing research on coping mechanisms to food insecurity especially the Coping Strategies Index.

### 4.1. Characteristics of respondents

**Table1. Heads of households who participated in the online interview.**

Household	Age of household head	Gender	Occupation	Education Level	Household size	location	Other
01	74	Male	pastoralist	No formal level	7	Mikenge	IDP
02	52	Female	Unemployed	Primary	6	Uganda	Refugee
03	47	Female	Cultivator	primary	6	Madegu	Host
04	42	Female	Farmer	Primary	6	Bijombo	IDP
05	38	Female	Unemployed	Primary	5	Uganda	Refugee
06	40	Male	Retailer	secondary	4	Madegu	Host
07	25	Female	Retailer	No formal level	3	Madegu	IDP
08	30	Male	Pastoralist	secondary	3	Bijombo	IDP
09	32	Male	Cultivator-breeder	secondary	3	Bijombo	IDP
10	57	Female	Cultivator	No level	7	Mikenge	Host
11	33	Male	Cultivator	secondary	4	Bijombo	IDP
12	62	Female	Cultivator	No level	8	Mikenge	Host
13	66	Female	Unemployed	No level	7	Burundi	Refugee
14	46	Female	Unemployed	Primary	6	Burundi	Refugee
15	50	Female	Retailer	Primary	5	Mikenge	Host
16	63	Female	Teacher	Primary	8	11	Refugee
17	45	Male	Carpenter	Secondary	4	Mikenge	-

18	51	Female	Unemployed	Primary	8	Kenya	Refugee
19	23	Female	Cultivator	Secondary	1	Madegu	Host
20	28	Female	Cultivator	Primary	2	Bijombo	IDP

**Table 2. Key informants**

Respondent	Age	Gender	Occupation	Education Level	Village/location
01	48	Female	Extension worker	University	Madegu
02	35	Female	Humanitarian worker	University	Mikenge
03	30	Male	Doctor	University	Bijombo
04	42	Male	Traditional chief	High school	Madegu
05	40	Male	Military officer	High school	Madegu

#### **4.2. Coping strategies adopted by households in Minembwe.**

The interviews conducted in this study shed light on a wide range of formal/informal, short/long-term coping strategies adopted by households in responses to food insecurity during conflict.

The strategies adopted include food rationing, food compromising, dietary changes, relying on food assistance and kinship food sharing, migration, sending household members to have meals elsewhere, planting on tinny gardens, shift in customary vocations, land for labor contract, early weaning of babies (Early cessation of breastfeeding), consuming seed stock, harvesting immature crops, skip cropping season, survival prostitution, risky food quest, crop looting, illegal sale of weapons and ammunition. Although some of these coping strategies are among the common coping strategies usually adopted by individuals and households affected by food insecurity, some of the strategies are typical food insecurity coping strategies in conflict affected areas, such as Minembwe.

##### **4.2.1. Immediate and short-term alteration of consumption patterns.**

Immediate, short-term changes in consumption patterns encompassed coping strategies undertaken by households to meet immediate food needs.

##### **4.2.2 Food rationing and food compromising**

To save food in times of conflict, households reduce the number of daily meals and the quantity consumed. Some households simply cook once a day. Reducing the number of meals and the amount of food consumed has a negative impact on household health and well-being, leading to widespread malnutrition, particularly among children and the elderly. Families restrict themselves and eat not to be satiated, but simply to survive the difficult situation of the conflict. In one of the statements made by a local chief.

Food is too expensive to find as almost all of it is given to us by charitable organizations including churches, and diaspora associations, they give us a little flour and beans which is not enough for our needs. So, to save on food, we cook just once. Only at 4 p.m. (Interview 8-M, 15 July 2023).

According to the research participants, before the conflicts, it was common for households to eat three meals a day. However, due to food scarcity, this habit had to be abandoned. Households are forced to reduce the number of meals to one, depending on the amount of food available. In the morning, they often drink porridge or eat a simple cornmeal-based preparation. The priority is to preserve flour and other foodstuffs for the most critical moments of the day. Due to the scarcity of food, households also limit the portions of food consumed at main meals. Families got used to eating smaller portions so that food could last longer. In certain circumstances. Adults, especially men, manage to go through the night without eating.

During an interview, one household (IDP in Mikenge), recounted a series of extremely difficult attacks they had to face.

We have been attacked more than 30 times, and on each occasion, we were forced to take refuge in the bush, sometimes in the forest to escape the dangers. During that period, access to food was a major concern due to the very precarious situation in which we found ourselves. To protect children from starving, we manage to take along a few quantities of flour and beans, enabling us to cook food at night. Cooking in the daylight during clashes is impossible. We avoid the smoke from being visible during the day, so as not to attract the attention of nearby rebels. As for the adults, we had to rely on fruits to survive (Interview 7-MK, 8 July 2023).

The foraging situation described illustrates the severity of the food crisis households face and highlights the extraordinary efforts they make to try to survive in extremely difficult conditions. During quiet periods, some households try to leave the highlands to fetch flour in Uvira, a journey of 4 days walking. So, it's important to understand that flour bought in Uvira calls for rational management. One interviewee in Bijombo reported that:

In the past, we considered ourselves satiated, if there was any food left on our plates at the end of a meal. But today, in principle, we no longer eat to be repleted, but simply to stay alive (Interview 4-B, 7 July 2023).

#### **4.2.3 Dietary Shifts**

We eat potato and cassava paste without alternating with anything else. We eat it from Monday to Sunday. It is the only food available now. We buy sometimes undried cassava flour at the Irumba market (Interviewee 3-B, 7 July 2023).

Food shortages during conflicts are forcing households to reduce the diversity and quality of their diets. One example is the purchase of undried cassava flour. Households now must rely on cassava flour-based meals more frequently.

Tangible evidence of tactics adopted to overcome the challenges of food insufficiency within households has revealed a variety of strategies. These include temporary adjustments in eating habits, and the reduction or rationing of consumption (Maxwell, 1996). When confronted with shocks, households facing food disruptions, draw on stored crop reserves or use their assets such as livestock, cash assets or other non-farm assets to meet their food needs. They seek to preserve their assets and

thus choose to endure reduction in consumption rather than liquidate them (Ansah, Gardebroek and Ihle, 2022). In Minembwe-conflict environments, food insecurity is endured temporarily by households in order to preserve food for when the going gets tough.

#### **4.2.4 Harvesting crops before they are ready.**

An important aspect of the harvesting situation was described in relation to the early harvesting of crops.

We find ourselves forced to harvest our corn sometimes before it is ready, due to our extreme hunger. This also serves as a means of protection against predators, in particular the military who steal our crops from the fields (Interview 8-M, 15 July 2023).

It became clear that food insecurity in the region is having a significant impact on household farming practices. Respondents pointed out that, to cope with their pressing hunger, they often find themselves obliged to harvest their maize, for example, before it is fully ripe. This strategy, while far from ideal from a nutritional point of view, provides them with a source of food more quickly. In addition, households mentioned that this early harvest also serves as a means of protection against predators, particularly the military who have been reported stealing their crops from the fields. This duality of constraints : The need to satisfy their immediate food requirements and the protection of their resources from theft, influences households' early harvest choices.

#### **4.2.5 Consuming seed stock.**

Some of the households of Minembwe, take the difficult decision to consume their seed stocks to feed themselves and survive.

Few of us keep stock of seeds, but most of those that escaped the fires during the clashes have been consumed because of the food need we have experienced (Interview 15-M, 13 July 2023).

Most of the seeds that miraculously escaped fire and destruction during the armed clashes are quickly consumed as a result of food insecurity that hit the region. The immediate priority for many households is to find ways to feed themselves daily, to the detriment of preparing for future harvests. Fire and destruction caused by conflict have exacerbated this situation, resulting in the irretrievable loss of precious agricultural seeds.

One household has testified that:

A humanitarian partner gave 7kgs of maize per household for sowing, but we used two kilos to sow and the rest 5kgs were eaten. We were trying to see if it would last a day (Interview 11-B, 3 August 2023).

A particularly revealing testimony came from a household in Minembwe. This household received humanitarian aid in the form of 7 kg of maize per household for planting. However, food insecurity situation was so desperate that this household used only 2 kg of maize to sow, thus sacrificing the possibility of harvesting more in the future and consumed the remaining 5 kg in a very short space of time. This anecdote highlights the extreme seriousness of the food situation in the region. Households find themselves in a situation where they must make difficult decisions for their immediate survival, even if this means sacrificing resources that could potentially improve their long-

term food security. Food insecurity forces them to adopt short-term survival strategies that compromise their ability to meet their long-term food needs.

This study confirms that rural households in the high plateau of Minembwe experience shocks. Consuming seed stock held for the next season and harvest immature crops appear to be some of the major coping strategies. These findings align with previous findings in different countries. For instance, Mjonono, Ngidi, and Hendriks (2009) show that poor rural households rely on harvesting immature crops in the Umbumbulu district of KwaZulu-Natal in South Africa. Similarly, Bauer and Sassi (2013) documented coping mechanisms adopted by individuals in response to declining crop productivity and farm income in Sudan. The outcome showed a higher degree of severity for the coping strategy “consuming seed stock held for next season” (Bauer and Sassi, 2013).

#### **4.2.6 Sending household members to have meals elsewhere.**

Supporting children through collective catering is done by local charities and churches. According to a local caritative association member from SAFECO:

We have organized collective meals for children in some villages and recruited women to cook porridge for 6 months (Interview 2-M, 15 July 2023).

Children and other vulnerable people are frequently sent to collective meals, organized during periods of calm.

This practice of sending some household members elsewhere for meals is a common strategy observed in various countries and regions, including Minembwe. A study by Yohannes, G., Wolka, E., Bati, T., & Yohannes, T. (2023) in Southern Ethiopia, describe this practice as a habit often perceived as shameful, strange and unusual within society (Yohannes et al., 2023). Whether this practice is considered atypical, as long as it enables households to cope with acute hunger, it is recognized as a crucial strategy that households rely on to survive in the context of conflict. This strategy aligns with Maxwell's findings and the results of studies in several other countries (Maxwell and Watkins, 2003).

#### **4.2.7 Relying on food Assistance and kinship food sharing.**

From Interviews, it was revealed that, in the current conflict which started from 2017 up to today, food assistance is mostly provided by diaspora and local associations, as well as by individuals and other social networks. Remittances were and are still vital in funding the purchase of food and other essential goods while International NGOs provided a very limited food relief.

Displaced households and host families received a 25Kgs of flour each month, which had to be shared between 3 or 4 households (Interview 2-M, 15 July 2023)

The interventions of international organizations and government institutions in the conflict affected Minembwe region have been fairly limited in terms of providing food relief. They have been able to provide limited assistance in the form of seeds, larger organizations are reluctant to intervene on a massive scale in food assistance due to their concerns about security on the ground (Ndahindurwa, 2021). According to interviews, although the assistance is very limited still, it's proving crucial in households coping strategies. Mahoro peace association (MPA), UGEAFI, SAFECO were the most involved in food assistance.

My family arrived in "Madegu", where my brother-in-law generously offered us shelter when we were completely destitute. We shared the available food with the host family,

but a few days later, another family arrived, making the situation even more difficult as the provision quickly ran out. (Interview 6-B, 6 July 2023).

The spirit of sharing prevails in times of conflict, when households help each other by using the limited resources available to meet nutritional needs. This view is common in communities suffering economic strains from sharing already meagre resources with IDPs (Davies, 2012).

One household said:

One dairy cow, which also produces less than three liters of milk a day, feeds five households, sometimes six, which means half a cup each, this helped to feed children (Interview 24-M, 15 August 2023).

This kind of solidarity enables displaced people to find refuge with their loved ones and to benefit from a source of food during periods of conflict.

Although many households in the area, relied on food aid from the diaspora groups, churches, social networks (Community sharing), was also a crucial coping strategy in the aftermath of the ongoing conflict. It has been instrumental in addressing immediate food needs. Kinship sharing among different households is an essential strategy, in ensuring food security in the challenging circumstances. Family, community, and social ties have served as valuable resources, fostering mutual support between individuals and households who shared what is available.

These findings reflect those of Ellis (2000) as described in our previous pages on the SRL framework, remittances constitute a financial asset to which people rely on to access source of subsistence, social assets which refer to synergies that a person or household benefits from associations or social networks have been mentioned as essential in construction of livelihoods (Ellis, 2000).

Furthermore, the above findings align with other existing literature on food insecurity coping strategies in different context such as drought, civil conflict and poor governance, climate change, economic decline, and political instability ( See Yohannes *et al.*, 2023; Yenesew, 2015; Zemedu and Mesfin, 2014; Shemyakina, 2022).

Remittances, food relief, kinship sharing have been the most important sources of income, especially when people have no other sources of income or if their livelihoods have been strongly affected by shocks and stresses (Chigora, 2010). This is also reflected in the agropastoral communities living in the arid and semi-arid regions of Tanzania which are the most vulnerable to food insecurity in the country. In the absence of government mitigation measures, they have traditionally relied on social networks as survival strategies to cope with food insecurity throughout their history (Rusomyo, Junlin and Mangare, 2017). Therefore, it is interesting to note the similarities between these strategies in different contexts and in different regions.

#### **4.2.8 Nighttime field harvest**

The night offers a degree of camouflage and stealth, reducing the risk of attack or theft during the harvest.

One head of household had this to say:

We've become like thieves in our own fields, we harvest at night. Our fields are a bit far from our homes, during the day the rebels set up ambushes, and we're afraid to go there

during the day, we prefer to go at night or we decide to abandon them (Interview 6-MK, 10 August 2023).

Harvesting fields at night in the Minembwe highlands emerges as a specific response to food insecurity, strongly influenced by the context of persistent conflict. Farmers' fields are often far from their homes, giving rise to legitimate apprehension about daytime movement due to regular ambushes by armed groups. Fear of attack during daytime farming activities has prompted farmers to develop a clever practice of growing crops on small lands around their homes and harvesting at night when they have farms in remote areas, taking advantage of the lower intensity of violence during this period. As for the displaced, their coping strategies have evolved significantly. Initially accustomed to harvesting in the fields of the villages they had left behind; a tragic event marked a major turning point. Women were tragically murdered while gathering crops in the deserted villages. This traumatic experience forced a re-evaluation of strategies, prompting these communities to change their habits and start harvesting at night to minimize the risk of violent attacks. In this way, night-time harvesting of fields emerged as a novel tactic in the face of food insecurity exacerbated by conflict.

The specificity of this strategy in the context of the Minembwe highlands stands out even more because it seems to have escaped the attention of the existing literature on coping strategies in the face of food insecurity. The testimony shared by an interviewee sparks the need to carefully document context-specific coping practices that can emerge in areas plagued by protracted conflict, underlining the importance of a thorough understanding of local coping mechanisms to inform humanitarian interventions and food security policies.

#### **4.2.9 Early weaning among mothers**

Food scarcity and inaccessibility during conflicts has led to nutritional deficiencies in nursing women, affecting their ability to produce enough breast milk to feed their babies.

One nursing woman said that:

Breast-feeding babies fell sick frequently, with diarrhea, due to an inadequate diet and lack of breastmilk. I often got sick several times due to a very nutrient-poor diet. I decided to wean my kid early, because I could no longer find any breast milk for him, and it was also a way of getting him used to the change in diet imposed by the war; I used to give him cow's milk in supplement to breast milk, but cows were looted. The baby suffered from time to time, so I thought weaning him would enable him to adapt to any kind of solid food. Unfortunately, my child died during that period! (Interview 1-M, 3 July 2023).

Early weaning refers to the untimely cessation of breastfeeding, due to constraining circumstances such as food shortages and inaccessibility. In the context I have described, breastfeeding mothers face considerable difficulties, including nutritional deficiencies due to difficult conditions. These deficiencies compromise their ability to produce enough breast milk to adequately feed their babies.

The decisions taken by breastfeeding mothers to resort to early weaning are influenced by several factors. On the one hand, the unavailability of their own milk due to immediate dietary constraints is a determining factor. On the other hand, the need to adapt the child to the change in diet imposed by wartime conditions, notably the early introduction of solid foods, plays a crucial role



in the decision. The described premature weaning could have serious consequences for children's health. The untimely switch to solid foods could lead to nutritional deficiencies, compromising infant growth and development.

The poignant experience shared by the nursing mother, reveals that early weaning was not simply an individual response, but rather a complex coping strategy adopted by many mothers in the region.

Social stress Studies have evidenced that early weaning practice may increase the incidence of gastrointestinal disease, and usually leads to small intestinal morphological abnormality and dysfunction in absorption. As a result, this leads to poor growth performance and increases in diarrhea and mortality (Tian *et al.*, 2023). Feeding infants only breast milk is the safest and healthiest option for children in every region of the world. Continued breastfeeding improves cognitive ability, translating into improved school performance, better long-term earnings and enhanced productivity (UNICEF, 2016). Thus, the World health organization recommended that infants should be breastfed exclusively during the first six months of life, and furtherly be breastfed together with supplementary feeding until the baby reaches two years of age (WHO, 2001).

#### **4.3.0 Long-term trends in income, food production methods and ad hoc responses**

When food insecurity is associated with environments marked by violent conflict, survival strategies become not only crucial, but also profoundly influenced by the long-term evolution of food production methods, incomes and ad hoc responses. In this complex context, the delicate balance between the availability of food resources and the constraints imposed by conflict shapes the life course of affected households. This section looks at how households have responded over time, trying to create a dynamic that calls for adaptive approaches to overcoming the pressing challenges of food insecurity in situations of violent conflict.

##### **4.3.1 Migration.**

Some households have been forced to migrate several times to safer villages within and outside Minembwe. Faced with growing food needs and the absence of viable means of survival, some households had no choice but to migrate to secure places.

An interviewed head of household said:

After being deprived of our resources, in particular our fields, we decided to migrate to Madegu, where we could work the land for the host communities for our survival (Interview 10-M, 20 July 2023).

Others have made the decision to take refuge in neighboring countries.

First, I had lost all my possessions, and the security situation was far from improving, it was getting worse and worse. The only alternative for me was to go to the refugee camps in Uganda where we can be assisted by the UNHCR (Interview 9- Ug 17 August 2023).

Misery, in the context described above, translates into a difficult reality where households are forced to adopt drastic measures to meet their basic needs. This situation of extreme hunger pushes many households to consider permanent migration to other places as an imperative solution. The

relentless search for food and employment opportunities becomes a powerful driving force behind this migration, leaving families with little choice in the face of persistent economic misery and food insecurity.

Several researchers have mentioned temporary migration as a coping strategy for food insecurity (For example, see Gupta et al., 2015). Migration was also perceived as a means of reducing vulnerability and increasing livelihood security in response to rainfall variability and food insecurity in Northern Ghana (Rademacher-Schulz, Schraven, and Mahama, 2014). Migration is thus integrated as a dynamic component of sustainable livelihoods. It represents an adaptation strategy in the face of unfavorable conditions, enabling households to diversify their sources of subsistence and improve their food security. It is seen as an essential element in the quest for sustainable livelihoods, complementing other strategies such as agricultural intensification or extensification, and livelihood diversification (Scoones, 1998).

#### **4.3.2 Land for labor, sharecropping contract and Shift in customary vocations**

"Land for labor" for instance, refers to a practice whereby households who have lost their land through forced displacements, offer their labor in exchange for access to small plots of land where they can grow crops in the host communities.

An interview with the program manager at CEDIER, an organization working in South Kivu, revealed that many IDPs households who left the high plateau for peri-urban areas found themselves obliged to rent fields from host communities. In the interviewee's own words:

For the displaced persons who have come directly to urban or peri-urban areas, it's true that it's difficult for them, because some of them still have the desire to resume farming activities to maintain themselves and ensure their survival, but they have difficulty accessing fields because they must rent fields. For example, they rent a 25-square-meter field for 100,000Fc, which is difficult for them, because they have no money. Most of IDPs don't pay money, they try to make compensation with the landowners by converting the money they could pay into a number of tasks to be done until it equals the amount, they must allocate 25 square meters. Sometimes the landowner can ask the displaced for two days a week to go and work in his field, and this for only one growing season. This means that for the next season, you'll have to do the same thing. Or otherwise, they share crops at the harvest "It's a bit tricky," said the key informant (Interview 25-B, 24 August, 2023).

This kind of labor is often provided by household members who have been uprooted from their homelands and they need a way to support themselves and their families in the host communities. IDPs try to negotiate with landowners or local authorities to make their labor available in exchange for access to a small portion of land. or to share the harvest, instead of monetary rent. This is in line with the sharecropping contract, an agricultural arrangement in which the landowner entrusts the management of his land to a farmer (the sharecropper) in exchange for a fixed or proportional share of the production (Allen, 1985).

Many heads of households were forced to change their professions or economic activities due to the loss of their means of survival. Changes such as switching from livestock to working the land or becoming a luggage transporter were observed in response to new economic realities and survival needs.

The pastoralist community suffered a significant change in their traditional way of life due to the conflicts and wars that affected the region. Traditionally, the "Banyamulenge" community was engaged in livestock rearing, which constituted their main source of subsistence and income. From their livestock, they were able to pay laborers, they also consumed the products of their livestock rearing (milk, meat, oil etc.). However, due to the conflicts and insecurity that have plagued the region, their livestock have been stolen, depriving the community of its traditional means of subsistence. The pastoral community had to adapt to a new way of life in order to survive. They began working the land and engaging in different other livelihood activities which they had not previously been accustomed. This radical change represents a forced transition to a new reality where their livelihood now depends on other sources of income rather than animal husbandry.

In south Kivu province, people who carry luggage on their heads in exchange for payment are often referred to as "Porteurs". This used to be done locally by groups other than the Banyamulenge. Following the war that impoverished them, some households reported that they began resorting to this activity to find the means to survive. These head porters are often essential to help traders and travelers transport luggage or goods from Mulima to Minembwe (an 8-hour walk on a dangerous road), riddled with bandits.

One household said the following:

We learned how to work using our strengths. We were a pastoralist community. We weren't used to cultivating the land or other works because we had the means to hire labor. But now, our cows (Our financial base) have been looted. We are now Cultivating small vegetable fields to survive (Interview 12-MK, 13 August 2023).

There are others who did works they didn't do. For example, carrying luggage for the "Bashi" community.

It touches on our dignity, we used to be a ruling class, but we've become servants to others (Interview 13-Ke, 14 August 2023).

Displaced people were forced to find ways of obtaining food despite the difficult circumstances by providing labor to host communities.

As displaced persons, we lived in villages where there was still some security. In order to buy just one bag of maize flour, we were required to go and cultivate for others (host communities), who ended up paying us the money we used to buy a little food. a group of 3 or 4 people could work together to afford the price of just one bag of maize flour (Interview 13-Ke, 14 August 2023).

In African development literature, the diversification of rural incomes is receiving increasing attention (Reardon et al., 1992; Reardon, 1997). Income diversification is defined as an expansion of rural sources of income outside agriculture. This encompasses several aspects, including a change in work, a further push towards the substitution of subsistence-based activities by cash-based activities, as well as the gradual increase in non-agricultural activities at the expense of agricultural work (Bryceson, 2016).

In the context of diversification of rural incomes, land for labor, sharecropping, and changing livelihoods emerge as significant coping practices in Minembwe conflict-prone setting. They become a crucial means of supporting households.

One of the focus of livelihoods concerns work and employment and links it with poverty reduction with broader issues of adequacy, security, well-being and capability. This relates to the ability of a particular combination of livelihood strategies to create gainful employment (Scoones, 2009).

Sen(1975) identifies three dimensions of employment: income, represented by a wage for work performed; production, with employment generating a consumable product; and recognition, manifested when employment confers the valorization of being engaged in a meaningful activity.

#### **4.3.3 Cultivation of tiny gardens**

This refers to the cultivation of small plots of land located in the immediate vicinity of homes, and IDPs camps because venturing far from home is risky. This practice allows farmers to simply cultivate small fields close to home, reducing the risks and challenges associated with travelling further afield. Before the conflict, people were used to farm and graze on fields located sometimes at some distance from their homes. This was generally due to the availability of larger farmland suitable for agriculture and easy mobility in remote areas. People had enough space to cultivate different crops and ensure their food subsistence. However, when conflicts broke out in the region, the situation changed radically. The high plateau of Minembwe became a danger zone with the presence of armed groups operating in the area. As a result, access to vast tracts of farmland becomes too risky for the local population, as it would expose them to violence. This space constraint forced households to adapt to the situation by limiting their farming activity to home gardening. However, some households still take the risk of going to their abandoned villages in search of food.

The only option I have for me to ensure the subsistence of my family is to cultivate my small fields near my house. I don't want to expose myself by going far (Interview 15-M, 25 July 2023).

Allocating tiny gardens to growing vegetables has been one of the key survival strategies during war and famine. This was reported by Stewart et al, (2001).

#### **4.3.4 Skipping of farming season.**

Farmers in the frequently under-attack locations seek to minimize the potential negative consequences associated with enemy attacks or conflict by avoiding cultivation during periods of heightened danger. As explained by one head of household:

Due to the uncertainty of enemy attacks, we avoid cultivating our fields, sometimes for an entire agricultural season, for fear that our efforts will be compromised by the attacks, looting or destruction perpetrated by the armed group "MaiMai", which frequently targets us. When we learn of their preparations for attack, especially during crucial periods we give up our farming activities. The recurring question is why invest in cultivation if the harvest is likely to be stolen or destroyed by our enemies? (Interview 13-MK, 17 July 2023).

In Minembwe, a common practice among households was to save seeds for the next planting season, in the hope of growing their own crops. However, for households who took the precautionary measure of saving seeds and not consume them, are often faced with a harrowing dilemma of constant fear of reprisals from armed groups who dissuade them from sowing these life-saving seeds. Armed actors, often uncontrollable and hostile towards civilians, perceive the possession of seeds and their cultivation, as contrary to their plan to chase out of the Minembwe highlands an ethnic group known

as "Banyamulenge", whom they equate with foreigners who will graciously or forcibly return to where they came from. This is also explained by the Razia of almost all their livestock, which constituted the economic base, preventing transhumance by shepherds, besieging villages, or blocking access to humanitarian aid. This is closely related to the ideology of using hunger as a weapon of war in order to eliminate a group of people by depriving them of food; those not killed by war(guns), will be killed by hunger (Linares Quero, Pérez Alonso de Armiño and Sánchez Montero, 2023, Messer and Cohen,2015).

The threat of imminent attacks creates a climate of uncertainty that weighs heavily on the daily lives of households. Farmers, already faced with difficult conditions and limited resources, have to juggle the complex dilemma of choosing between preserving their seeds for the future and the immediate need to feed their families. Some, fearing for their safety, opt to consume seeds they had originally stored for planting, thus forgoing the possibility of growing their own crops.

This difficult decision testifies to the scale of the challenges facing households in situations of armed conflict. The urgent need for food and concern for personal safety led to impossible choices, often dictated by external circumstances beyond the individual's control. In addition, forced displacement and the destruction of livelihoods further increase the vulnerability of conflict-affected populations.

These findings reflect the links between difficult choices of consuming seed reserves, skipping cropping seasons, and the potentially serious consequences of food insecurity. Seed consumption, as explained in the preceding pages, was a response to food emergencies, prompting some households to use their seed reserves to meet immediate survival needs, but it also represents a painful compromise between sacrificing the opportunity to sow and ensuring immediate subsistence. It is an act dictated by urgency and the immediate need for food, whereas skipping the cropping season is an adaptation to instability, as conflict conditions create a context of unpredictable instability, where the security of farming activities is not guaranteed. Skipping a cropping season is a strategy for adapting to this reality, avoiding the risks associated with farming activities in times of conflict. Secondly, by choosing not to sow during a specific season, households preserve the resources needed for cultivation, such as seeds, and other financial means, and can reallocate them towards more immediate needs or alternative survival strategies.

The decision between consuming seed and skipping a cropping season is often influenced by a multitude of factors, including the immediate need to feed oneself, protection against risks, and the search for alternative livelihoods.

#### **4.3.5 The role of food insecurity coping strategies in perpetuating conflict and violence.**

This research has shown that some coping strategies adopted in Minembwe in search for means of survival were at the root of the perpetuation of conflicts and exposing people to violence or misconduct. Survival prostitution, the over-militarization and crop looting, the illegal sale of arms and ammunition by starving soldiers, risky food quest, over disputes over firewood, all were associated to conflict and violence perpetuation.

#### **4.3.6 Transactional sex**

One humanitarian agent interviewed mentioned that:

Displaced women did a lot of things that they didn't do before when they were in their normal life. Some women turned to prostitution although this strategy undermines their dignity and exposes them to STDs, still was one of the key strategies relied on for the survival of their households. (Interview 16-B 19 July 2023).

In some areas, displaced women have been forced to engage in prostitution to obtain money and meet their food needs. In Minembwe, the traditional roles of men and women dictate their responsibilities in the search for food. Women are often in charge of meal preparation and the search for local foods. During the conflicts, men were often recruited into the fighting while others had to flee for protection. Some women, burdened with increased responsibilities to provide for the household, engage in prostitution to earn bread for their children, while others had to abandon their families to marry either soldiers or other men with sufficient financial means. This caused tensions. There were cases where some women had to abandon their children to remarry elsewhere.

The relationship between food insecurity and transactional sex is well documented in the literature (Sheira *et al.*, 2023). The exchange of money or gifts for sexual relations is believed to be one means that women use to cope with negative shocks (Gong, de Walque and Dow, 2019), and in most of the time, when women find themselves unemployed, without a stable income and lacking the skills to secure a financial alternative, it's clear that they are dependent on men for the provision of food and other basic needs. This was proven to be true in Namibia and several other countries (Fitzgerald-Husek *et al.*, 2011). Conflict-induced displacement in rural Nepal disrupted farming activities, leading young women to engage in prostitution to provide financial support for their families. Similarly, in northern Uganda, transactional sex was adopted as a survival strategy when farming was no longer viable (Hutchinson *et al.*, 2016).

#### **4.3.7 Crop looting**

As described in our previous pages, the conflicts raging in the Minembwe are marked by identity-based oppositions between the highlanders, these antagonisms have led to the formation of armed militias and self-defense groups fighting alongside their respective ethnic groups. Those armed groups have succeeded in extending the influence over vast territories and the takeover of large geographical areas adds to the complexity of the conflicts and makes it difficult to resolve them peacefully. Faced with escalating tensions, and permanent clashes, the government reacted by deploying thousands of troops to the region to combat those armed groups. However, that intervention had unforeseen effects.

The military, not receiving regular food supplies from the state, turned to harvesting from the fields of local populations. as reported in the interview:

The war also had a negative impact on them (military). We had the same issues. They were also starving like us, we didn't know whether the government was supplying them, but what showed that the state wasn't, is that they were going to steal from the farmers' fields (Interview 17-Bu, 21 July 2023).

Another interviewee said:

It's really complicated, in Bijombo, there is a serious problem where the crop owners are obliged to stand at one end of their fields and the soldiers stand

at the other to harvest, it is like a race between the field owners and the soldiers (Interview 21-B, 29 July 2023).

Several people were arrested trying to report these cases according to the same interviewee.

In different villages in Minembwe, field owners began to spend the night in their fields with weapons and there were cases of clashes between field owners and thieves and the military as reported by a military officer.

There have been clashes between soldiers and civilians in Ilundu village, young guys have ambushed in the maize fields, soldiers who were hungry and came to harvest. There have been intense clashes throughout the day and death have been reported on both sides (Interview 25-M, 17 August 2023).

one interviewee said as well that.

It's hard to understand how the FARDC (National army), who were supposed to protect the population and their property, are the ones who sometimes destabilizes the population by harvesting from their crops (Interview 17-Bu, 21 July 2023).

Crop looting by the uncontrolled military and other starving people has led to tensions between the population itself and between the local population and the army, exacerbating the already existing conflict.

#### **4.3.8 illicit arms and ammunition trafficking**

Hunger drove soldiers to act desperately to survive to the absence of supplies. This underlines the severe consequences of armed conflicts not only on civilian households but also on the military, who often find themselves in difficult conditions during wars. The illegal sale of arms and ammunition to civilians and self-defense groups has contributed to the proliferation of weapons in the conflict-affected region. It has also exacerbated violence and led to an escalation of the conflict, increasing the risk of loss of life and destruction. I quote from the military officer interviewed.

They were selling ammunition just like in the market. They did it several times, I'm a witness to this, because we transferred undisciplined soldiers who had sold ammunition to civilians to Bukavu's central prison (Interview 25- Bu, 17 August 2023).

Crop looting and illicit arms and ammunition trafficking as food insecurity coping strategies reported in Minembwe, raises questions about power and resistance. Scott in his book "Weapons of the Weak: Everyday Forms of Peasant Resistance" discusses how peasants use everyday forms of resistance to access livelihoods (Scott, 1985). In the case of Minembwe, there appears to be a direct struggle on the side of local population and the military in accessing food resources. peasants and soldiers react to difficult conditions in ways that can be seen as resistance in the face of scarcity. The analysis of this behavior through James C. Scott's findings highlights the multiple ways in which local populations resist pressure, even in complex conflict situations. Survival strategies and everyday forms of resistance intertwine, creating a complex web of unexpected consequences. In war period, Petty theft, armed robbery, and the illicit trade in firearms and explosives increases, prostitution become widespread (Teodosijevic, 2003).

#### **4.3.9 Risky food quest**

People run risks in their search for means of survival, it's true that they have difficulties gaining access, especially in certain areas that are much more fertile, because of the activism of the armed groups, there are people who have found it impossible to continue looking for food in their tinny plots of crops around their homes, but they take risk of going a bit far by crossing areas controlled by armed groups. However, there have been several cases of murder.

We were sometimes constrained to travel through dangerous areas occupied by armed groups from the highlands to fetch food in towns, from Bijombo to Uvira, a 4-day walk and from IDP camp to our abandoned villages. The search for food drove us to undertake such difficult and dangerous decisions (Interview 22-Ke 15 August 2023).

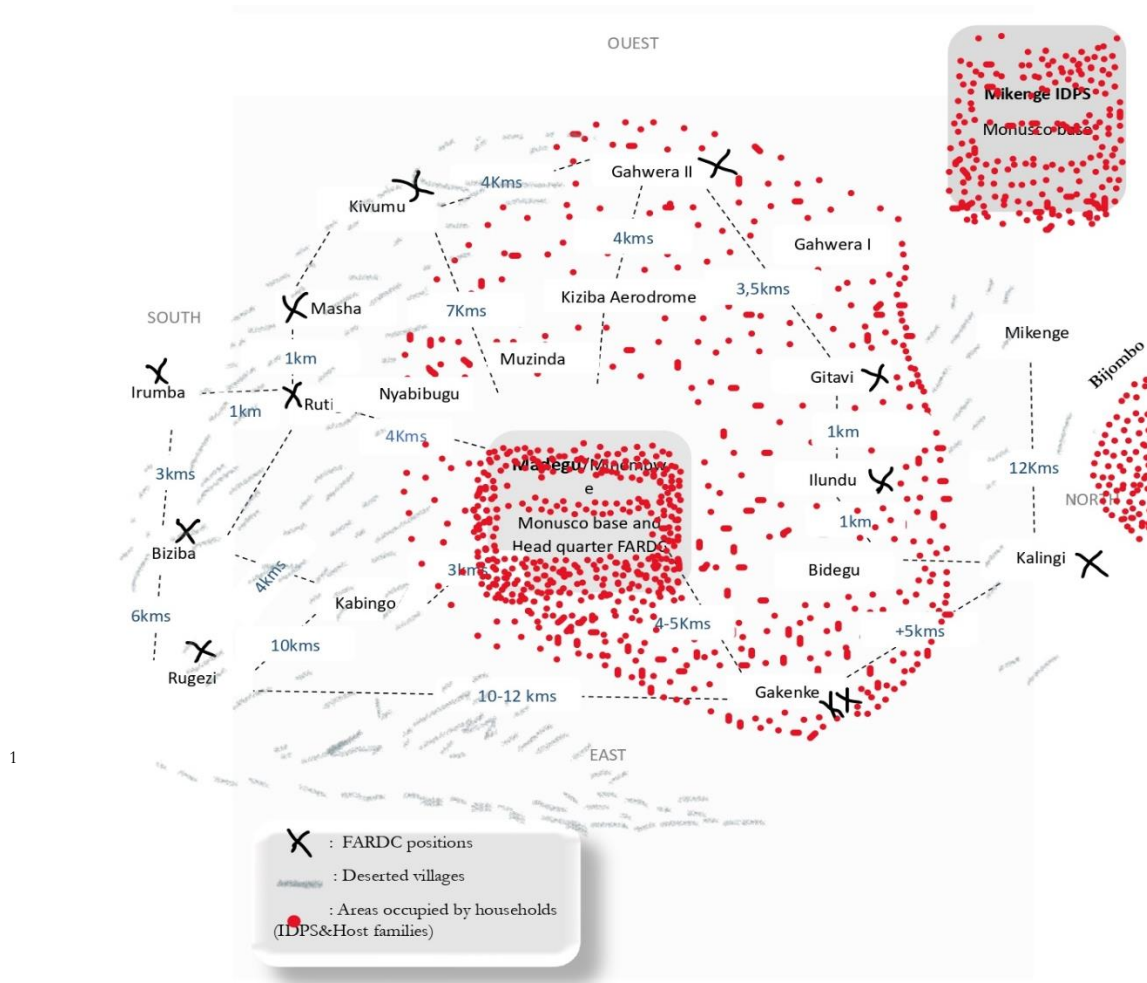
This is particularly true for internally displaced people, who often decide to collect food in remote areas sometimes in their abandoned villages.

According to an interviewee:

Three women were decapitated, and their bodies mutilated by the MaiMai armed group in Kivumu village (deserted village), and another was taken hostage when they went to seek food far from the villages where they had settled as internally displaced (Interview 5-M 19 August 2023).



## Map 2. The Geography of Crisis: Displaced Households, Deserted Villages and the Struggle for Survival in Minembwe



Minembwe Highlands has been for the last 5 years the scene of a harrowing humanitarian crisis, strikingly illustrated by the above drawing that I have attempted to represent based on mileage estimates from Dr. Delphin Ntanyoma, a PhD researcher at ISS. The drawing highlights the areas occupied by internally displaced households and host families within Minembwe. The red dots on the map represent villages where households are concentrated and trapped, while the gray dashes show abandoned villages. People are often confined to small spaces far from their villages of origin. The

<sup>1</sup> FARDC Stands for “Forces Armées De la République Démocratique du Congo », National Army

lack of food drives them to take considerable risks by crossing territories occupied by armed militias, in the hope of finding food to survive.

The black cross symbols scattered across the map indicate the positions of regular state soldiers deployed on missions to combat the militias. Women are thus exposed when they go to their land in the abandoned villages to fetch food. The closer displaced households are to their area of origin, the more likely they are to return there in times when the need of food is higher or in case the assistance, they get is not sufficient, and when they think conditions are favorable, they periodically return to their homes to fetch for food and graze their remaining cattle or maintain ties. This is what is called pendular displacement (Davies,2012).

One heartbreaking aspect of this crisis concerns women who undertook the perilous journey back to the villages they were forced to abandon in Kivumu village from kiziba (hosting zone). In a desperate attempt to find food for their families, some of these women have fallen victim to barbaric acts, murdered by ruthless armed militias. This tragic episode underlines the scale of the challenges facing households in the Minembwe, where the basic quest for food often turns into a struggle between survival and death.

#### **Survival at all costs: The Nightmare of the Women of Minembwe**



This picture was captured on Sunday 19 April 2020 and features internally displaced women who had settled in Kiziba, a hosting area. As was their custom, they decided to leave this place and head for their deserted villages in Kivumu (6kms) in search of food. Unfortunately, they were apprehended by militia who, before lynching them, first rap them. One of these women was familiar to me, she was from the neighboring village. This desperate search for food in a conflict-ridden environment is a high-risk strategy.

#### **4.4.0 Clandestine firewood cutting**

An interviewee described a complex situation that has developed during periods of conflict in Minembwe, the consequences of conflict that have led to a large influx of displaced people into villages with minimal security. This situation exposes the displaced, as well as the host communities,

to major challenges. The problem lies in the way this situation has led to increased competition for local resources, particularly firewood.

The act of cutting wood without permission on other people's land has exacerbated tensions (Interview 9-Ug 19 August 2023)

The arrival of refugees in rural areas often leads to an increase in demand for resources such as firewood (Ruiz and Vargas-Silva, 2017), resulting in the deforestation of areas close to homes. In rural Tanzania, as mentioned by Vergas-Silva(ibid), it has been common for households to collect wood for cooking, responsibilities that are usually assumed by women. In Mozambique, the rural population has sought protection in the major cities or along the corridors. During the period of conflict, the Beira corridor was perceived as the safest, attracting many residents to settle there (Teodosijevic, 2003). Teodosijevic(ibid) argues that the high population density creates a number of problems including the depletion of wood resources, mainly used for charcoal production which can lead to significant environmental damage. In parallel to the impact described in the study of Teodosijevic on the arrival of refugees or internally displaced people in rural areas, the situation in Minembwe, characterized by violent conflict and massive population displacement, generates similar challenges linked to the increased demand for resources. The IDPs together with the host populations have intensified the need for firewood, resulting in considerable pressure on local natural resources, and in particular this has led to escalating disputes between owners and those engaged in cutting the wood.

#### **4.4.1 Constrained Grazing**

The situation where cows cannot move further away due to frequent acts of looting forces them to stay close to residential areas. This exposes the animals to the risk of crop destruction, triggering conflicts between farmers and breeders. The proximity of cows to residential areas creates a dilemma, as on the one hand, they seek protection from looting, but on the other, this creates problems linked to the preservation of local crops. Thus, this complex dynamic reflects the challenges faced by herders and farmers in cohabiting with animals considering the threat of looting and potential conflicts linked to crop destruction and the inaccessibility of the grazing land. An integrated and balanced management of these aspects is needed to foster peaceful coexistence between the various agricultural and livestock activities.

In case cows escape the herdsman's vigilance and manage to attack fields, the owners either report it to the police or take revenge. There have been cows slaughtered in these circumstances (Interview 14-Ug 21 August 2023).

Research sheds light into the dispute between Fulani herders and farmers over the management of agricultural produce and land use, showing that this has become a threat to peace in many parts. This is reported in Nigeria, particularly in the Savannah and Guinea regions (Ofem and Basse, 2014). This aligns with the argument that tensions over pastoral land loss exist in areas where cattle owners restrict access to previously open rangelands (Bassett, 1988). Thus, the decision to restrict livestock to grazing areas and confine them to restricted spaces emerges as an essential coping mechanism during periods of frequent looting. By keeping livestock close to dwellings, they become a crucial source of livelihood to protect, particularly when it comes to rescuing food-insecure

households during armed conflict. Indeed, animals represent a tangible form of wealth for herders, often constituting their main source of income and food security.

During periods of unrest, keeping livestock nearby offers herders a form of control and protection against the risk of looting. Animals become a strategic resource, not only for immediate household subsistence but also as a long-term investment. However, the downside is that, concentration of livestock close to residential areas creates a breeding ground for conflict. Farmers, closely dependent on the fertility of their land, see their crops exposed to the constant risk of being damaged by livestock. This generates tensions and confrontations between herders and farmers, perpetuating existing rural conflicts.<sup>2</sup>

#### **4.4.2 Reflection on the findings**

From the above findings, we could claim that coping strategies vary according to the constraints and opportunities specific to each environment. The reasons why certain strategies do not apply in Minembwe during periods of conflict, despite their use in other settings, would be explained by contextual factors, such as conflicts, geographical situation or cultural norms. For example, the sale of assets, such as livestock, may be hampered by declining market value due to economic disruption and loss of grazing space, making this strategy less viable. Market blockages and security concerns may also deter Minembwe households from selling assets. Borrowing money at a high rate to buy food also did not apply in Minembwe during the conflicts. Difficulties in accessing sources of finance and the increased risk of over-indebtedness due to high rates are potential reasons for this. In addition, begging as a coping strategy for food insecurity may be limited by cultural norms.

The resemblances found with the coping strategies assessed by the CSI tool are considerable. This reinforces the validity of findings and suggests that the standardized tool has relevance in certain contexts. This consistency can serve as a solid basis for targeted development and humanitarian aid actions. Nevertheless, it is equally important to consider the specificities and divergences that emerge particularly regarding the Minembwe situation and conflict environments. The fact that certain strategies mentioned in the literature do not manifest themselves in Minembwe's conflict conditions raises important questions. This may indicate that Minembwe households face unique challenges that require different responses from those prescribed by the standardized tools when designing interventions.

On the other hand, the identification of Minembwe-specific strategies not captured by the CSI and not presented in the literature is a significant contribution to the understanding of local dynamics. This may reflect deep contextual adaptations and highlight the importance of taking cultural, conflict settings, and geographical aspects into account when designing coping strategies assessment tools.

Several other observations emerge in reflection to the findings compared to previous work on coping strategies.

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<sup>2</sup> **Notes:** Interview transcripts are coded as M for Madegu, MK for Mikenge, B for Bijombo, Ug for Uganda, Ke for Kenya, and Bu for Burundi.

One of the central questions of the CSI tool to be explored is “What do you do when you don’t have enough food, and don’t have enough money to buy food?” (Maxwell and Watkins, 2003). This question concerns the orientation of the standardized tool towards financial constraint and resource availability as determinants of the coping strategies. This study highlighted that coping strategies are not exclusively the result of a lack of money or resources. For example, harvesting at night, skipping of farming seasons, or harvesting immature crops, and cultivating small plots of land around residential areas, have their origins mainly in food insecurity caused by conflict situations, such as fear of kidnapping or attack by militias, or fear of crop looting. The CSI instruments do not take these acts of violence into account, focusing exclusively on financial or resource-related limitations.

Moreover, it is important to note that the literature on coping strategies to food insecurity tends to focus more on current and immediate strategies, leaving aside the long-term mechanisms that households seek to put in place to ensure their lifelong food supply in a conflict context.

In terms of long-term strategies, some households have repeatedly chosen to migrate to locations considered safer, both inside and outside Minembwe. This migration is a response to growing insecurity and food shortages, and reflects a coping strategy aimed at seeking more stable living conditions and more accessible food resources.

Secondly, displaced households who have lost their land, rely on the land-for-labor and sharecropping strategies to gain access to farming land in the host communities. This strategy enables conflict-affected people to get food by providing their labor power, which is essential to overcoming food shortages.

Thirdly, as a result of growing insecurity, some households try to adapt their farming methods, giving priority to growing small gardens close to their homes and crop association practice. This enables them to reduce the risks associated with moving to more distant and insecure farmland, thus guaranteeing a more secure food supply. In addition, armed conflict has forced some heads of household to change their profession or economic activity, switching from livestock farming to working the land or other forms of income generating activities. This adaptation testifies to their ability to adjust to new economic realities in order to maintain their livelihoods. Ultimately, farmers avoid cultivating during periods when the danger of attacks or looting by armed groups is highest. This strategy aims to protect their resources(financial), including seeds, from loss or looting. It reflects prudent risk management in a context of persistent insecurity.

These strategies illustrate how Minembwe households are proactively adapting to the difficult conditions created by inter-ethnic armed conflict, seeking to ensure their long-term food security despite the constant challenges they face.

Based on our interviews with participants and the life stories collected, the conflict situation has persisted in Minembwe region and more widely in the high plateau for over five years. This situation is characterized by intermittent periods of calm, which may last a few months or even a year at most, but invariably the cycle of attacks and violence resumes. This has significant implications for the strategies and efforts households deploy to ensure their survival. Importantly, local households face immense uncertainty as to how long the periods of calm will last and when hostilities will resume. This chronic instability jeopardizes strategies aimed at establishing sustainable livelihoods. Periods of

relative peace can enable some households to begin rebuilding their lives, cultivating their land, investing in agricultural projects, and diversifying their economic activities. However, their efforts are constantly threatened by the recurrence of armed conflict. The cyclicity of conflict disrupts the long-term plans of local populations, discouraging them from investing in sustainable livelihoods.

## CHAPTER FIVE

### CONCLUSION AND RECOMMENDATIONS

This study has examined how households cope with food insecurity in conflict-affected settings. It addressed how conflict is shaping households' coping strategies for food insecurity and how the coping strategies adopted may, in turn, perpetuate existing conflicts and expose individuals and households to violence.

Understanding and addressing these questions could help to guide interventions aimed at improving food security in conflict-affected households and to better understand the underlying mechanisms and consequences of coping strategies in such contexts.

Regarding how conflict shapes local coping strategies, the findings from households and key informants reveal, on the one hand, similarities in coping strategies with those observed in non-conflict contexts. For example, in the context of floods, drought, and other disasters. Analogies are also reflected in WFP and CARE's Coping Strategies Index (CSI). However, Night harvesting, Early (premature) weaning, land-for-labor and sharecropping contracts, shift in customary vocation, cultivation of tiny gardens and crop association, and skipping of farming seasons, were reported as conflict-driven coping strategies in Minembwe.

The study yielded intriguing findings regarding whether and in what ways the coping strategies employed participate in intensifying and protracting the ongoing conflict. Transactional sex, crop looting, illicit arms and ammunition trafficking, risky food quest, clandestine firewood cutting, and Constrained grazing have been reported as contributing to the perpetuation of existing conflicts within Minembwe high plateau.

The study highlights the need to reconsider conventional approaches to food insecurity coping strategies in areas affected by violent conflict. This means integrating a more detailed understanding of local dynamics. Conventional strategies for adapting to food insecurity do not take sufficient account of the specific features of violent conflict. In the context of the Minembwe highlands in the Democratic Republic of Congo, conflicts have had serious consequences for household food security, influencing the choices they make to cope with growing food insecurity.

The implemented coping strategies not only meet immediate food needs, but often lead to the escalation of conflicts and enhanced vulnerability to violence.

Finding appropriate solutions to the challenges posed by these strategies requires close collaboration between researchers, policymakers, non-governmental organizations and local communities. This collaboration aims to implement initiatives that promote food security while contributing to the peaceful resolution of conflicts. It is essential to design initiatives capable of strengthening the resilience of communities in the face of food insecurity, while minimizing the negative repercussions on conflict.

Referring to the persistence of conflict and perils that people are enduring, I previously mentioned that the crux of the conflict dynamic revolves around a coalition of multiple militias with the aim of targeting an ethnic group at risk of losing their ancestral lands. Militias employ a range of tactics, which encompass the use of weaponry and the impediment of local population to cramped areas, thereby severely restricting their access to indispensable food resources. Against this backdrop,

the foremost duty to address the issue lies with the Congolese government, the guarantor of the safety of its citizens and their properties. The state must work towards restoring the security of its people and their possessions without any form of discrimination, recognizing that peace is a fundamental prerequisite for accessing alternative means of livelihood. Without peace, all other initiatives may end in failure.

In the tense context of Minembwe, responses to emergency situations are mainly of a "humanitarian" nature, orchestrated mainly by the diaspora and local organizations. They are essential to save lives and protect livelihoods in the short term. However, they generally fail to provide lasting solutions to the complex root causes of these crises. This is due to the absence of the long-term policies and strategies needed to guarantee people's security in the long term. In fact, the policy frameworks developed for sustainable development actions, although relatively well established, often prove inadequate in contexts of extreme instability and protracted conflict. As a result, governments need to tackle the root cause of the crisis.

The adoption of Security Council Resolution 2417 in 2018 marked a significant turning point regarding the relationship between food insecurity and conflict. The resolution established an unprecedented global commitment, at a high multilateral level, aimed at breaking the destructive link between hunger and conflict. Specifically, the resolution pledges to formally prohibit the deliberate use of hunger as a weapon of war. It also opens the possibility of sanctions against those who deliberately provoke hunger in armed conflicts. It is essential that this resolution takes account of the local and regional context in its application.

The proposals put forward in this research open interesting prospects for the revision of approaches aimed at mitigating the impact of food insecurity in conflict-ridden regions, while contributing to the reduction of tensions and the peaceful resolution of crises. These ideas could offer alternatives to strategies that fuel the rise of conflict, as well as guidelines for action by humanitarian organizations.

By understanding the specific coping strategies to food insecurity in a conflict context, humanitarian organizations can customize their approaches. They can set up food programs that take account of local particularities and, by design, aim to ease tensions and reduce violence. They can also deploy initiatives designed to strengthen community resilience in the face of food insecurity.

A coordinated partnership between humanitarian agencies, the Congolese government and local organizations would maximize the impact of their interventions. Enhanced communication and collaboration between stakeholders can greatly contribute to stability and conflict resolution. At the same time, the promotion of awareness of peaceful conflict resolution within communities in conflict can be initiated, including mediation and inter-community dialogue programs.

Non-governmental organizations (NGOs) also have a key role to play in advocating at international level the implementation of resolutions such as Security Council Resolution 2417. They can press for sanctions to be implemented against those who use hunger as a weapon of war.

Finally, they can support research aimed at better understanding local dynamics and the impact of conflict on food security. This would contribute to the development of more effective, knowledge-informed strategies.



This research has specifically focused on a single aspect of livelihood, namely food insecurity. However, it is important to note that livelihood is complex and encompasses a variety of components, including natural capital, economic or financial capital, human capital and social capital. In my view, examining the single aspect is not sufficient to gain a full understanding of the implications of conflict on livelihoods. Given the complexity of livelihoods, it would be timely to consider, in a future perspective, more comprehensive research aimed at a holistic understanding of how violent conflict, including inter-ethnic conflict, may have influenced livelihoods, and what the implications of this influence are for conflict escalation. Such an approach would make it possible to take these issues beyond the local context and analyze them on a regional and national scale.

## REFERENCES

- Africa Center for Strategic Studies (2023) 'Conflict Remains the Dominant Driver of Africa's Spiraling Food Crisis', pp.1–4.
- Akukwe, T.I. et al. (2023) 'Flood-induced food insecurity and coping strategies: A gender-based analysis of agrarian households in South-eastern Nigeria', *GeoScape*, 17(1), pp. 20–33. Available at: <https://doi.org/10.2478/geosc-2023-0002>.
- Allen, F. (1985). On the fixed nature of sharecropping contracts. *The Economic Journal*, 95(377).
- Amungwa, F. A. (2011). The evolution of conflicts related to natural resource management in Cameroon. *Journal of Human Ecology*, 35(1), 53-60.
- Ansah, I.G.K., Gardebroek, C. and Ihle, R. (2022) 'Using assets as resilience capacities for stabilizing food demand of vulnerable households', *International Journal of Disaster Risk Reduction*, 82(August), p. 103352. Available at: <https://doi.org/10.1016/j.ijdrr.2022.103352>.
- Arcand, J. L., Rodella-Boitreaud, A. S., & Rieger, M. (2015). The impact of land mines on child health: evidence from Angola. *Economic Development and Cultural Change*, 63(2), 249-279.
- Autesserre, S. (2006) 'How Local Disputes Fuel Regional Conflict', *Foreign Affairs*, 87(3), pp. 94 110.
- Badewa, A. S., & Dinbabo, M. F. (2023). Multisectoral intervention on food security in complex emergencies: a discourse on regional resilience praxis in Northeast Nigeria. *GeoJournal*, 88(2).
- Bapolisi, W.A. et al. (2021) 'Gendered determinants of food insecurity in ongoing regional conflicts, North and South Kivu, the Democratic Republic of Congo', *Agriculture & Food Security*, pp. 1–9. Available at: <https://doi.org/10.1186/s40066-021-00285-x>.
- Bassett, T. J. (1988) 'The political ecology of peasant- herder conflicts in the northern Ivory Coast', *Ann. Assoc. Am. Geographers* 78(3):433 472.
- Bauer, S. and Sassi, C. (2013) 'Households Coping Strategies and Food Consumption Gap in Sudan', (September 2015), pp. 1–16.
- Boyce, C. and Neale, P. (2006) 'conducting in-depth interviews: A Guide for Designing and Conducting Interviews for Evaluation Input. PATHFINDER International Tool Series, Monitoring and Evaluation-2, May 2006', Attachment and Human Development, (May).
- Brabant, J. and Nzweve, J.-L.K. (2013) *La houe, la vache et le fusil*.
- Breisinger, clemens, olivier ecker, Jean-François maystadt (2014). "How to Build Resilience to Conflict." *The Role of Food Security*.
- Brück, T., Habibi, N., Martin-Shields, C., Sneyers, A., Stojetz, W., & Van Weezel, S. (2016). The relationship between food security and violent conflict. *Report to the Food and Agriculture Organization, ISDC, Berlin*.
- Bryceson, D.F. (2016) 'Development Perspective Linked references are available on JSTOR for this article: African Rural Labour, Income Diversification & Livelihood Approaches : A Long-term Development Perspective', *Review of African Political Economy*, 26(80), pp. 171–189.

- Bundervoet, T., Verwimp, P., & Akresh, R. (2009). Health and civil war in rural Burundi. *Journal of human Resources*, 44(2), 536-563.
- CARE and WFP (2003), The Coping Strategies Index: Field Methods Manual. Nairobi
- Chagomoka, T. et al. (2016) 'Food coping strategies in northern Ghana. A socio-spatial analysis along the urban-rural continuum', *Agriculture and Food Security*, 5(1), pp. 1–18. Available at: <https://doi.org/10.1186/s40066-016-0052-x>
- Chambers, R. and Conway, G.R. (1992) 'Sustainable rural livelihoods: practical concepts for the 21st century', IDS Discussion Paper, 296.
- Chauveau, J. P., & Richards, P. (2008). West African insurgencies in agrarian perspective: Côte d'Ivoire and Sierra Leone compared. *Journal of Agrarian Change*, 8(4), 515-552.
- Danso-Abbeam, G., Asale, M.A. and Ogundeji, A.A. (2023) 'Determinants of household food insecurity and coping strategies in Northern Ghana', *GeoJournal*, 88(2), pp. 2307–2324. Available at: <https://doi.org/10.1007/s10708-022-10742-0>.
- Davies, A. (2012) 'IDPs in Host Families and Host Communities: Assistance for hosting arrangements', (April), pp. 1–53.
- Davies, S., (1996) *Adaptable Livelihoods. Coping with Food Insecurity in the Malian Sahel*, London
- Devereux, S (2001). Livelihood insecurity and social protection: re-emerging issue in rural development. *Development Policy Review*, 19(4): 517-519.
- Duque, V. (2016). Early-life conditions, parental investments, and child development: Evidence from a violent conflict. *Documento de trabajo, Columbia University, Nueva York*.
- Dorward, A., Poole, N., Morrison, J., Kydd, J., & Urey, I. (2003). Markets, institutions and technology: Missing links in livelihoods analysis. *Development policy review*, 21(3), 319-332.
- Ellis, f, (2000). Rural livelihoods and diversity in developing countries, Oxford, OUP. Empirical Overview of Economic and Social Consequences. In Stewart, F. and Fitzgerald, V.
- Englebort, P. (2016) *Conflict in the democratic Republic of Congo*, Routledge Handbook of Security Studies: Second Edition. Available at: <https://doi.org/10.4324/9781315753393>.
- FAO, IFAD, UNICEF, WFP and WHO (2022). The State of Food Security and Nutrition in the World 2022. Repurposing food and agricultural policies to make healthy diets more affordable. Rome, FAO. <https://doi.org/10.4060/cc0639>.
- FAO (1996) *World Food Summit–Final Report–Part 1*.
- Fitzgerald-Husek, A., Martiniuk, A. L., Hinchcliff, R., Aochamus, C. E., & Lee, R. B. (2011). " I do what I have to do to survive": An investigation into the perceptions, experiences and economic considerations of women engaged in sex work in Northern Namibia. *BMC women's health*, 11(1), 1-8.
- Food and Agriculture Organization. (2017). Lake Chad Basin crisis Response strategy (2017–2019): Vol.March (Issue March 2017). [www.fao.org/publications/lake\\_chad\\_basin\\_crisis](http://www.fao.org/publications/lake_chad_basin_crisis).

- Gong, E., de Walque, D. and Dow, W.H. (2019) 'Coping with risk: Negative shocks, transactional sex, and the limitations of conditional cash transfers', *Journal of Health Economics*, 67, p. 102219. Available at: <https://doi.org/10.1016/j.jhealeco.2019.06.006>.
- GRFC (2022) 'Global Report on Food Crisis'.
- Gupta, P., Singh, K., Seth, V., Agarwal, S., & Mathur, P. (2015). Coping strategies adopted by households to prevent food insecurity in urban slums of Delhi, India. *Journal of Food Security*, 3(1), 6-10.
- Hendrix, C. S., & Haggard, S. (2015). Global food prices, regime type, and urban unrest in the developing world. *Journal of Peace Research*, 52(2), 143-157.
- Hennink, M., Hutter, I., & Bailey, A. (2020). *Qualitative research methods*. Sage.
- Hiernaux, J. (1965). Note sur les Tutsis de l'Itombwe. *Bulletins et Mémoires de la Société D'anthropologie de Paris*, 7(4), 361-379.
- Hutchinson, A., Waterhouse, P., Neal, S., & Ingham, R. (2016). Understanding early marriage and transactional sex in the context of armed conflict: protection at a price. *International perspectives on sexual and reproductive health*, 42(1), 45-49.
- Jackson, S. (2006). Sons of which soil? The language and politics of autochthony in Eastern DR Congo. *African Studies Review*, 49(2), 95-124.
- Kemmerling, B., Schetter, C. and Wirkus, L. (2022) 'The logics of war and food (in)security', *Global Food Security*, 33(April), p. 100634. Available at: <https://doi.org/10.1016/j.gfs.2022.100634>.
- Linares Quero, A., Pérez Alonso de Armiño, C. and Sánchez Montero, M. (2023) 'Improving famine early warning systems: a conflict-sensitive approach', *Conflict, Security and Development*, 23(1), pp. 23–42. Available at: <https://doi.org/10.1080/14678802.2023.2188570>.
- Maccini, S., & Yang, D. (2009). Under the weather: Health, schooling, and economic consequences of early-life rainfall. *American Economic Review*, 99(3), 1006–1026.
- Mary, S., & Mishra, A. K. (2020). Humanitarian food aid and civil conflict. *World Development*, 126, 104713.
- Mathys, G. (2017) 'Bringing history back in: Past, present, and conflict in Rwanda and the eastern democratic republic of Congo', *Journal of African History*, 58(3), pp. 465–487. Available at: <https://doi.org/10.1017/S0021853717000391>.
- Maxwell, D.G. and Watkins, B. (2003) 'The Coping Strategies Index: A tool for rapidly measuring food security and the impact of food aid programs in emergencies 1 Population Explorer View project Urban Land Tenure and Policies in a Developing World View project', (February 2015). Available at: <https://www.researchgate.net/publication/265059159>.
- Messer, E., & Cohen, M. J. (2007). Conflict, food insecurity and globalization. *Food, Culture & Society*, 10(2), 297-315.
- Messer, E., & Cohen, M. J. (2015). Breaking the links between conflict and hunger redux. *World Medical Health Policy*, 7(3), 211-233.

- Mjonono, M., Ngidi, M., & Hendriks, S. L. (2009, July). Investigating household food insecurity coping strategies and the impact of crop production on food security using coping strategy index (CSI). In *17th International Farm Management Congress, Bloomington/Normal, Illinois, USA*.
- Mkhize, M. C. (2016). Peacebuilding in the Democratic Republic of. African. *Frontiers: Insurgency, Governance and Peacebuilding in Postcolonial States*.
- MONUSCO (2020) Note analytique sur la situation des droits de l'homme dans les hauts plateaux des territoires de Mwenga, Fizi et Uvira, province du Sud-Kivu, entre février 2019 et juin 2020.
- Morse, S. and McNamara, N. (2013) Context of the Sustainable Livelihood Approach, Sustainable Livelihood Approach. Available at : [https://doi.org/10.1007/978-94-007-6268-8\\_3](https://doi.org/10.1007/978-94-007-6268-8_3).
- Mulumeoderhwa, M. ; Mugisho, M. ; Rushigira, C. ; Biganiro, M. ; Vwima, N. ; Mushagalusa, N. Stratégies d'adaptation et sécurité alimentaire des ménages dans les hauts plateaux de minembwe au Sud-Kivu. *Agron. Afr.* 2020, 32, 207–220.
- Muriuki, J., Hudson, D., Fuad, S., March, R. J., & Lacombe, D. J. (2023). The spillover effect of violent conflicts on food insecurity in sub-Saharan Africa. *Food Policy*, 115, 102417.
- Ndahindurwa, D.B. (2021) Humanitarian Governance at the Crossroads: Violence, Remoteness and Ethnic Discrimination in South Kivu (DRC). International institute of social studies. Research paper.
- Ntanyoma, R.D. (2020) 'Genocide Warning: The Vulnerability of Banyamulenge ' "Invaders" Working Paper. November 2019. Available at: <https://doi.org/10.13140/RG.2.2.16544.94724>.
- Morvan, H., & Nzweve, J. L. K. (2010). Small Steps Towards Peace.
- O'Leary, Z (2017) the essential Guide to doing your Research project, 55 city Road London EC1Y 1SP: SAGE publications LTD.
- Ofem, O.O. and Basse, I. (2014) 'Livelihood and conflict dimension among crop farmers and Fulani herdsmen in Yakurr region of Cross River State', *Mediterranean Journal of Social Sciences*, 5(8), pp. 512–519. Available at: <https://doi.org/10.5901/mjss.2014.v5n8p512>.
- Olanrewaju, O., & Balana, B. B. (2023). Conflict-induced shocks and household food security in Nigeria. *Sustainability*, 15(6), 5057.
- Payne, P. R., & Lipton, M. (1994). How third world rural households adapt to dietary energy stress: the evidence and the issues (Vol. 2). Intl Food Policy Res Inst.
- Peng, W., Dernini, S. and Berry, E.M. (2018) 'Coping With Food Insecurity Using the Sociotype Ecological Framework', *Frontiers in Nutrition*, 5(November). Available at: <https://doi.org/10.3389/fnut.2018.00107>.
- Pinstrup-Andersen, P., & Shimokawa, S. (2008). Do poverty and poor health and nutrition increase the risk of armed conflict onset? *Food Policy*, 33(6), 513-520.
- Rademacher-Schulz, C., Schraven, B., & Mahama, E. S. (2014). Time matters: shifting seasonal migration in Northern Ghana in response to rainfall variability and food insecurity. *Climate and Development*, 6(1), 46-52.

- RDC, Ministère de l'Agriculture et du Développement Rural. (2014). *Rapport du 10<sup>ème</sup> cycle d'analyse du Cadre Intégré de Classification de la Sécurité Alimentaire (IPC)* (p. 39). Kinshasa.
- Reardon, T (1997), 'Using Evidence of House- hold Income Diversification to Inform Study of the Rural Nonfarm Labor Market in Africa', World Development.
- Reardon, T, C Delgado & P Matlon (1992), 'Determinants and Effects of Income Diversification amongst Farm Households in Burkina Faso', Journal of Development Studies.
- Rudolfson, Ida. "Food insecurity and domestic instability: A review of the literature." *Terrorism and political violence* 32.5 (2020): 921-948.
- Ruiz, I. and Vargas-Silva, C. (2017) 'The Consequences of Forced Migration for Host Communities in Africa', *Revue d'Economie du Développement*, 25(3-4), pp. 135-154. Available at: <https://doi.org/10.3917/edd.313.0135>.
- Rukundwa, S.L. (2004) 'The Banyamulenge of the Democratic Republic of Congo: A cultural community in the making', *HTS. Theological Studies*, 60(1-2), pp. 369-383. Available at: <https://doi.org/10.4102/hts.v60i1/2.509>.
- Rusomyo, R., Junlin, H., & Mangare, C. (2017). The role of social networks as survival strategies in agro-pastoral communities in arid and semi-arid lands in Tanzania.
- Russell, B. (2014) 'Interviewing I: Unstructured and Semi structured', *Igarss 2014*, (1), pp. 1-5.
- Sassi, M. (2021) 'Coping strategies of food insecure households in conflict areas: The case of South Sudan', *Sustainability (Switzerland)*, 13(15). Available at: <https://doi.org/10.3390/su13158615>.
- Scoones, I. (1998). Sustainable rural livelihoods: a framework for analysis.
- Scoones, I. (2009). Livelihoods perspectives and rural development. *The journal of peasant studies*, 36(1), 171-196.
- Scott, J. C. (1985). *Weapons of the weak: Everyday forms of peasant resistance*. Yale University Press.
- Sen, A. (1975). Employment, institutions and technology: Some policy issues. *Int'l Lab. Rev.*, 112, 45.
- Shemyakina, O. (2022) 'War , Conflict , and Food Insecurity'.
- Sheira, L.A. et al. (2023) 'Food Insecurity and Engagement in Transactional Sex Among Female Secondary Students in Rwanda', *AIDS and Behavior* [Preprint]. Available at: <https://doi.org/10.1007/s10461-023-04173-2>.
- Snel, e & Staring, R.(2001). Poverty, migration, and coping strategies: an introduction. *European Journal of Anthropology*, 38: 7-22.
- Stewart, F, Huang, C. and Wang, M (2001). *Internal Wars in Developing Countries*.
- Teodosijevic, S. B. (2003). Armed conflicts and food security. The effects of violent conflict on household resilience and food security: Evidence from the 2014 Gaza conflict. *World Development*, 119, 203-223).
- Tor A. Benjaminsen & Boubacar Ba (2019) Why do pastoralists in Mali join jihadist groups? A political ecological explanation, *The Journal of Peasant Studies*, 46:1, 1-20.

- TPO (2019). Evaluation réalisée par TPO RDC avec ses partenaires locaux ADPS asbl et A.H.P asbl du 09 au 19 Aout 2019.
- UNHCR (2022). Global report 2022. UNHCR. <https://reporting.unhcr.org/global-report-2022>
- UNICEF (2016) *From the First hour of life*. Available at: <https://data.unicef.org/resources/first-hour-life-new-report-breastfeeding-practices>.
- United Nations (1967). Principles and Recommendations for the 1970 Population Censuses. Statistical papers, series M, No. 44. New York City
- Unicef, & World Health Organization. (2017). The state of food security and nutrition in the world 2017: Building resilience for peace and food security.
- Verweijen, J. and Brabant, J. (2017) ‘Cows and guns. Cattle-related conflict and armed violence in Fizi and Itombwe, eastern DR Congo’, *Journal of Modern African Studies*, 55(1), pp. 1–27. Available at: <https://doi.org/10.1017/S0022278X16000823>.
- Verweijen, J. and Vlassenroot, K. (2015) ‘Armed mobilization and the nexus of territory, identity, and authority: The contested territorial aspirations of the Banyamulenge in eastern DR Congo’, *Journal of Contemporary African Studies*, 33(2), pp. 191–212. Available at: <https://doi.org/10.1080/02589001.2015.1066080>.
- Vlassenroot, K. (2003) ‘Households land use strategies in a protracted crisis context: land tenure, conflict and food security in eastern DRC’, *Conflict*, pp. 1–40.
- Vlassenroot, K. and Huggins, C. (2005) ‘Land, migration and conflict in eastern DRC’, *From the Ground Up Land Rights Conflict and Peace in Sub Saharan Africa*, pp. 115–194. Available at: <http://www.iss.co.za/pubs/Books/GroundUp/4Land.pdf>.
- Weldegiargis, A.W. et al. (2023) ‘Armed conflict and household food insecurity: evidence from war-torn Tigray, Ethiopia’, *Conflict and Health*, 17(1), pp. 1–9. Available at: <https://doi.org/10.1186/s13031-023-005201>.
- WFP (2023) *Rapport de situation #52 – 31 oct 2023*.
- World Food Summit(1996) Rome Declaration on World Food Security and World Food Summit Plan of Action. November 13-17. Rome, Italy.
- World Health Organization (2001) ‘Global strategy for infant and young child feeding. The optimal duration of exclusive breastfeeding, (May), pp. 1–5.
- Yenesew (2015) ‘Causes and coping mechanisms of food insecurity in rural Ethiopia’, *Agriculture And Biology Journal Of North America*, 6(5), pp. 123–133. Available at: <https://doi.org/10.5251/abjna.2015.6.5.123.133>.
- Yohannes, G. et al. (2023) ‘Household food insecurity and coping strategies among rural households in Kedida Gamela District, Kembata-Tembaro zone, Southern Ethiopia: mixed-methods concurrent triangulation design’, *BMC Nutrition*, 9(1).
- Young, C. (2006) ‘The heart of the African conflict zone: Democratization, ethnicity, civil conflict, and the Great Lakes Crisis’, *Annual Review of Political Science*, 9(October 1993), pp. 301–328. Available at: <https://doi.org/10.1146/annurev.polisci.9.062404.170648>.

## APPENDIX

### Questionnaire guide

1. Can you briefly describe your experience and role in this community currently affected by inter-ethnic conflict and food insecurity?
2. What are the main causes of food insecurity in the Minembwe Highlands?
3. How are households in this region currently coping with food insecurity caused by conflict? Can you identify some of the coping strategies they have adopted?
4. How is the conflict currently influencing household choices and decisions regarding food and food security?
5. Can you give concrete examples of current dietary changes as a result of the conflict?
6. How are women currently affected by food insecurity during the conflict? Have they developed any specific strategies at this time?
7. Are there any local initiatives or organizations currently helping communities cope with food insecurity caused by the conflict? Can you tell me more about their current impact?
8. How do households currently access basic food resources such as farmland, markets and water during conflict?
9. How are current changes in farming and livestock practices influenced by conflict and food insecurity?
10. Can you identify any current links between food insecurity coping strategies and the perpetuation of ongoing conflict? How can these strategies potentially exacerbate the current violence?
11. Do you have any current examples of local conflicts over food resources? How are these conflicts currently managed or resolved?