

A home away from home? South Sudanese refugee farmers' agricultural market access in Ayilo 1 settlement, Uganda.

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II. Abstract.

Uganda currently hosts the highest number of refugees in Africa. This number coupled with their protracted situation informed the open-door policies that attempt to integrate refugees into the Ugandan society to become self-reliance. However, refugees are hosted in districts that are under poverty with limited resources. Much has been studied about their social and economic integration from the lens of these open-door policies but the role that agricultural market access can play in the refugees' social and economic integration is understudied. Thus, this thesis attempts to fill this gap by exploring the role(s) that South Sudanese refugee farmers' agricultural market access can play in their social and economic integration in Uganda. To approach their market access, livelihood framework was utilized in this study. The fieldwork, which was conducted in Ayilo 1, involved interviews and document studies with the Ugandan experts, and interviews, short household survey and observations with the South Sudanese refugee farmers.

The findings from this study show that the refugee farmers participate in agricultural market access through short and long-supply chains. Yet this involvement is being faced with several challenges due to their limited access to livelihood resources such as physical, natural, financial, human, and social capital. These challenges are high transportation cost, poor storage facilities, exploitation by middlemen, lack of market information, over taxation, competition and theft/robbery in the market at nights. Some of the strategies deployed by the refugee farmers in an attempt to overcome challenges are collaboration between them and the locals in the market, networks, and friendships creation to have access to enough agricultural land from the hosts. Besides these strategies, the current infrastructural development in the district that includes improving road networks, and the presence of NGOs and government initiatives that provide trainings and market linkages for the refugee farmers present great opportunities for improving their market access for their produce. Improved market access can increase their income levels and food security, create employment, and social cohesion among them and their hosts.

This thesis recommends that a robust collaboration among the stakeholders such as government authorities, NGOs, hosts, and refugee farmers should be prioritized. Also, gender mainstreaming in livelihood and development initiatives to address gender inequities could be critical in improving refugee farmers' agricultural market access where majority of them are women to effectively integrate them in the Ugandan society.

Key words: Market access, South Sudanese refugees, Uganda, Integration, Poverty.

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V. List of abbreviations.

CRRF CSA DfID DINU DRDIP FRC FSL LC LWF OPM NDP3 NGO NURI PMP ReHoPE UNDP	Comprehensive Refugee Response Framework Climate Smart Agriculture Department for International Development Development Initiative for Northern Uganda Development Response Displacement Impact Project Finnish Refugee Council Food Security and Livelihood Local council/local government Lutheran World Federation Office of Prime Minister Third National Development Plan Non-governmental Organization Northern Uganda Resilience Initiative Production and Marketing Plan Refugee and Host Population Empowerment United Nations Development Program
UNHCR	United Nations High Commissioner for Refugees

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Chapter 1: Introduction.

1.1 Background

Currently, over 1.5 million refugees from many African countries are seeking refuge in Uganda. About 65% of this total number are South Sudanese, making South Sudan the country with the highest number of refugees in Uganda, followed by the Democratic Republic of Congo with 28%, according to the UNHCR Uganda factsheet for 2021. Some refugees choose to live in big cities such as Kampala, Arua, Gulu, and Koboko. However, those who choose to stay in cities must cater to everything in cities, such as renting, feeding, and medication, among others. The rest of the refugees who choose to live in rural areas are allocated lands to settle on and cultivate (Omata, 2022). This allows refugees to continue their livelihood activities. These activities include but are not limited to farming, building permanent and semipermanent houses, and doing business (World Bank, 2019). Most of the settlements are located in northern Uganda at the border with South Sudan, with a few in central Uganda (World Bank, 2019; UNHCR, 2021). There are thirteen districts in Uganda where refugees are hosted, as indicated in the UNHCR Uganda factsheet for 2021 (UNHCR, 2021). These settlements are Adjumani, Bidibidi, Imvepi, Kiryandongo, Kyaka II, Kyangwali, Lobule, Nakivale, Oruchinga, Palabek, Palorinya, Rhino Camp, and Rwamwanja, as well as urban refugees in the city of Kampala. Adjumani has the highest number of settlements in Uganda; it currently has 17 settlements, with Ayilo I and II Settlements being some of them. Adjumani, in particular, hosts nearly 220,000 refugees.

Since the refugees' situation has become protracted, and their return to their countries of origin is unforeseeable because the civil wars and other factors that pushed them out of their countries are still happening, Uganda has adopted a progressive approach towards refugees (Kreibaum, 2014). This progressive approach was enacted in the Refugee Act (2006) and the regulations operationalizing this Act were documented in The Refugee Regulations (2010). These regulations revolve around an open-door policy that allows refugees to have freedom of movement and the right to ownership of property. The open-door policy in Uganda grants refugees the right to have access to land, cultivate, and sell their produce for their own selfreliance (Omata, 2022). The economic inclusion and self-reliance policies make Uganda attractive to refugees (Omata, 2022; Betts et al., 2019; BBC,2016). As a result, Uganda has become Africa's leading destination for refugees, and in the world, it is in third position after Türkiye and Pakistan (Ahimbisibwe, 2019). Uganda does this through the implementation of projects that aim to empower refugees to become self-reliant by making sure that they are economically included. With this, Uganda receives support from UNHCR and other development partners by funding some development projects designed to support refugees on their way to becoming self-reliant. The National Development Plan which happens in Uganda in phases and is currently in phase 3, incorporates refugees in the planning alongside nationals. There are some frameworks that the Ugandan government uses such as;

1. The CRRF (Comprehensive Refugee Response Framework) in Uganda requires the integration of refugees into national planning and local development. In order to alleviate the burden on refugee-hosting districts and improve service provision for both refugees and host communities, inclusive sectoral plans that establish connections

between the refugee response and government sector plans have been developed. In addition, the plans facilitate the effective identification of areas where the international community can provide valuable assistance for a comprehensive and community-based approach in the refugee-hosting districts of Uganda (World Bank, 2019).

2. The ReHoPE (the Refugee and Host Population Empowerment Strategy) framework was a strategic initiative that aimed to enhance self-reliance and resilience among refugees and host communities residing in the nine refugee-hosting regions of Uganda out of the thirteen refugee-hosting regions. The commitment lasted a period of five years and acknowledged the imperative for innovative and sustainable resolutions (2015–2021). The approach aligned with humanitarian principles and placed particular emphasis on fostering self-reliance and resilience among both refugees and host communities (World Bank, 2017; ReHoPE).

The multidimensional frameworks in Uganda - CRRF, and ReHoPE-provide significant opportunities for South Sudanese refugees residing in Ayilo 1 Refugee Settlement and other settlements in Uganda to engage with local markets and achieve economic well-being and selfreliance. These frameworks recognize the significance of both refugees and host communities, intending to foster mutually beneficial interactions that enhance their respective livelihoods. Nevertheless, the successful integration of refugees into the market economy does face obstacles, including limited knowledge of the local market from the refugees, the presence of competition, and limited access to resources (Opono & Ahimbisibwe, 2023). According to UNHCR (2023), the integration of the refugees into Ugandan society is not living up to the image of social and economic inclusion policies because the regions where refugees are hosted are those which are under abject poverty. In the survey done by World Bank (2019) in Northern Uganda (where Adjumani District and Ayilo 1 Settlement are situated), the results show that 57% of the refugees and 29% of the hosts are under abject poverty. Livelihood assets/capitals/resources ownership is low among the refugees according to this survey. The efficacy of these frameworks above hinges on the ongoing process of adaptation, the resolution of market-specific challenges, and the establishment of cooperation among refugees, host communities, and diverse stakeholders in order to increase refugees' access to resources. Therefore, it is imperative to explore the role of agricultural market access in the social and economic inclusion of the South Sudanese farmers in Ayilo I Refugee Settlement. This exploration is done by employing the livelihoods framework. This framework does not only look at the livelihoods of households through economic lenses but also through sociological and institutional lenses.

1.2 Problem statement, research objective, and research questions

1.2.1 Problem statement.

Adjumani District which hosts the highest number of the refugees in Uganda has been under poverty for quite a long time (UNHCR, 2023). Refugees in the rural areas in Adjumani engage in livelihood activities such as farming thanks to the open-door policy. However, better access to livelihood capitals/resources for successful integration is a major concern (UNHCR, 2023). Therefore, this study will look at the South Sudanese refugee farmers' agricultural market access by employing livelihoods approach. In the livelihoods approach, livelihood capitals, and structure and processes' influence on market access is studied, and the role(s) agricultural market access can play in the refugees' social and economic inclusion because there is a limited to no research on South Sudanese refugee farmers' agricultural market access.

It is imperative to know whether social and economic inclusion policies live up to their idealized objectives from the perspectives of the refugees by exploring their navigation and experiences within the agricultural market because agricultural market access will have a profound impact on social and economic inclusion. Needless to say, all the refugees in Ayilo 1 Settlement are farmers, predominantly small-scale farmers. Furthermore, refugees face several challenges in their new areas, such as local market access challenges. Also, some refugees have an agricultural background, but only for subsistence (Jean, 2015). This is seen in the case of South Sudanese farmers, who mostly farmed and kept livestock for subsistence back home in South Sudan (Grant and Thompson, 2013). This means that these refugees with only subsistence farming knowledge must learn a new experience for farming oriented toward the market (Jean, 2015). As seen from the number of refugees in Ayilo 1 Settlement, which is about 20,000 refugees, the presence of refugees can sometimes put the available resources/livelihood capitals under pressure (Omata, 2022). In most places, when resources are under pressure, conflicts arise, making integration a challenging task (Jacobsen, 2002; Ahimbisibwe, 2019). Market competition is one of the conflicts Omata (2022) gives as an example. These issues make it hard to achieve the envisaged social and economic integration of the refugees. Therefore, it is of immense importance to research the role(s) agricultural market access can play in self-reliance and economic integration so that informed decisions and interventions are made to improve their agricultural market access.

At the moment, there is not much research on market integration for South Sudanese refugee farmers in Uganda in general and in Ayilo 1 Settlement area in particular. Therefore, this thesis aims to find out the experiences of these farmers in agricultural markets—their challenges, and how they try to overcome them—as these will play a role in their economic and social integration. The role played by institutions (under structure and processes) will be provided in the discussion chapter in this thesis.

In addressing poverty, and integration, the research on South Sudanese refugees' market access in the Ayilo I Refugee Settlement in Uganda could provide profound societal significance. This information could contribute to more effective interventions, better living conditions (poverty reduction), and the long-term well-being of refugees and their host communities (economic and social integration).

1.2.2. Research objective.

The objective of this research is to study the South Sudanese refugee farmers' market navigation and experiences in Ayilo I Refugee Settlement. The study looks at how they access the agricultural market for their agricultural products, as previously they were people who farmed for subsistence. It looks at their current agricultural market practices and the challenges in these practices. The study will look at the market opportunities that will make the policy of economic inclusion a reality. The market opportunities will facilitate their income generation; hence, they will become economically included and self-reliant. This research will

be approached with a livelihoods approach. This approach provides an opportunity to look at agricultural market access by refugee farmers as not an independent economic endeavor that is only affected by economic factors. It can also be influenced by other major factors such as level of education, and other capital such as human, physical, social, and natural capital, and structures and processes. In structure and processes, there are social dynamics such as networks, connections, and gender roles. There are also policies and institutions. Structures and processes form a major part of this thesis. Therefore, support programs from institutions such as government and NGOs and the impact of these support programs and policies on agricultural market access is studied. The impact of the five livelihood capitals is also studied.

Methodologically, this research data was collected through a mixed methodology because the livelihoods approach views livelihoods as complex, dynamic, and multifaceted endeavors comprising assets, strategies, and outcomes. Therefore, a single methodology would fall short of collecting comprehensive data. Thus, both qualitative and quantitative methodologies were applied. The qualitative study involved the use of tools and methods such as interviews (semi-structured interviews and key informant interviews), participant observation, and policy document studies. A short household survey tool was employed to collect quantitative data on household livelihood assets. Quantitative data provided a basis for comprehensive analysis when analyzing qualitative data, which was the core of this research. The household survey provided data such as human capital (gender, number, and education level of the member at the household level), physical capital such as livestock, poultry, and crops, financial capital (sources of finance such as credits, remittances, employment) The general and specific research questions are, therefore, given below.

1.2.3. Research Questions.

General research question.

1. What role can agricultural market access play in the social and economic integration of South Sudanese refugees in Uganda?

Specific research questions.

- 1. What are the South Sudanese refugees' current agricultural market access practices
- 2. What are the challenges they face?
- 3. How do they try to overcome those challenges?

1.3. Thesis Outline.

This thesis consists of seven chapters. The first chapter provides the background information about the refugees and their protracted situation in Uganda. It also highlights the frameworks that are used by the Ugandan government to integrate refugees in its national planning and

statistics. Additionally, it outlines the problem statement, objectives, research questions, justification, and significance of the study.

The second chapter provides an overview of past research on refugee livelihoods and their economic inclusion elsewhere in the world. It further gives an overview of agricultural practices in refugee settings, policies in Uganda related to refugees, challenges that face refugees in their market access, and market access in livelihood approach.

The third chapter, however, focuses on the livelihood framework/approach used to answer research questions in this study. Chapter four focuses on the methodology and methods used to collect data. Ethical considerations are highlighted in this chapter.

Chapter five presents the results of this study, while chapter six provides the subsequent discussion and what these results mean. Finally, chapter seven presents a conclusion and the recommendations for action and further research.

Chapter 2. Literature Review

2.Introduction.

The world is currently facing an unprecedented increase in the number of refugees (Myers, 2002). Myers points out that the number of crises worldwide has contributed to this surge in displaced people seeking safety and stability. The crises, such as wars and disasters, push many to leave their places of origin and become refugees in other countries (Myers, 2002). Turkey, Pakistan, and Uganda have the highest number of refugees, with Uganda being the first country in Africa with the highest number of refugees (Omata, 2022). This increase in the number of refugees has led the UNHCR to champion a paradigm shift towards self-reliance and economic inclusion to better support and integrate refugees into host communities (Omata, 2022). Some countries, such as Uganda, have adopted this paradigm, according to Omata (2022).

Though Uganda has been praised for adopting this paradigm, challenges remain in fully implementing it (UNDP, 2018). Most of the refugee-hosting areas are those that are already facing extreme poverty and limited resources, making it difficult to provide adequate support for both refugees and hosts (UNDP, 2018). According to Omata (2022), pressure on resources and limited economic opportunities in these areas are some of the challenges hindering the self-reliance and economic integration of the refugees. Without addressing these challenges, refugees and host communities may bear the costs of implementing self-reliance policies. Therefore, this review looks at the importance of addressing resource constraints and creating economic opportunities in refugee-hosting areas to ensure the successful implementation of self-reliance policies. Solving these problems can make both refugees and host communities benefit from sustainable economic inclusion and support.

This review follows the following structure: 2.1. refugee livelihoods and economic inclusion; 2.2. agricultural practices in refugee settlements; 2.3. Policies in Uganda related to refugees;

2.4. market access challenges in refugee settings; and 2.5. Livelihoods Approach and Market Access. And then followed by chapter summary (2.6).

2.1 Refugee livelihoods and economic inclusion.

Following the introduction above in Section 2.1, refugees are those who have been forced to leave their places of origin and relocate to other places in search of safety. In this process, most refugees leave behind their belongings and start afresh in their new places (Ellis, 2003). They either start new livelihoods or maintain their previous livelihoods (Omata, 2022). This depends on the knowledge they have and the context of the new place. In most cases, refugees maintain their previous livelihoods to make them adapt to their new environment quickly. Jean (2015) highlights that refugees with agricultural knowledge will still engage in farming to reconnect with their previous place. She further says that the refugees must adjust their farming to the new climate, seasons, and market engagements. This adaptation allows refugees to not only sustain themselves but also contribute to the local economy. By utilizing their existing skills and knowledge in a new setting, refugees can create a sense of familiarity and stability in an otherwise unfamiliar environment (Jean, 2015).

Refugee livelihoods are crucial for their economic inclusion and sustainability in their new environments. Understanding the agricultural practices, market challenges, and opportunities in refugee settlements is essential for promoting their self-reliance and integration into the local economy (DINU, 2020). By supporting refugee livelihoods, host communities can also benefit from increased economic activity and cultural exchange (Jacobsen and Fratzke, 2016). They argue that this approach fosters a more inclusive and harmonious society for both refugees and hosts. Furthermore, investing in refugee livelihoods can help reduce dependency on aid and contribute to long-term economic development in host countries as Zena et al. (2022) put it in their paper where they examined the impact of refugee livelihoods on host communities in the Gambella region of Ethiopia. Manlosa et al. (2019) argue that improving access to livelihood capitals for the refugees can spark crop diversification for food and commercial purposes therefore achieving food security and development. It also promotes social cohesion and mutual understanding between refugees and host communities, ultimately leading to a more sustainable integration process (Zena et al., 2022; Nagopoulos et al., 2023; Opono & Ahimbisibwe, 2023).

2.2. Agricultural Practices in Refugee Settlements.

A paper by Muhangi et al. (2022) indicates that refugees in Nakivale Refugee Settlement in Uganda engage in various agricultural practices to maintain and improve their livelihoods. They indicate that refugees in Nakivale Refugee Settlement engage in crop production, animal production, poultry farming, and home gardening, and eventually, they engage in markets. These practices provide food security for the refugees as well as create opportunities for economic empowerment and self-reliance (Omata, 2022). Through their agricultural production, refugees can contribute to the local economy and build relationships with host communities through trade and the exchange of their agricultural goods (Zena et al., 2022). This integration into local markets can also help refugees build social connections and foster a sense of belonging in their new communities (Ray, 2013). However, it is always not possible to achieve self-reliance with these practices, as most of them are not sustainable and do not

compete with industrialized farming (Escribano et al., 2016). Most of the refugees still use their conventional ways of farming, which, at times, pose a threat to their food security and environment, as Aregai and Bedemariam (2020) gave an example of Eritrean refugees in Tigray Region of Ethiopia.

2.3. Policies in Uganda related to Refugees.

This calls for the implementation of sustainable agricultural practices in refugee settlements to improve food security for both refugees and host communities, and achieve environmental conservation as articulated in the Development Response Displacement Impact Project (DRDIP, 2018) by the Government of Uganda, which aims to "expand economic opportunities and enhance environmental management for hosts and refugees in targeted areas in Uganda" (DRDIP, 2018). The open-door policies in Uganda towards refugees allows the refugees to engage with their economic activities to be self-reliant (Omata, 2022). These policies are implemented in a bid to integrate the refugees into the Ugandan Society (Opono & Ahimbisibwe, 2023). In Uganda, refugees do not live in camps but instead reside in settlements in rural areas while affluent refugees opt to reside in urban areas. Those who prefer to reside in rural areas are allocated plots of land for agricultural purposes, to foster their self-reliance. The nation's refugee legislation, as outlined in the 2006 Refugees Act and 2010 Refugees Regulations, grants refugees rights, such as the right to employment, unrestricted mobility, and access to social amenities such as healthcare and education (Betts et al., 2019). This comprehensive strategy applies to all refugees, regardless of their nationality or ethnicity, enabling them to develop sustainable livelihoods and reduce their need on humanitarian assistance (UNDP, 2017).

Overall, Uganda's refugee policies are distinguished by their progressive and inclusive nature, prioritizing self-reliance, economic empowerment, and peaceful co-existence between refugees and host populations. The nation's strategy for handling refugees could serve as an example for other countries that are hosting refugees, as these policies can facilitate successful integration of refugees into society.

2.4. Market access challenges for refugee farmers.

Markets, according to Saili et al. (2007) are venues where farmers sell their agricultural produce to the consumers/customers. They further argue that farmer markets are of two kinds; mixed farmer markets where farmers sell a variety of goods including those they do not produce, and producer-only farmers' markets where farmers sell exclusively the products they produce. These two kinds are present and observed in Uganda. Some refugees sell their agricultural products alongside manufactured goods such as cooking oil and sugar. While on the other hand, some sell exclusively their agricultural products without manufactured goods.

Market access, on the other hand, is the capacity of producers, specifically farmers in the agricultural domain, to efficiently establish connections with marketplaces in order to vend their produce (Villar et al., 2023). It includes multiple elements like as physical access to markets (including transportation infrastructure), availability of information (knowledge about market prices, demand, and trends), and capacity to engage in formal markets and adhere to rules (Villar et al., 2023).

Farmers, especially smallholder farmers, face several challenges in accessing agricultural markets for their agricultural products as highlighted in Baloyi (2010). Baloyi (2010) put forward, the lack of market information (social capital), inadequate human capital, poor on-farm infrastructure, production constraints, and transportation problems (physical capital challenges) among others as outstanding challenges facing smallholder farmers. These challenges become even more problematic for refugee farmers who are endeavoring to make a living in their new place (Heilbrunn, 2021).

Small-scale farmers encounter many obstacles when it comes to accessing agricultural markets, such as limited market information, insufficient infrastructure, and struggles in reaching profitable markets (Magesa et al., 2020). Furthermore, small-scale farmers frequently face lack of knowledge regarding market dynamics, pricing, and quality standards, which in turn results in the exploitation by middlemen and fluctuations in prices (Aku et al., 2018). Smallholder farmers confront additional hurdles in accessing markets due to inadequate financial resources and restricted availability of technologies (Magesa et al., 2020). In addition, challenges such as inadequate land tenure security contribute to the difficulties faced by small-scale farmers in accessing markets (Arias et al., 2013).

Presently, there are debates around smallholders and their market access. These debates revolve around smallholder farmers' agricultural market access. Some examples of these debates include, first, the heterogeneity of smallholder farmers. The literature highlights that smallholder farmers exhibit significant heterogeneity, and it is crucial for development approaches and interventions to take this variation into account. While several small-scale farmers possess the capacity to engage in markets inside the agricultural sector, others may find it hard to achieve their desired outcomes due to challenges they face (Fan & Rue, 2020). Second, small-scale farmers are exposed to various hazards, including climate change, sudden price fluctuations, and restricted access to financial resources, which contribute to the high level of risk in their market endeavors. The discussion is around the necessity of implementing supportive policies and making investments to assist small-scale farmers in efficiently managing risks, enhancing their ability to withstand challenges, and gaining access to financial resources and capital (Villar et al., 2023). Third, the literature emphasizes the significance of advocating for land rights, bolstering risk management measures, facilitating efficient food value chains, addressing gender inequities to enhance market access for smallholders. The discussion revolves around the role of institutions and policies in enabling smallholders to engage in markets and tackle the obstacles they encounter (Fan & Rue, 2020; Birthal & Joshi, 2007; Arias et al., 2013).

In the context of refugees in the Nakivale Refugee Settlement in Uganda, Muhangi et al., (2022) highlight some overarching challenges faced by refugees from the Democratic Republic of Congo, Burundi, Somalia, Ethiopia, and Eritrea. These include but are not limited to limited land availability, low market prices, and limited space in the market stalls. Refugee farmers often lack the necessary resources and support to overcome these barriers, making it even more difficult for them to access markets and achieve economic stability (Jacobsen and Fratzke,2016). As a result, interventions and programs tailored to address the specific needs of refugee farmers are crucial to improve their livelihoods and ensure their successful integration into markets (Jacobsen, 2002). These interventions can include providing access to training, resources, and support networks to help refugee farmers navigate market challenges.

In conclusion, by addressing these barriers and providing targeted assistance, refugee farmers can have a better chance to achieve economic stability in their new communities (Desai et al., 2020).

2.5. Livelihood approach and market access.

G. Murugani and Joyce M. Thamaga-Chitja (2018) researched smallholder irrigation farmer market access in Limpopo, South Africa. This study utilizes the sustainable livelihoods framework to examine the livelihood assets of smallholder irrigation farmers and their impact on production and market access. The findings underscore that the tangible assets owned by farmers, such as irrigation infrastructure, play a crucial role in supporting agricultural production. However, it is observed that in certain instances, these assets pose constraints on achieving optimal levels of productivity. Likewise, intangible assets, such as social capital, primarily constrained their ability to effectively produce, identify market opportunities, and establish organizational structures. Furthermore, the paper underscores the importance of improving physical assets and strengthening intangible assets in order to improve both production capacity and marketing access. Finally, it also suggests that interventions by relevant stakeholders, such as government authorities and NGOs, are necessary to address these asset limitations and improve market access for smallholder farmers.

Dorward et al. (2003) argue that there is a gap in livelihood approaches, which is "a lack of emphasis on markets and their roles in livelihood development and poverty reduction" (p. 1). They argue that failure to adequately consider the roles of markets and market relationships in livelihoods analysis and action can result in the inability to recognize and respond to "livelihood opportunities and constraints" that arise from market processes and institutional matters that are crucial for "pro-poor market development" (p. 1). Their paper, therefore, proposes an alternate perspective on livelihood approaches, with a particular focus on the significance of markets in the advancement of livelihood development and the alleviation of poverty. The authors suggest that incorporating a more explicit focus on the interplay between institutions, technology, and assets in livelihood analysis could prove beneficial in the conceptualization and implementation of programs aimed at promoting livelihood development and reducing poverty. Thus, their paper uses the sustainable livelihoods concept as formulated and implemented by the UK Department for International Development (DfID), which encompasses an analysis of the significance and functions of markets, institutions, and technology in livelihood development.

Mumuni and Oladele (2016), focus on access to livelihood capital and entrepreneurship among rice farmers in Ghana. The market access by rice farmers is addressed in this paper through the examination of physical and social capitals. The paper suggests that improvements in physical capital, such as processing facilities, can enhance market opportunities for rice farmers. The significance of social capital in affecting agricultural production and the adoption of new technology is also recognized. Social capital encompasses many networks, such as farmer associations, agro-input dealers, and agricultural extension officials. Social networks have the potential to influence farming practices and market access by providing valuable knowledge and support. In general, their study recognizes the importance of physical and social capital in improving market access for rice farmers and enhancing their entrepreneurial abilities.

2.6. Chapter summary

In summary, smallholder farmers are susceptible to risks/challenges. However, the degree these challenges affect them is not homogenous. Those smallholder farmers who have better access to livelihood capitals stand a better chance to absorb some risks and achieve their livelihood outcomes. These challenges facing smallholder applies to the smallholder refugee farmers as well. The refugees' proacted situation even exacerbates these challenges further. Similar to smallholder farmers' heterogeneity, refugee farmers also exhibit the same nature. The way these challenges affect them and how they try to overcome differ from one refugee farmer to the other. Refugee farmers with better access to livelihood capitals, by and large, absorb some challenges and continue with their livelihood activities and market access.

It is apparent that little research has been conducted on South Sudanese refugee farmers' agricultural market access in the Adjumani District in general, and in Ayilo 1 Refugee settlement in particular. This thesis aims to address this knowledge gap. The Livelihoods Approach is used to answer the research questions in this research.

Chapter 3. Theoretical Framework

In this section, the livelihoods approach has been chosen as a central theory to investigate agricultural market access of South Sudanese refugee farmers in Ayilo I Refugee Settlement. This is because agricultural market access is a complex endeavor as juxtaposed to just a physical entry into the market. In Figure 1 below, access to markets is more than a physical entry to the markets. It is also influenced by structures (levels of government and private sector) and processes such as regulations, policies, cultures, and social institutions (Natarajan et al., 2022). More details about this are given in section 3.1 under the concepts for analysis. The livelihoods approach focuses on individuals, acknowledging their skills, resources, and capabilities. This statement underscores the significance of comprehending the ways in which individuals lead their lives and the importance of policies and interventions that promote their well-being and livelihoods (Serrat, 2017). According to Serrat (2017) the livelihoods approach acts at various levels, taking into account the interplay between individuals, communities, institutions, and wider societal conditions. It acknowledges the dynamic condition of livelihoods, which adapt and develop over time in reaction to prevailing circumstances and opportunities. The livelihoods approach highlights the significance of several livelihood assets, such as human, social, physical, financial, and natural capital. By comprehending and utilizing these resources, individuals can improve their skills/capabilities and enhance their livelihood strategies (Mumuni & Oladele, 2016).

Although the livelihoods approach is highly regarded for its theoretical underpinning, there are difficulties in properly implementing this theory in practice. The actual use of this approach encounters significant obstacles that must be resolved to guarantee its significance and effectiveness in real-world situations (Morse & McNamara, 2013). There is a need to adapt the livelihoods approach in order to enhance its applicability in various global contexts. This critique emphasizes the significance of modifying the strategy to various situations and demographics in order to improve its relevance and effectiveness (Morse & McNamara, 2013).

3.1 The Livelihoods Approach

The core component of this framework revolves around the livelihoods approach, which conceptualizes livelihoods as complex and ever-changing endeavors encompassing diverse assets, strategies (activities and outputs), and outcomes as indicated in Figure 1. This approach offers a comprehensive perspective for understanding and investigating the complex dynamics between human relationships, external conditions, and the endeavor to achieve a state of welfare among farmers. This approach also allows the researchers to look at development issues from the perspective of rural or local people themselves. In the book Rural Development: Putting the Last First (Chambers1983), it is narrated how the livelihoods approach could be used as a bottom-up approach (since it is the local people that understand their vulnerability contexts more than anyone else) to solving development issues among rural people. Thus, this approach engages the agency of local people. This approach, or framework, is further divided into components such as assets and outcomes. There is a circular relationship between livelihood assets and livelihood outcomes. In this framework, assets are utilized by households with the aim of achieving certain outcomes such as more income, increased economic well-being, reduced vulnerability, and food security. With these, the capabilities of the households to access more assets become significantly increased. Yet, these livelihood outcomes are likely achieved when there are structures and processes that support them.

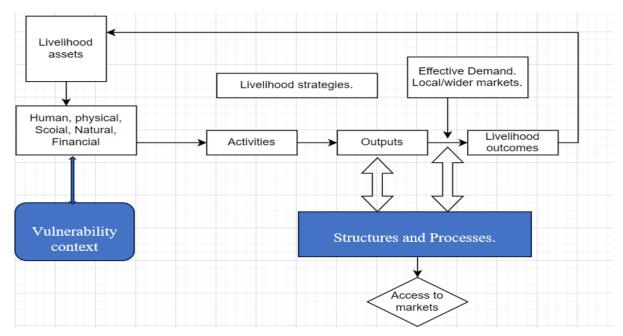


FIGURE 1 MODIFIED LIVELIHOOD FRAMEWORK FROM DORWARD ET AL. (2003)

3.1.1. Livelihood Assets, Strategies, and Outcomes

The livelihood framework comprises three fundamental components that livelihood researchers argue influence the means of living for households generally: assets, strategies, and outcomes

as indicated in Figure 1 above. Scoones quotes the definition of livelihoods in the work of Conway and Chamber (1992:6) as "a livelihood comprises the capabilities, assets (including both material and social resources), and activities for a means of living" (Scoones, 2015:23). Livelihood assets refer to a range of capitals, including human, social, natural, physical, and financial, which have a significant role in shaping the choices and opportunities accessible to farmers (Natarajan et al., 2022). Natural capital encompasses the assortment of natural resources, including but not limited to land, water, and forests, that individuals utilize for sustenance and economic activities (Raik & Decker, 2007). Physical capital encompasses the assortment of infrastructure, tools, and equipment that individuals employ in the process of generating goods (products) and services (Zada et al., 2019). Financial capital encompasses monetary assets that individuals possess, including savings, credit facilities, and remittances. Human capital encompasses the collective talents, knowledge, and health of individuals (Zada et al., 2019). Social capital is a concept that encompasses the social networks, interpersonal connections, and institutional frameworks that individuals utilize to access valuable resources and receive assistance (Zada et al., 2019). Studies such as Megyesi et al. (2010) have shown social capital to be a crucial asset because it is the one that mobilizes other forms of capital. For instance, Mayoux (2002) narrates in her paper how social capital helped Cameroonian women achieve financial sustainability through their networks and collective action. These networks and collective action gave a high bargaining power in the transactions in the market. These assets jointly influence the strategic decisions made by individuals, encompassing agricultural and off-farm activities, diversification, and migration (Natarajan et al., 2022). Thus, access to and a combination of different levels of these assets influence the ability of different households and individuals to pursue particular livelihood strategies. Livelihood strategies can either be applied at an aggregate level or at a household level, depending on the nature of the development issue, external factors such as institutions and environmental factors, and asset availability (Peach Brown and Sonwa, 2015). The overarching objective of these strategies is to attain favorable livelihood outcomes. Livelihood outcomes, in this framework, refer to the ultimate goals that individuals or households attain through their chosen livelihood strategies and the assets they own. The outcomes are crucial in comprehending the efficiency of livelihood choices in enhancing welfare. Within the Livelihoods Framework, livelihood outcomes are commonly classified into diverse dimensions such as economic prosperity, food security, human growth, social well-being, and resilience (Connolly-Boutin and Smit, 2016). The main aim of livelihood interventions, policies, and programs is to achieve better livelihood outcomes. Therefore, to determine whether or not these interventions, policies, and programs have been effective, it necessitates assessing the livelihood outcomes, thus making livelihood outcomes an important component of the livelihoods framework.

The livelihood outcomes are interrelated and frequently mutually reinforce each other (Pain and Levine, 2012). For instance, enhanced economic well-being can result in enhanced opportunities for accessing education and healthcare services, therefore contributing to enhanced human capital (enhanced human development). The presence of enhanced human capital contributes immensely to increased production and better access to agricultural markets. The livelihood outcomes in turn influence livelihood assets inasmuch as livelihood assets influence livelihood outcomes.

3.1.2. The concepts for analysis: market access, policy and institutions, and social dynamics.

Access to agricultural markets has a crucial role in determining the livelihoods of farmers (Bhandari, 2013). Kamara (2004) argues that market access increases the farmers' ability to produce more and upgrade their production methods. Farmers employ capital to produce something for the market. However, even after producing their products, accessing the agricultural markets becomes another daunting task for them as it is very complex (Markelova et al., 2009). This paradigm explores how farmers establish linkages with markets, the obstacles they encounter, and the influence of value chains on their agricultural production and outcomes. Participation in the value chain has a substantial impact on the results of smallholder livelihoods by improving their income, welfare status, and general well-being. Small-scale farmers experience advantages by engaging in value chains, including improved income levels and enhanced strategies for sustaining their way of life (Ndlovu et al., 2022). Integrating small-scale farmers into commercialized production and value chains presents prospects for reducing poverty and fostering economic growth among rural producers according to Ndlovu et al. (2022). Market access is a crucial component of individuals' livelihoods, as it dictates their capacity to engage in the sale of commodities and the provision of services, thereby generating income and economic well-being among other outcomes. Natarajan et al., (2022) argue that market access encompasses more than mere physical entry into markets; it also encompasses the complex power dynamics that determine the beneficiaries of market transactions. Additionally, market access encompasses more than solely economic considerations, as it is influenced by social and cultural elements, including but not limited to gender, ethnicity (refugees and hosts in this case), and social class. Hence, comprehending market access necessitates a comprehensive perspective that considers the broader societal, economic, and political framework within which markets function since gender norms, social standards, community bonds, and policies are assumed to influence the market experiences of farmers (Ansari et al., 2012).

The component of market access explores the ways in which farmers establish connections with markets, manage obstacles linked to the market, and integrate themselves into different market systems (Poulton et al., 2010). It is imperative to keenly investigate the challenges and opportunities for agricultural market access. The challenges, perhaps, encompass a wide spectrum, spanning from transportation challenges, such as insufficient road networks and high transportation expenses, to market-related infrastructure issues, such as limited storage facilities and processing centers (John, 2014). Furthermore, the availability of market information plays a crucial impact. Farmers who are deprived of easy-to-access market information may encounter difficulties in making well-informed decisions on the optimal timing and location of selling their agricultural produce. Households use their capital, such as human, financial, and social capital, as a means of accessing agricultural markets. A household with a number of literate members or farmers who can read and write and know how to use technology can quickly access market information, therefore making their agricultural market access guite easy (Worku, 2019). Financial capital can facilitate storage and transportation costs to the markets. Social capital and networking can also provide easy access to information and a readily available pool of customers since the members of the group that a farmer belongs to are the first customers.

The policies and institutions (institutional organizations), as parts of the Livelihoods Framework, have a great influence on agricultural market access (Ton, 2008). This influence can be studied through the livelihood framework approach under structures and processes. Any researcher must evaluate the impacts of policies pertaining to land tenure, agribusiness and farming training, market linkages, and market regulations, as these could provide challenges and opportunities for farmers to access agricultural markets. A comprehensive understanding of the policy and institutional framework is important in order to discern specific domains where policy reforms or institutional improvements can effectively ease agricultural market access for farmers. Furthermore, it aids in ensuring that governmental initiatives are in accordance with the requirements and priorities of agricultural communities.

Furthermore, the Livelihoods Framework highlights the significance of taking into account social dynamics such as gender roles and norms (Maclean, 2010). The influence of gender roles and norms on households' and individual farmers' access to and engagement with markets is significant (Upton, 2004). In certain cultural contexts, it is seen that women are assigned the task of marketing particular crops or products, whereas men are entrusted with the responsibility of handling others. Gaining a comprehensive understanding of gender-specific roles and their impact on agricultural market accessibility is crucial.

3.2. Chapter summary

The livelihoods framework is a central theory used to investigate agricultural market access of South Sudanese refugee farmers in Ayilo I Refugee Settlement. This approach emphasizes the importance of understanding individuals' skills, resources, and capabilities, as well as the role of policies and interventions that promote their well-being and livelihoods. The livelihoods approach focuses on various livelihood assets, such as human, social, physical, financial, and natural capital, which are crucial for improving skills and strategies.

Livelihood outcomes are crucial in comprehending the efficiency of livelihood choices in enhancing welfare. Within the Livelihoods Framework, livelihood outcomes are commonly classified into diverse dimensions such as economic prosperity, food security, human growth, social well-being, and resilience. The main aim of livelihood interventions, policies, and programs is to achieve better livelihood outcomes.

Policies and institutions, as part of the livelihoods framework, significantly influence agricultural market access. The impacts of policies pertaining to land tenure, agribusiness and farming training, market linkages, and market regulations are critical to farmers' market access. A comprehensive understanding of the policy and institutional framework helps identify areas where reforms or improvements can ease agricultural market access for farmers. Gender roles and norms also play a significant role in farmers' access to and engagement with markets. Understanding gender-specific roles and their impact on agricultural market accessibility is crucial for addressing these challenges and promoting economic growth among rural producers.

Chapter 4. Methodology.

The Livelihoods Approach seeks to offer a comprehensive understanding of the livelihoods of individuals and households, taking into account many assets and strategies, and structures and processes. Therefore, to holistically address this issue of agricultural market access in the livelihoods approach, I will employ a mixed methodology. However, this thesis employs predominantly qualitative methodology. The main data comes from qualitative methodology; however, quantitative data aid in the analysis of the qualitative data. The utilization of a mixed methodology enabled me to collect a combination of quantitative data through a short household survey, such as income levels and asset ownership, as well as qualitative data, such as narratives and experiences of the refugee farmers within the agricultural markets of Ayilo 1 Refugee Settlement or other nearby markets where they could sell their agricultural products. Quantitative data possesses the ability to provide a comprehensive overview (breadth), while qualitative data contributes to a more profound understanding and contextualization (depth and context) (Almalki, 2016). Furthermore, the mixed methodology is one means of triangulating data. The triangulation serves to strengthen the reliability and validity of research data and findings. For example, when a quantitative survey demonstrates low-income levels among some farmers, qualitative interviews might elucidate the precise obstacles they encounter in terms of agricultural market accessibility or capital acquisition.

4.1. Research Site.

This research was carried out in Ayilo 1 Refugee Settlement which is located in Pakelle Subcounty, Adjumani district, Northern Uganda. Ayilo 1 is one of the 17 settlements in Adjumani District. It is bordered by Olua 1 and 2, Ayilo 2 and Pagrinya settlements. It has a population of over 20,000 Refugees. Locals also reside in Ayilo 1, however, the researcher did not access their population. There are also several villages surrounding Ayilo 1, inhabited by the locals and these are where the refugees hire agricultural lands for farming. Ayilo 1 Settlement accommodates several NGOs and government offices, including OPM. There are 4 primary and 2 secondary schools within Ayilo 1 Settlement, attended by both children of refugees and the hosts. There is a healthcare center as well as a market center. All the other services are accessed by both refugees and locals. This is to pay back for the locals who gave their land for settlement. Ayilo 1 is being managed by OPM's assistant commandant altogether with Ayilo 2. There is also a settlement chairperson who always comes from the refugee communities. Each block within the settlement has its leader who reports to the settlement chairperson. Ayilo 1 has 6 blocks as shown in Fig. 2 below. The settlement chairperson works hand in hand with the assistant commandant in the settlement. The refugees conduct elections under the supervision of OPM to choose their block leaders, settlement chairperson, and the overall Adjumani District chairperson for all 17 settlements. They were conducting elections when I first arrived there.

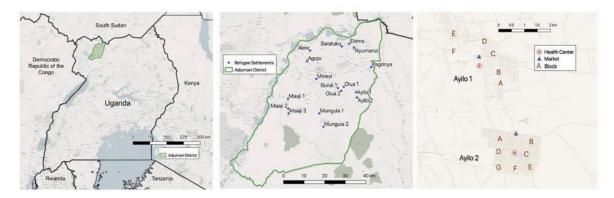


FIGURE 2 MAPS OF UGANDA, ADJUMANI DISTRICT, AND AVILO 1 &2

Source: E. van Hove & N.G Johnson, 2021.

The refugees cultivate two times a year (March-July and August-November) when climatic conditions allow because it sometimes gets flooded. The open space surrounding Ayilo 1 is swampy and not suitable for farming unless modern ways of cultivating in swampy areas are devised. Therefore, refugees have to go to the villages surrounding Ayilo 1—at least 2km away.

Ayilo 1 Settlement was chosen for this research because it is one of the settlements where refugees face problems in getting agricultural land for cultivation. Other settlements such as Kiryandongo, Nyumanzi, Rhino, etc have agricultural lands allocated to them by the government while this is not the case in Ayilo 1 as refugees have to hire land from the nationals or use some parts of their settlement plots for home gardening because the land is owned by the communities in Adjumani Districts, therefore, government does not have much say in the land tenure system. Other settlements such as Olua 1 and 2 bordering Ayilo 1 are not suitable for farming as the topography there does not favour farming because these settlements are quite rocky and hilly. These Olua 1 and 2 are inhabited by refugees who are of the same ethnicities as those in these places (Madi of South Sudan-the refugees, and Madi of Uganda—the host). They speak the same language and have the same culture. Therefore, it is believed that these refugees can integrate into these areas easily and successfully. Ayilo 1, on the other hand, is inhabited by The Dinkas, Nuer, and other ethnicities from South Sudan who do not speak Madi. Therefore, their inclusion and market integration can be guite challenging. These reasons informed my decision to choose Ayilo 1 Settlement to explore market access by the refugee farmers who are of different ethnicity as the nationals in this area.

4.2. Sampling strategy

The sampling strategies employed were convenience and purposive strategies. The locations of the interviews were farms, homes, and markets. It was a busy season as it was a time for harvesting. Refugee farmers had some small gardens at home and their main gardens were in far villages—at least 2km away from the settlement. Therefore, I had to get up in the mornings and go and visit refugee farmers in their farmers, the market, and at their homes. I would only look for South Sudanese refugee farmers because they were farming together with the local farmers, and engaging in the market together in the same areas. Four (4) participants were

purposively selected. Those were the refugee settlement leader (LC1), OPM settlement assistant commandant (that oversees both Ayilo 1 and 2), LWF Food security and livelihood officer, and FRC Climate-smart Agriculture project officer. The other sixteen (16) were conveniently recruited to participate in the interviews and consequently the survey. A total number of twenty (20) participants was recruited. The number of participants was determined by the data saturation.

Respondents	Number	Data collection methods
Refugee women	11	Interviews, household survey, observation.
Refugee men	5	Interviews, household survey, observation.
Settlement chairman, LC1	1	Interviews, household survey, observation.
OPM assistant commandant.	1	Interviews, documents.
LWF FSL officer	1	Interviews, documents
FRC CSA officer	1	Interviews, documents

 TABLE 1 SHOWING THE NUMBER OF THE PARTICIPANTS

4.3. Data Collection Methods

The tools and methods that I employed were both qualitative and quantitative. However, since this research is qualitative, most of the methods were qualitative methods with a short household survey as a quantitative tool. The qualitative methods were interviews (both semistructured and unstructured interviews, and key informant interviews), participant observation, and document analysis. These mixed methods are further elaborated in the next paragraphs.

4.3.1. Interviews.

As part of the methods, interviews were conducted in Ayilo 1 Settlement from early November to late December 2023. Both semi-structured and unstructured interviews were done with farmers, either on their farms, at their homes, or in the markets. There were no appointments made before the interviews as the majority were engaged with their seasonal agricultural activities and others were in the market selling their agricultural products. Furthermore, most of the farmers did not use WhatsApp or Emails to plan an interview. Before conducting the interviews, permission was sought from Pakelle Sub-county OPM office where Ayilo 1 Settlement is located. OPM office in Pakelle Sub-county requested my research proposal as they were first skeptical of why I had to leave the Netherlands and carry out research in the refugee settlement. They went over my proposal and I had to wait for one week before being given the go-ahead.

Though semi-structured interviews came from a set of planned questions/guides, they afforded the flexibility to engage in open-ended exploration (see Appendix A). This enabled

respondents to provide detailed accounts of their experiences and perspectives. Unstructured interviews, on the other hand, were good for obtaining comprehensive and contextually rich insights into the experiences of farmers as they allowed participants to express their viewpoints using their wordings. Unstructured interviews had the potential to reveal unanticipated concerns that may not be addressed in structured or semi-structured interviews. These two types(semi-structured and unstructured interviews) are what most researchers call in-depth interviews as the two present an opportunity to delve deeper into the topic of conversation.

In conjunction with the interviews with the refugee farmers, I had an opportunity to interview some experts. These experts were NGO and government officers in Ayilo I Refugee Settlement. The NGO staff were the Lutheran World Federation(LWF), and the Finnish Refugee Council(FRC) food security and livelihood officer and climate-smart agricultural project officer respectively. The NGOs work in collaboration with the UN Refugee Agency(UNCHR), the Office of the Prime Minister(OPM), and the district administration. Thus, the policies about refugees' economic inclusion and self-reliance are initiated, supported, and implemented by these stakeholders. It was, therefore, paramount to know their points of view on the challenges facing refugee farmers in accessing agricultural markets, the opportunities and the role of agricultural market access in economic and social integration, and the self-reliance of the refugee farmers. As an outsider, their views could be significant for my research as they have expertise and knowledge on the market dynamics, policy implications, and other factors that may not be readily known by an outsider.

The number of the overall interviewees was 20 participants. 17 refugee farmers, including the settlement chairman, and 3 key informants(experts). The 3 key informants were purposively sampled and appointments were made before interviews as it was possible to contact them via email. Out of the 17 refugee farmers, 11 were females and 6 were males. The majority of the population in the settlement were females.

4.3.2. Participant observation

Participant observation also served as a crucial research method in examining the challenges, and opportunities that refugee farmers encounter in their agricultural market access. Not only that but it was also possible to observe their physical assets. To properly implement this approach, I established a sense of trust with the research participants, acquired informed consent, and actively engaged in their everyday activities. I arrived at a time when they were busy harvesting, and most of them (women) were also in the market. They were exercising leadership change in the settlement, and as such, campaigns and elections were conducted. Engaging myself in their everyday activities such as harvesting, sitting in the market with refugee farmers and joining their cultural dances, presented an opportunity to make systematic observations of livelihoods, market transactions, and sociocultural dynamics while documenting observations in my field notes. Observations then acted as the basis for unrestricted dialogues (to delve deeper into what is observed) with the refugee farmers while demonstrating consideration for cultural sensitivity and adherence to ethical principles. This participant observation will have an opportunity to facilitate a comprehensive understanding of the livelihoods of refugee farmers and their market access within their specific contexts. This approach not only revealed concealed aspects of their livelihoods and experiences in the agricultural markets but also served to validate information obtained from other sources of data.

4.3.3. Short household survey.

To collect quantitative livelihood data, a short household survey was administered to the interviewed refugee farmers—17 refugee farmers in number. This was a form of structured questions in an application called Kobo Collect Toolbox used to collect livelihood data such as sources of income, ownership of assets, resource accessibility, livelihood activities, etc. However, since the purpose of this survey was not to make a generalization of the findings but to complement the qualitative data, the sample would not be that statistically significant. With the help of a local enumerator, the process of data gathering involved conducting face-to-face interviews with the selected households.

The survey utilized structured questions, employing predetermined response alternatives in order to methodically collect quantitative data (see Appendix B). The information in the questionnaire encompassed several aspects such as income levels, livelihood assets, household composition, and market access patterns(local, regional, rural, urban market access, etc.). The utilization of structured questions enabled the collection of standardized data and promoted the ease of doing data analysis.

4.4. Data analysis

The data was collected through transcribing interviews, and documenting observations as field notes and policy documents. After collection, the data was examined through the utilization of a combination of thematic and pattern analyses, document analysis, and visual content analysis techniques. The coding was done on Atlas.ti

I commenced a thematic analysis, where I discerned recurrent themes and patterns within the transcribed interviews and field notes. In the process of examining the text, I analyzed the recurring keywords, phrases, and concepts that surface, and afterward, I organized them into coherent thematic categories. Through a comprehensive analysis of the data, it was possible to reveal overarching patterns that might have not been readily discernible from individual reactions or observations. This offered a detailed analysis of the various factors that influence farming practices and market engagement among refugees residing in the Ayilo Refugee Settlement. Codes were grouped according to the main themes and patterns were further categorised according to sub-themes.

The role of document analysis was very significant in this study. To provide comprehensive data that could not collected through one method, I analyzed pertinent materials, including policy reports, program assessments, and historical data on the livelihoods of refugees in the region. This methodology made it easier to understand the impact that local and regional policies have on the dynamics of changing agricultural practices and market entry for refugee farmers.

Furthermore, I engaged in utilizing visual resources such as pictures as part of my research methodology. Through an analysis of the visual information documented during the fieldwork, such as pictures, I derived further insights that were not effectively communicated solely through textual means. The utilization of visual analysis enabled me to comprehend the

tangible surroundings, interpersonal dynamics, and non-verbal signals that play a role in the farming practices and involvement of refugees in local markets.

Within the course of fieldwork, I adopted a reflective position, recognizing my own biases and preconceptions that could potentially impact the interpretation of the data. I consistently recorded my thoughts regarding the potential influence of my perspective on the analysis while actively pursuing impartiality. The presence of self-awareness in the study served to enhance its rigor and validity.

Overall, the utilization of a multifaceted method enabled a comprehensive examination of the aspects pertaining to agricultural and market opportunities, challenges strategies among South Sudanese refugees and locals residing in Ayilo 1 Refugee Settlement.

4.5. Ethical Considerations

Though I am a South Sudanese, researching South Sudanese refugee farmers' agricultural market access, it was crucial to acknowledge my status as an outsider in the context of this area in particular and Uganda in general, with limited contextual knowledge regarding agricultural market access by refugee farmers. Hence, it was imperative to adopt an openminded stance towards information and perspectives, refraining from making any presumptions about the various stances held by refugee farmers and experts. Moreover, it was crucial to recognize the outsider perspective and make an effort to reciprocate the questioned individuals, ensuring that this research endeavor was not solely focused on extracting knowledge but also aimed to contribute to the economic inclusion of refugees in Ayilo I Refugee Settlement. However, it was important to exercise caution in making assumptions regarding the accuracy of the issue description and research, as well as to avoid overestimating the magnitude of the research's influence. In the context of this study, the duration of fieldwork was limited to about 2 months. I aimed to optimize the utilization of the available time and maximize the accumulation of evidence within the designated two-month timeframe though there were some challenges. First, the OPM office was quite reluctant in the beginning to provide permission to begin my fieldwork. This process follow-up took around one week. They were skeptical of why I had to go to Ayilo 1 refugee settlement and do research over there. I provided them with my research proposal and they permitted me to conduct my fieldwork after going over my research proposal. Second, the refugees thought that I was affiliated with an NGO or Government. I had to explain to them that I was an independent researcher from the school and not affiliated with any NGO. This also became another issue as they were reluctant to provide enough time for interviews after learning that I was not affiliated with any NGO, citing that they were busy if it was nothing to help them immediately. Therefore, much of the time had to go for an explanation of the significance of this research to them.

4.6. Chapter summary

The study employs a mixed methodology, primarily qualitative; however, to gather data on income sources, asset ownership, etc., of refugee farmers household survey was employed. The use of both quantitative and qualitative data aids in providing a comprehensive overview and a deeper understanding of the refugee farmers' agricultural market access. The research site, Ayilo 1 in Adjumani District, was chosen due to refugees' difficulties in accessing agricultural land in comparison to other settlements in other regions of Uganda. The land

tenure system in Adjumani District is communal—the land is communally owned, rendering the national government weaker voice in land tenure system in this region. The sampling strategy was convenience and purposive, with interviews conducted with refugee farmers, settlement leaders, and NGO officers. Data collection methods included interviews, participant observation, and document analysis. The study involved 20 participants, including refugee farmers and key informants. The chapter also highlights the importance of participant observation in understanding the challenges and opportunities in agricultural market access for refugee farmers.

Chapter 5: Results

5. Introduction.

This chapter presents the findings from the fieldwork that was carried out in Ayilo 1 Settlement. A livelihood framework was used to analyze the findings. In the following sections, livelihood capitals and their role(s) in refugee farmers' market access are presented. The challenges refugee farmers face due to the limitations of these capitals are described in section 5.3 likewise to the strategies they deploy to try to overcome these challenges.

5.1. Livelihood capitals and their role in agricultural market access.

The livelihood capitals in Ayilo 1 Settlement, Adjumani District are vital in assisting refugees' access to agricultural markets. Within the context of agricultural market access, the possession of livelihood capitals can impact the decision to employ diverse livelihood strategies, which include cultivating different types of crops, participating in non-farm activities, and engaging in value chain activities. The term "livelihood capitals" refers to the different types of assets and resources that individuals and communities rely on to support their livelihoods (Mumuni & Oladele, 2016). Access to these livelihood capitals/resources determines how farmers escape from poverty (Mumuni et al., 2016). However, in regions such as Adjumani District where poverty has been prevailing for a long time, it becomes challenging for the refugee farmers to access some of these capitals/resources though the Refugee Act (2006) and Refugee Regulations (2010) stipulate that refugees are eligible to access resources. These capitals are distinct from one another. For instance, the availability of financial capital can facilitate physical capital and natural capital through hiring and purchasing. Social capital can also facilitate financial capital as saving networks such as VSLAs act as a source of financial capital. Human capital can facilitate all the other capitals. Therefore, this interconnectedness among these capitals is unavoidable and it does appear in the descriptions in the subsequent paragraphs given below. These capitals are the ones that influence refugee farmers' market practices, the challenges that refugee farmers face, and how they try to overcome the challenges as described in section 5.3.

5.1.1. Natural Capital.

Presently in Ayilo 1 Settlement, refugees have access to settlement land. They utilize some parts of their settlement plots for gardening. Refugees have also utilized creative methods to acquire additional land for agricultural purposes, including through bilateral agreements with

host communities, collaboration with farmer groups as NGOs and OPM encourage this, and agreements with landowners. The availability of arable land is a crucial component of agricultural market accessibility for refugees residing in Ayilo 1 Settlement. The presence and standard of land have a direct influence on the efficiency of agriculture and the generation of money. Land plays a central role in the market access of refugee farmers. They rely on the land to produce agricultural produce for the market. Farmers who have access to fertile and large agricultural lands are in a better position to enough produce for the market and their consumption. Block A leader who is one of the few refugee farmers to get enough land and cultivate enough okra can supply both the local market in Ayilo 1 and the wider market such as South Sudan. His garden which I captured some pictures is shown below in Figure



FIGURE 3 SHOWS AN AGRICULTURAL LAND AS A NATURAL CAPITAL.

Source: Field data, 2023.

Secondly, water is also a significant component of natural capital. The agriculture in Ayilo 1 majorly depends on rainwater. This means that refugee farmers cultivate in the rainy season which runs from March/April to November. However, some individual refugee farmers who cultivate in the dry seasons use watering cans for irrigating their crops. They mostly cultivate green leafy vegetables such as *kudura, gwedegwede*, and *kropa*. These farmers who cultivate in dry seasons have easy access to markets and consumers because these crops are consumed by almost everyone in the settlement. Since the demand becomes high in the dry seasons and supply decreases, those who cultivate in the dry seasons tend to maximize their income and improve their economic well-being.

5.1.2. Human capital

This capital refers to the skills and knowledge that individuals possess (Manlosa et al, 2019). In the context of refugees, it is crucial to provide them with training programs and opportunities for skills development. This will not only improve agricultural practices and increase yields but also foster entrepreneurship among them. Human is shaped by the environment as well as human capital shapes the environment (Azunna & Botes, 2020). This

is the case in Ayilo 1 Settlement. Due to their new environment, refugees have acquired skills that can currently help them increase their market access. However, all of them do not have similar skills to have uniform access to markets. Refugees with better skills and those who have attended formal institutions of learning such as high school and college have better market access compared to their other counterparts who have not attended training. For this matter, NGOs such as FRC and LWF have been training refugees on modern farming practices such as line planting and marketing plans to increase their access to the agricultural market in Ayilo and beyond(wider market). For example:

"I was trained in line planting by FRC through a Climate Smart Agriculture project. I practice it currently as it allows my free movement between my crops and it is easier to weed."

"We are trained on some modern practices here by LWF. One of those practices that I was trained in and have adopted is row planting. They also take us to their greenhouse for demonstrations."

One respondent who previously knew drying and grinding okra and whose knowledge was supplemented by the training offered to her by FRC said that drying and grinding okra helped her in storage and also carrying it to the market.

"Post-harvest handling is what I was trained on as well but I had my knowledge previously. For example, I can sell my fresh okra if someone wants them like that but generally, I dry and grind it so that it doesn't go bad easily. Drying and grinding okra help in their storage as a dry and ground okra can't occupy a big space and it is easy to carry."

Through a means of drying and grinding, the refugee farmers add value to their okra and cassava. One female respondent narrates how she adds value to her okra and cassava and eventually, her products command high prices in the market. Furthermore, after cutting and drying the okra, she picks out the good ones for seeds for next season's planting.

"I cut and dry okra and cassava after harvesting using the sun. I sell them as just dry okra and cassava or I first grind them to add value and sell them as powders/flours. One basin of dry and powder okra is 260,000 Ugx".

5.1.3. Financial Capital.

The ability to obtain financial resources, such as micro-credit facilities, is essential for refugees to allocate funds towards agricultural inputs, equipment, and infrastructure. Financial inclusion empowers refugees to develop small businesses and enhance their economic welfare. Furthermore, farmers who have improved access to financial resources, such as loans and microfinance, can make investments in their livelihoods and participate in more profitable endeavors. However, refugees in Ayilo face a difficult situation in terms of financial capital. Most of them are unable to hire modern equipment for their farming. A few who can sporadically rent modern types of machinery are met with high prices.

"I strongly desire to use modern types of machinery, however, my financial constraints do not actually allow me to do so. At times, I rent a tractor but it is way too expensive. The only available technology is to rent ox-plough from the locals who also charge us highly."

5.1.4. Physical capital

This refers to the development of infrastructure such as roads, and storage facilities. This development is crucial for improving market access by making it easier to move agricultural produce to markets. Sufficient physical capital facilitates the smooth operation of value chains and trade networks. Farmers who have improved access to transportation infrastructure and marketplaces are more inclined to engage in commercial activities and cultivate a wider range of crops. This can lead to an increase in their earnings and a decrease in their susceptibility to unforeseen events. However, the challenge in this capital is quite clear. The roads leading to the farms in the villages are generally poor and become impassable during the rainy season. Refugees face several challenges in this situation. The transportation cost becomes consequently because the few boda-boda riders who go to those far and unreachable villages charge the refugee farmers highly. There are also no storage facilities in the market center. The only stall in the market is used during the daytime and is not enough for all the farmers (hosts and the refugees). However, the roads going to Adjumani town and other towns in the region are generally good and tarmac. Some refugees take advantage of these roads and transport their produces to Adjumani and Pakelle. A few also transport their produces beyond Adjumani borders to South Sudan thus supply the wider market and maximizing their income in return. They only arrange transportation of their produces/products to South Sudan and their relatives there will receive and sell it. Then they transfer money to the refugees.

"For South Sudan, I have relatives back home who take care of the sale of my okra. What I just do is arrange the transportation of my okra because there is a good road to South Sudan, and then they take care of the rest until it is fully bought. They send me my money through a mobile money transfer system afterward."

Another significant physical capital in the area is the milling/processing facilities. In this settlement, there are okra and cassava millers that are used to grind these produce. Refugee farmers who have sufficient financial capital hire these millers to grind their okra and cassava. The ground okra and cassava can be transported to far distances and can also be stored without getting spoiled. Therefore, refugee farmers benefit from place and time utilities hence maximizing their income.



FIGURE 4 SHOWS OKRA AND CASSAVA MILLER AS A PHYSICAL CAPITAL.

Source: Field data, 2023.

5.1.5. Social Capital.

Programs promoting cultural integration and awareness facilitate the overcoming of communication obstacles between refugees and host communities. Facilitating reciprocal comprehension enhances favorable connections, societal unity, and efficient cooperation in agricultural endeavors. Collaborative endeavors between refugees and host communities, as well as joint farmer groups, have a substantial impact on improving sustainability and production in agriculture. This is known as social capital. Social networks and collaborations enhance the ability to get resources and access markets. Participation in developmental groups or organizations is also social capital and can enhance the likelihood of diversifying one's livelihood and bolstering coping strategies during difficult periods. One female refugee who is well connected with the NGOs receives seeds and extension services. Due to this connection, she can cultivate onion and groundnuts which have a great market in Ayilo 1.

I am very connected with NGOs that deal with agriculture projects. Thus, I have a network to get seeds and agricultural extensions. I generally sell things like groundnut, onion, okra, chicken, and fruits. I don't sell eggs, only chicken. At times of emergency, I also sell goats."

Social networks also help refugee farmers connect with other prominent customers of their agricultural produces such as Ethiopians and Eritreans. The Ethiopians and Eritreans are affluent and engage in other businesses such as owning shops for accessories, clothings, and electronics. South Sudanese refugee farmers who connect with these traders can have their produces bought easily and earn enough income. Their bonding and co-existence strengthen as well. Some other refugees still have family ties with their relatives back in South Sudan.

These ties facilitate their access to markets for their produces in South Sudan as narrated by one male refugee farmer in Block C in Ayilo 1.

"At times, when I go to South Sudan, I normally take it with me for sale since it commands better prices in South Sudan. Ethiopians and Eritreans in places like Kampala also buy from us since they also eat okra, this also happens through networking. Sometimes, relatives from South Sudan also import from us here and they will sell it again over there."

Also, those refugee farmers who are members of certain groups have easy market access. The members of their groups become their primary customers, and if not, they become their means of advertisement for their produces. Therefore, the NGOs have started mixing both hosts and refugees for them to benefit from these social groupings and connections. Farmers who are members of mixed groups have better access to markets than those who are members of groups.

"The VSLAs are also extremely connected. They are aggregated also in circles within the district. The VSALs know each other most of the time. VSLA as an institution provides, if a member has a produce, the VSLA group is the first market. When you just tell the group members. I have this who is willing to buy it means you already have over 30 people you are advertising to. And sometimes when the product is bought immediately because the VSLA people are also connected to other people, so it's a primary unit for marketing and even sales."

5.2. Agricultural Market Practices.

Refugee farmers in Ayilo 1 Settlement area have ways they access agricultural markets. In this part, these are what are referred to as market practices. These practices depend on an individual farmer and are not static. One farmer can practice all of them or one or two of them. This majorly depends on the time of harvest and demand at that particular period and the capital they possess. Factors such as networking are at play in these market practices. When a farmer does not have ready buyers by the time of harvest, they have to take their products to the local market in the settlement or the nearby town. One female respondent in Block C said, *"I don't have contract buyers. I just my things to the markets and then I will find customers over there."*

Some farmers, who can establish networks, find their goods booked when they are still in the garden. This saves the transport cost incurred by the farmers since most people cultivate in deep villages that are quite far from the settlement. It also ensures income security when an individual farmer has buyers in advance. One male refugee farmer who was able to have contract buyers for the year 2023 during my time of fieldwork in Ayilo 1 narrated, *"Some buyers booked them while still in the garden, they came to my garden during harvest time to come and collect them."*

However, it is not every time that this contract buying always happens. It, generally, depends on the period of harvesting and the demand at that time. At times, when some crops are scarce, it is now the customers that compete to buy. This pushes buyers to book crops. Other than that, a farmer has to take their crop produces to the market if there are no contract buyers. *"It depends on the time and period of harvesting. In periods when okra is rare, some people even come to my garden to buy it. Other than that, I bring it to this local market for sale."*

Some other crops are mainly sold in the local market in Ayilo 1. This is because they are mainly eaten by both the locals and the refugees. Locals have also adopted eating some of the crops grown by the refugees. This has created a wide market within the settlement for those crops. Some of the crops that were not previously consumed by the locals but are currently being consumed are *kudura,kropa/gwedegwede* and okra. Therefore, the first two crops/vegetables have a wide market within the local market in Ayilo 1. Okra, also, has a market but its outside demand is higher than the demand within the settlement, hence it is

both for consumption within the settlement and the surrounding villages, other districts within Uganda, and other countries such as South Sudan and the diaspora. Refugees take advantage of good roads to South Sudan and their family ties to send their goods to South Sudan to maximize income. Also, the local restaurants within Ayilo 1 Market started adding *kudura,gwedegwede/kropa*, and okra on their menus alongside their local foods because the majority of the consumers in those restaurants are South Sudanese refugees. Simsim, in Arabic or Sesame in English, is the most widely consumed crop within the settlement. It is also widely grown by the refugees, therefore, it has a ready market within the settlement.

"My main commercial crop is leafy vegetables such as kudura and kropa. They are light to be taken to the local market by carrying them on head. Therefore, it is only the local market that I can access for my leafy vegetables. The sale of the other crops is irregular but it is still the local market."

"Simsim is mostly sold in the local market here in Ayilo because it is also eaten by the locals and the refugees. However, okra can reach up to South Sudan if it doesn't get finished in the local market."

"The locals here have also increased their consumption of okra. They used not to consume okra before we came here. Also, the refugees eat in their restaurants, therefore the locals have learned how to cook it in their restaurants. This creates a wider market for okra both here in Adjumani district and beyond the borders of Uganda such as South Sudan. Therefore, my household sells to both local and regional markets. We sell to both small-scale and large-scale retailers."

Gender, as part of social dynamics, also plays a significant role in the market practices of South Sudan refugees. While women tend to sell their crops predominantly in the local market, men have the advantage of taking their crops to other places, including South Sudan. Women find it convenient to sell in the local markets because it does not require a lot of procedures compared to taking goods to other places which involves some procedures, including national ID checks at the border and customs duties. Since refugees do not own Uganda National IDs, it is only men who take the risk of taking their goods to other places because they have devised ways of dodging customs authorities at the borders. One female refugee farmer narrated how it is easy to take her crops to the local market. Her difficulty only comes in when she wants to sell her goats because the sale of goats involves formal paperwork to show ownership and to prevent future accusations of theft.

"As a woman, I normally sell my products here in Ayilo 1 market. Things like kudura, gwedegwede, okra, onion, and fruits have a ready market here in Ayilo 1. Therefore, I do not bother to take my things to the regional market as it comes with some challenges such as taxation on the way and lack of national ID that complicates things on the way. Last year, I had my table/space under the market stall but then taxation was high. I resorted to selling my things at home or in bulk to other retailers. The only transaction that may take time is the sale of goats. The government wants every seller to first have papers of ownership before selling any goat or any other livestock. Therefore, it is rare to sell my goats, only in times of emergency."

Presently, in the settlement, refugee farmers' main export comes from okra—mostly dry and ground okra. Okra is one of the main ingredients for any soup in South Sudanese dishes. Eventually, this increases its demand among South Sudanese. Because of this, refugee farmers in Ayilo 1 settlement cultivate okra in large quantities. Though parts of okra harvests end up in the local market to supply local restaurants and homes within the settlement, much part of it goes outside Adjumani district. Ethiopians and Eritreans in Uganda also consume okra but

they do not cultivate it since they stay in big cities engaged with other livelihood activities such as businesses, hotels and restaurants. These groups also form a large portion of customers and consumers of okra from South Sudanese refugee farmers in Ayilo 1 settlement who have established connections with them. Therefore, okra is sent to Kampala, Gulu among other major cities, and South Sudan for sale. The refugee farmers use their relatives back home in South Sudan to sell their okra on their behalf. Some refugees also take their okra in person when they are going to South Sudan for visits. Some of the refugee farmers narrated how they engage with the outside market.

"For South Sudan, I have relatives back home who take care of the sale of my okra. What I just do is arrange the transportation of my okra here up to South Sudan, and then they take care of the rest until it is fully bought. They send me my money through a mobile money transfer system afterward."

"At times, when I go to South Sudan, I normally take it with me for sale since it commands better prices in South Sudan. Ethiopians and Eritreans in places like Kampala also buy from us since they also eat okra, this also happens through networking. Sometimes, relatives from South Sudan also import from us here and they will sell it again over there."

To sum up South Sudanese refugee farmers' agricultural market practices, they are involved in both short-supply and long-supply chains. A short supply chain involves contract buying as well as taking the agricultural products to the local market. Contract buying happens when the demand is high and the production is quite low. There is also a wider demand for agricultural products such as okra. Ethiopians and Eritreans, mostly in big cities such as Kampala and Gulu, demand okra from the South Sudanese refugee farmers in Ayilo1 and other settlements. Therefore, refugee farmers export dry and ground okra to other districts where these people are residing. South Sudanese in South Sudan and the diaspora also demand this okra. The hindrance is only at the border because refugees do not have Uganda National IDs, therefore the only way to export this okra to South Sudanese is to take one sack at a time, which is not sustainable. Therefore, the government of Uganda should revisit the policies concerned with the freedom of movement for refugees to spread beyond Uganda's borders. This will make a complete freedom of movement.

After these market practices, in the next section challenges faced by the refugee farmers are presented.

5.3 Agricultural market challenges.

5.3.1. High transportation cost.

As indicated in natural capital (See section 5.1.1), refugees rent agricultural lands in places far away from the settlement. This is so because they can only get agricultural lands in those villages which are far away from the settlement due to the topography around the settlement which is swampy and inappropriate for cultivation. This farness in distance is then reflected in transportation. The time that harvest normally occurs is rainy reason and roads leading to these places are generally footpaths with no good roads. In light of this, transportation always becomes a burden to bring harvested produce to the market. Moreover, the transportation fee is generally high. This exponentially increases the cost of production and hence reduces the income earned by the refugee farmers. Since the majority of the farmers face this issue of roads in the physical capital, only a few quotes of this challenge are given below.

"First of all, we cultivate in far places. This means we have to bring our goods to the markets from these places. The issue here is that the roads going to these places are not good. Only footpaths which become impassible during the rainy season and this is the only season where people cultivate. This means one can spend a lot of money on transportation and when you bring your things to the market, taxation comes in with high fees. At the end of the day you end up getting less income."

"Generally, our garden is far away from the settlement. Thus, when bringing products to the market, we face challenges such as high transport fees and a bad road network since it is in the village. It is even worse when it is a rainy season—yet we normally farm in the rainy season because we depend on rainwater for our crops."

One of the key informants, a CSA project officer with FRC, agreed with what the refugee farmers narrated concerning this transportation challenge. He also stressed it becomes an outstanding challenge because agricultural produces are generally perishable. He said,

"The first challenge is the poor road infrastructure, which is very impassable during the rainy season. Yeah, this causes delays in transportation and increases the cost of transportation. Yeah and also like to spoil some perishable products while in transit"

5.3.2. Lack of storage facilities

Apart from the transportation challenge, farmers are met again with another daunting physical capital challenge after having brought their goods to the market. Generally, there are neither storage facilities nor permanent or well-built shops in the market center. There are only temporarily erected shelters made of bamboo and covered with nylons. These shelters are not in a position to protect agricultural produce from sun or rain. There are shops for clothes and other wears in the center of Ayilo 1 Market for the locals, Congolese, Ethiopians, and Somalians. However, these shops are not appropriate and unavailable for storing agricultural produce as the owners cannot agree to allow refugee farmers to store their produce. The farmers are then forced to return them home in the evening and bring them back in the morning in the face of a lack of vehicles to transport them. They merely use human power to carry them to and from the market.

"As you know agricultural products are perishable, they normally go bad when there is no good facility for them. This is how it is here. I personally don't have any storage facility here or to put it general, there are no storage facilities in this market. I take my products back home in the evening after a long day in the market."

"Our structures here in the market are semi-permanent. They are not good for the storage of these products. Therefore, I take them home in the evening and bring them to the market the next morning."



FIGURE 5 SHOWS WOMEN SELLING UNDER AND IN FRONT OF TEMPORARY STRUCTURES

Source: Fieldwork Data, 2023

5.3.3 Lack of space in the market stall.

Not only is the storage facility a problem but where to sell during the day. There is one market stall in Ayilo 1 Market thanks to the government of Uganda. However, refugee farmers expressed their discontentment because it is nearly impossible to get a stand under this stall as it is not even enough for the locals alone. Because of this, those who take their produce to the market are forced to spread them on the ground or build a temporary shelter.



FIGURE 6 SHOWS WOMEN SELLING THEIR MAIZE, SWEET POTATOES, AND CASSAVA ON GROUND.

Source: Field data, 2023

As I passed in the market, I observed that a lot of women only spread their produces such as cassava on the ground under trees. After that observation, I interrogated some women traders in the market. Some of their responses are,

"The major issue when bringing our products to the market is where to put them down and sell them."

"Market stall isn't always enough for the locals alone let alone including the refugee farmers/traders. We normally find it hard to get stands where we can place our products for sale---yet we still get taxed daily in the evenings after a long day toil under trees in the market."

5.3.4. Lack of market information.

Presently, in Adjumani District and Pakelle Sub-County where Ayilo 1 settlement is located, most of the radio communications are done in the local language, which the refugees in these areas do not know unless those who migrated to Uganda in the 1980s during the civil wars between the then Southern Sudan government and government of Sudan in the North. These are the people who know local languages in these specific areas. Those who came in early 2014 are yet to learn any of the languages in these areas. This typically means that they face difficulties in understanding the announcements made over the radio. These announcements include but are not limited to the announcements concerning the arrival of supplies from large producers in the district and from other districts, market prices among other announcements such as hygiene in the market. The supplies from the large suppliers/farmers greatly reduce the income for the refugee farmers as these large suppliers sell at lower prices, forcing the refugee farmers to subsequently reduce their prices as well. Furthermore, there is no frequent communication between the refugee farmers and the market regulators. The market regulators normally visit the market when it is time to collect taxes. This further sidelines and segregates South Sudanese refugee farmers/traders in the market. At times they would make announcements in English but it is still a challenge for the women in the market because a majority of them did not go to school. They normally rely on translations from their children who go to schools and this is not always the case because during school times, children stay in boarding schools for nearly three months, and will only come back home during school holidays. Some of the women refugee traders/farmers I interviewed in the market said,

"Sometimes, the local authority makes announcements on local radio. They announce it in the local language and translate it into English. I don't know both the local language and English. But there is someone at home who is in secondary school who can get announcements in English. The announcements, sometimes, revolve around hygiene in the market, making drainage channels in the market area to drain away water on rainy days."

"Market information is lacking. There is no communication system between us and the market regulators and we are always not aware of any new development in the market. We just depend on the information we receive from the first people who enter the market."

"Another issue is that we don't get information about regional markets' supplies to our local market. At times, they bring in their cassava in large quantities and sell them at low prices. This greatly affects our income during times as such. If we get information, we can keep our products without taking them to the markets in order to sell at times where supply is low."

5.3.5. Over taxation.

Refugee farmers expressed their dissatisfaction with the way taxes are collected. In the market center, they believe that they are highly taxed in comparison to their local counterparts. Though the majority of them do not have stands in the market stall, the local council still tax them to facilitate the maintenance of the market such as cleaning the space in the evening. Not only in the market center does the taxation happen but it also happens at the borders.

The taxation increases when the trader(farmer in this case) does not have a Uganda national ID, which South Sudanese refugee farmers do not have. The refugee farmers expressed their resentment with the taxation system,

"They don't tax us at the same rate like the locals. I believe our taxation is higher than the way they tax the local people. Also, it is very hard to find customers here in the market if you don't have contract buyers in place or if you don't take them to South Sudan or other regions of Uganda where their demand is high. Here, the demand is a little bit low."

"At times, our refugee id doesn't suffice. Some stuffs need a national ID which we don't have. This causes us several problems when trying to make a cross-border trade. This means when you don't have a national ID, the charges increase on the way. E.g when you take a cow here to Adjumani Center for sale, the police give you a paper certifying ownership. However, while on the way you get highly charged. This reduces income after the sale as much has been used for a charge on the way."

5.3.6. Exploitation by the middlemen.

This is a challenge that the refugee farmers did not express or talk about. It was narrated to me by The Climate Smart Agriculture Project Officer of the FRC in Ayilo 1 Settlement. Perhaps, the refugee farmers are not aware that it is an exploitation. They may think that those large-scale buyers are their customers, yet these buyers buy from them at low prices and sell at high prices. As a result, these buyers get more income than the farmers who produce the crops. Perhaps, due to the level of education of most of the farmers---which is below primary school—they are either not aware of this vice or they have no choice other than selling their crops at once to avoid every day coming to the market and taking things back home in the evening.

"And then also, there's another challenge is the exploitation by the middlemen, most of the middlemen buy at low prices from the communities around and sell at high prices with their belief that refugees have a lot of money. So we find that average prices are higher in the settlements compared to markets outside the settlement, which is a disadvantage to the people within the settlements." FRC Project Officer.

5.3.7. Competition.

This challenge typically emanates from a lack of information about when large suppliers would bring their supplies to the local market. Refugee farmers cannot compete with large-scale farmers in the district. Large-scale farmers tend to reduce their prices to sell their products because they have large varieties of products that can generate enough income even when sold at low prices. Consumers are mostly attracted by this practice toward large-scale suppliers because this is where they can maximize their utility. This stiff competition. Because of this, South Sudanese refugee farmers are pushed to reduce their prices. This results in low income for the refugee farmers. During fieldwork/interviews, some of the female refugee farmers said,

"Competition from the large producers of the same products we produce is the main challenge in the market. When they bring their products in excess, they destroy the market greatly; prices reduce and we don't have other options apart from selling at low prices as well."

"The prices of the goods in the market are always low since there are large-scale producers who bring a lot of products to the market. This forces us to reduce our prices as well to get customers."

5.3.8. Theft/robbery.

Key informants stressed this theft issue in their responses several times. They attributed this vice to poverty in the region. They believed that the gangs who are involved in night thefts in the market are from poor economic backgrounds. While it is generally accepted by most people in Uganda that Northern Uganda (where Adjumani District is located) is generally poor, some children just like stealing because their peers are doing it even if they are economically better off. The lack of electricity in the market makes traders(both local and refugee farmers) to close earlier. This gives room for these children to carry out their activities of stealing without anyone present in the market at nights. A key informant from FRC narrated,

"Sometimes there is also theft because some of the people are not having a good economic background, so they tend to steal. We have heard breakings into people's shops and stores which creates a sense of insecurity for the traders. There's also poor light in the markets. This causes people, especially in the food market, to close their business very early. You can't work beyond six or seven and also this issue of insecurity. So many of the traders are also fearing the young and crowded boys who hung around, who can easily attack them. This reduces the time over which someone make more sales."

5.4. Strategies they use to overcome challenges.

Presently, refugee farmers are faced with challenges in the market. These challenges range from high transportation costs, a lack of storage facilities, high taxation, and competition from large-scale producers to a lack of space in the market stall. Nonetheless, refugees have developed some strategies to overcome some of these challenges, though some of the challenges are beyond them. These challenges require collaboration between government agencies, NGOs, refugees, and the local communities to address them. The issue of agricultural land acquisition is detrimental to agricultural production. Some refugee farmers fail to get enough land due to hurdles surrounding land acquisition. Therefore, to fully address this challenge requires the government to engage the local communities to allow refugee farmers to rent at ease or the government and other partners such as UNHCR should first acquire land from the locals and then the refugees should get it from the government (OPM). In the face of this challenge, some refugees have been reporting conflicts associated with the land to the OPM and the police, however, it does not yield tangible results as the government (OPM) does not have a voice in matters to do with land since it is communally owned. The problems that arise cannot be solved through the legal system in the country but through customary laws. One male refugee narrates how he involves OPM and the police in the settlement to be witnesses when he is entering into a transaction with a local landlord as below,

"Well, most of the challenges are beyond us. We try our level best to just cope with them, some of which can be solved as well. For example, high rent fees for land, I can use remittances from South Sudan to rent land. The issue here is that it is scarce to get land, and when you get it some disputes arise from the relatives of the landlord/landlady as they claim the ownership of the land. What I do sometimes is to report my agreement with that particular landlord/landlady to OPM and Police Center in the settlement here to be witnesses of that agreement in case disputes arise later on."

Another potential strategy for avoiding land conflicts is employing the one who owns the land. Some refugee farmers, after renting the land from the locals, employ them to take care of the gardens. This prevents conflicts that may arise as well as it protects refugee farmers' crops from potential damage by cattle and theft since refugees retreat to their homes in the evening. The landlords, who now turn into employees, will then look after the crops in the absence of refugees. They also weed them and harvest them when harvest time comes as one of the refugee farmers narrated,

"Also, when I rent land from a local, I also pay him again as a laborer to tilt my land, weed my crops, and harvest them. This creates a strong bond as he is my landlord and an employee at the same time. His income diversifies and our friendship becomes strong."

The establishment of networks allows refugee farmers to pool resources and collectively address market challenges. The network is a broad term that could mean forming groups and/or creating relationships between the refugee farmers and their potential buyers. These constitute social capital which is an important aspect of livelihoods for smallholder farmers as they use it to access important resources (Zada et al., 2019). According to Mayoux (2002), social capital helps farmers achieve financial sustainability through networks and collective actions. Collective actions in the context of Ayilo 1 Settlement include VSLAs and mixed farmer groups. The VSLAs serve as a source of credit and loans to the refugee farmers, thus mobilizing financial capital. The refugee farmers also employ networking to pool customers beforehand. This acts as income security in terms of market inaccessibility because these customers come up to the farms to buy the products and transport them by themselves. Not only is networking for looking for customers but also for establishing connections with the local farmers in the market stall and area. Some refugee farmers do this in order to get spaces in the market area/stall since it is difficult to get a space under the current stall in the market, forming a sense of co-existence. Refugee farmers also forge friendships with local transporters. Physical capital such as road infrastructure is still behind in this area and this contributes to the difficulty in transportation. Refugee farmers face difficulties in bringing their goods to the market, especially in the rainy season when these poor roads become impassible. This means that transportation cost exponentially increases as a result, reducing their income received from the sales. They struggle to overcome this by creating friendships and connections with the local transporters in order to pay less than a normal and strange client. Some refugee farmers gave their strategies as below,

"When I want to plant okra, I have to look for buyers first. When I don't get ready buyers before planting okra, then I have to devise ways to get enough money for transportation."

"Currently, I don't have a space under the market stall. However, if I want to sell my produces, I only approach those who have spaces and agree with one of them to allow me to sell my things and I pay something little in return. This is the only way I sell produces under the market stall."

"For the case of transportation, I create friendships with local bodaboda riders. They see me as a friend than a client."

To ascertain market prices and information, some refugee farmers take it upon themselves to research the market on their own. They do this to avoid competition from large-scale producers who bring their products to the same market. When they bring their products before the large-scale producers, they have the opportunity to maximize their income before competition creeps in. Refugee farmers have also adopted communication among themselves to ensure that they are selling at almost similar prices according to the LWF food security and livelihood officer.

"I also do market research before bringing my products to market to ascertain myself with market prices. I then reduce my prices to sell out my products quickly while still fresh since I don't have a space under this market stall." "Yeah, the farmers themselves. I've seen farmers on information calling each other and communicating with each other to find out prices to find out whether their markets to compare different markets."

Taxation is also another significant challenge, both in the local market and at the borders. Refugee farmers do not have a say in the taxation that occurs in the local market though they are resentful about it. They believe that they are taxed highly in comparison to their local counterparts, however, they believe that they do not necessarily have a right to oppose this practice. It is incumbent upon the local government to at least reduce the tax amount or at least be transparent so that the refugee farmers do not feel that they are taxed highly compared to the locals.

They have only devised a way to avoid heavy taxation at the borders, especially the one of Uganda and South Sudan. They do not transport their products in bulk when taking them to South Sudan. This is done in a bid to avoid heavy taxation because when it is one sack or sacks of okra powder, the customs authorities at the border would assume it is for consumption. It is usually males who transport products across this border because they are not culturally known for sale, unlike women who regularly sell in the market. However, before transporting crops such as okra to other districts and countries, the women will first add value by drying and grinding it. This will make it transportable and can stay long without getting damaged on the way. This value-addition is done by women before men take it to other areas. One male refugee okra farmer said,

"Since the issue of ID and high taxation at the border have become big challenges, I don't send my okra to South Sudan in bulk. I sent it one sack at a time to avoid these issues as someone who is taking it there couldn't be taxed as the authority at the border may think it is only for consumption."

5.5. Chapter summary.

Refugees in Ayilo 1 use the five livelihood capitals to facilitate their market access. The five capitals are human, physical, natural, financial, and social capital. These capital are not uniform among the refugees. Therefore, refugees who have better access to these capitals have better access to markets compared to their other counterparts. Some refugees who are trained in modern techniques of farming such as line/row planting, and usage of machinery produce enough for the markets making them reach wider markets likewise to those who have enough land and those with better financial capabilities and social capital. Therefore, it is evident that these capitals play a critical role in their access to the market.

However, the condition of Adjumani district, which is generally in poverty coupled with incomplete integration of the refugees, makes it hard for the refugees to fully access these capitals/resources. For example, roads from their farms to markets are poor and become impassable in rainy seasons. Storage facilities in the market are not available as well. There is only one stall in the market which is not enough for all the farmers to sell their produce under it. Therefore, physical capital needs a lot of improvement in Ayilo 1 because refugees face several challenges emanating from it. Other capitals also have their limitations in the area, for example, land and water for irrigation are inadequate making it hard for farmers to farm enough for markets and their consumption.

To solve these challenges, refugees also use the capitals to solve challenges that emanate from these capitals. The most familiar examples of the capitals that the refugees use are financial and social capital. Refugees build relationships with the hosts intending to solve the challenges. Refugees lobby for agricultural lands to hire from the locals/hosts through their social connections. Moreover, they form VSLAs and farming groups with the hosts/locals. This way, they acquire social and financial at the same time. Financial capital facilitates the transportation of their goods to the market and social capital facilitates their finding of customers. Therefore, refugees with better financial and social capital also have better access to the agricultural markets for their produce in Ayilo 1 Settlement.

Chapter 6: Discussion.

In this section, a discussion about results and reflections on the fieldwork and methodology are presented.

As a flashback, the research aims to explore the role(s) agricultural market access can play in the social and economic integration of South Sudanese refugees in Ayilo 1, Uganda. Three specific questions were answered to arrive at the findings of this study. The three questions were; 1. "What are the South Sudanese refugees' current agricultural market access practices?"; 2. "What are the challenges they face?" ; 3."How do they try to overcome those challenges?" The answers to these SRQs are given alongside what the literature says about them.

6.1 Livelihood Capitals and Agricultural Market Practices.

This discussion section highlights the various market practices employed by South Sudanese refugee farmers in Ayilo 1 Settlement area such as short-supply chains and long-supply chains. These practices are influenced by factors such as the time of harvest, demand, networking capabilities, and other capitals of individual farmers. The farmers utilize strategies like contract buying, selling in local markets, and exporting to neighboring regions like South Sudan depending on how financial, physical, and social capitals permit them to do so (Mumuni & Oladele, 2016). Access to these capitals demonstrates heterogeneity among the refugee farmers. This signifies that refugee farmers who have better access to these capitals have better market practices such as transporting produce beyond the borders of Uganda to maximize income. Others who have better social capital can network and have their produce bought on their farm without transporting them to the market therefore significantly reducing the cost of transportation. This difference in access to these capitals means that refugee farmers can also have differences in their livelihoods and market engagement outcomes. This is in line with a study that Manlosa et al. (2019) conducted in rural Southwest Ethiopia that

indicated that farmers in this rural Southwest Ethiopia demonstrated differences in income levels and food security because of their differences in accessing livelihood capitals and their different livelihood strategies. Gender dynamics also play a role in the agricultural market practices of refugees in Ayilo 1, with women often selling in local markets due to convenience, while men take on the risk of exporting goods to other places (Maclean, 2010).

6.2. Agricultural Market Access Challenges.

In their engagement with the agricultural markets, South Sudanese refugee farmers are met with challenges of accessing livelihood capitals, though there is no uniformity among the farmers. Some farmers still can access these capitals to a certain extent. Some of these challenges emanate from the market system and some are from refugee farmers' vulnerability. For instance, lack of storage facilities, lack of space in the market stall, lack of market information, over-taxation, and high transportation costs are from the market system itself. A well-functioning market, supported by policies and programs, can address several of these challenges. Challenges such as theft/robbery, competition, and exploitation stem from refugee farmers' vulnerability. Refugee farmers are vulnerable to theft because they do not have permanent storage facilities for storing their produce, therefore, they store them in temporarily built structures that are susceptible to robbers. They are smallholder farmers and cannot withstand the competition that comes from large-scale producers. Smallholder farmers cannot overcome these challenges in their market access (Baloyi, 2010). According to Muhangi et al., (2022), these market access challenges perpetuate refugees' vulnerability as they become unable to achieve food security and improved income. Refugees do not have enough resources to mitigate these challenges, making their economic prosperity and welfare remain unreachable unless otherwise support programs are designed in a way that overcomes these challenges (Jacobsen and Fratzke, 2016).

6.3. Strategies they use to try to overcome challenges.

However, in the wake of these challenges, refugee farmers employ some strategies to try to overcome some of the challenges. These strategies include networks, collaboration with their local counterparts in the market center to get spaces under the market stall, market research, and value addition. Networks help them find customers beforehand, therefore, supporting them in the elimination of transportation costs and income security (Nchanji, E.B & Nchanji, Y.K, 2022). The customers will normally come to the farms to buy things, instead of the farmer transporting the products to the markets. This is possible through networks. They collaborate with the local farmers to get spaces under the market stall such that they can sell their products under a good shade. Value addition is mostly for crops such as okra, and cassava. They do value addition to transport these products to other districts and countries to maximize profit, eventually increasing their income. Women dry and grind okra and cassava and put them in 50 kg sacks to facilitate smooth transportation and avoid damages that may occur on the way when men are transporting them. While transporting okra and cassava in sacks, men can evade taxation on the way as it may be assumed that it is for consumption because South Sudanese refugee men are not known for selling in Adjumani District, unlike women who are known for selling, according to their culture. Through market research, refugee farmers can acquaint themselves with the current prices in the market and adjust their products' prices accordingly. They can know when the large-scale producers will bring their products to the markets to avoid competition. By employing these strategies, they can overcome some market challenges and improve their market access and consequently, their income and relationships between them and the local farmers (Saili et al., 2008).

6.4. Opportunities to improve/increase agricultural market access.

Besides these strategies, there are evolving opportunities for increasing agricultural market access. The ongoing infrastructural development could prove to be a major boost in the agricultural market access to refugee farmers (NDP3, 2020/2021-2024/2025). There is an upgrade going on the roads going to the major towns in Adjumani District. These towns are where many people, who could be potential customers and consumers of the refugee farmers' products, are residing. Therefore, upon completion, the agricultural market for their products is anticipated to improve. Another opportunity is the availability of fertile land. However, land acquisition policies are still customary in the region (UNDP, 2018). With that, the government plans to take it upon itself to lobby for land from the locals to allocate to the refugees to increase their agricultural productivity. Refugees believe this is a great opportunity for them to produce for the markets if the government gets the agricultural land according to this plan. Furthermore, the ongoing trainings in agribusiness and mixed farmer groups by development initiatives such as NURI encourage refugee farmers to be entrepreneurial in their farming. The main aim of such trainings is to have a production and marketing plan(PMP) every planting season by selecting strategic crops and making their marketing plan for sales to have income, and to facilitate farmers' collaboration in their groups. Furthermore, NGOs and government authorities such OPM link refugee farmers to markets in other areas through market shows in big cities. These opportunities can allow refugee farmers to cultivate in large quantities for both consumption and markets, therefore, achieving food security and increased income.

Yet, it is not always a physical development that can only improve their market access. A wellfunctioning system comprising government, NGOs, and the farmers can address several systemic challenges therefore improving farmers' agricultural market access. Refugee farmers should be seen as entrepreneurs who can contribute to the economic development of a place rather than just poor peasants. In the words of Zena et al., (2022), increasing agricultural market access for the refugees improves their livelihoods, and as a result, reduces their dependency on aid. They argue that refugees immensely contribute to the economic development of their host areas. This is seen in the case of Ayilo 1 settlement. Restaurants, schools, market centers, and health centers have been constructed in the area, providing sources of employment to both the refugees and the locals. The interaction of the locals and the refugee farmers in the agricultural market can promote their social cohesion and mutual understanding (Zena et al., 2022; Nagopoulos et al., 2023; S. Opono &F. Ahimbisibwe, 2023) as observed in the local market of Ayilo 1. Despite the challenges facing refugees, they have created friendships with the nationals/locals to overcome some of these challenges. Agricultural market access can spark agricultural production, and in the process, it can contribute to food security among the refugees (Kamara, 2004; Omata, 2022). Refugees reiterated that they can even feed themselves and the whole district if challenges facing them in the market are mitigated. When fully integrated into the agricultural market, refugees can increase their income and consequently their economic welfare (Jacobsen & Fratzke, 2016; T. Berke & L. Larsen, 2022).

6.5. Reflection on the fieldwork.

Before commencing the fieldwork, I sought permission from the OPM office in Pakelle Subcounty. It was a tiresome one traveling from Ayilo 1 Settlement to the OPM office in Pakelle because the OPM office in Ayilo 1 iterated that they could not permit me to do research/fieldwork unless it came from above(the office in Pakelle). I traveled to and fro for nearly one week following this process.

Before conducting the real interviews and survey, I first tested interview survey guides with my enumerator and other test participants. This process proved to be crucial as it allowed me to see where I could adjust some survey and interview questions.

During the fieldwork, the distance covered was somewhat challenging as I had to travel from the settlement to remote villages with poor to no road network linking them to the settlement. However, it was a great learning experience as I experienced firsthand what the refugees said about poor road networks. Therefore, the fieldwork in Ayilo 1 was an enriching and eye-opening experience as it allowed me to immerse myself in the lives and experiences of South Sudanese refugee farmers concerning their market engagements.

6.6. Reflection on the livelihood framework used to answer research questions.

The framework's emphasis on assets/capitals was critically helpful during the analysis and writing of this report. Refugee farmers effectively make use of capitals such physical, human, social, financial and natural capital to maintain their livelihoods and provide for their family, despite confronting various limitations such as scarcity of land, financial resources, and market prospects. In addition, the livelihood approach/framework promoted a research strategy that was participatory and focused on the community. Through involving refugee farmers in the process of identifying market challenges, strategies to overcome these challenges, and potential opportunities to improve market access, a feeling of ownership could be developed by the participants(refugees). The collaboration with local stakeholders, NGOs, and government agencies increased the significance and practicality of the research findings for policy and development initiatives that aim to better livelihood outcomes for refugees and their hosts in the district.

6.7. Limitations.

In this study, a number of limitations were encountered. They are given below.

First, there was not enough literature on South Sudanese agricultural market engagement in Ayilo 1 and other surrounding settlements to supplement the data collected on their market access in Ayilo 1. Therefore, this research used studies from other refugees in countries such as Ethiopia. The available literature was labour market access which do not capture the idea of agricultural market access well.

Second, it is paramount to acknowledge that translating data from Dinka language to English might have led to loss of some respondents' expressions and what they wanted to mean in their original dialects (Dinka Language has many dialects).

Finally, this research was generally descriptive and do not exhaustively provide critical analysis. It is also area-specific and cannot be generalized to other areas and refugee farmers in other areas/countries.

Chapter 7: Conclusion and Recommendations.

7.1. Conclusion.

The results of this thesis have been given in chapter 5. This chapter presents a relevant conclusion derived from the specific research questions that have been answered in the preceding chapter. Here, a relevant answer to the main research question is given. The main research question is "What role can agricultural market access play in the social and economic integration of South Sudanese refugees in Uganda?". The livelihoods approach allowed me to look at the refugees' current livelihood practices and their engagement in the agricultural market. Within the market engagement, the livelihoods approach made it possible to assess refugees' current market practices and challenges facing refugees when accessing the markets, their strategies, and the available opportunities to increase market access. Their outcomes afterward were also made manifest through this same approach. More importantly, the influence of structures and processes on the refugee livelihoods and their market access was looked at through this approach. This research aimed to explore the role(s) agricultural market access can play in the self-reliance and economic integration of the South Sudanese refugees in Ayilo 1 Settlement area.

Despite the presence of progressive approaches toward refugees such as self-reliance and economic integration policies in Uganda, refugees still find it hard to achieve their self-reliance due to several challenges. It is still a major challenge to achieve food security and increased income levels even if they are currently practicing farming as their livelihood activity. The small land of 30m*30m given by the government and UNHCR is only for housing and settlement. Refugees are then encouraged to rent land from the locals. However, due to the ambiguous nature of policies surrounding land renting, refugees find it difficult to rent enough land from the locals. Cheating between locals and refugees and land conflicts also arise among the locals themselves since land in Adjumani District is owned by local communities.

Presently, there is an incomplete market integration of the South Sudanese refugee farmers. The systemic challenges facing the refugee farmers in the market demonstrate that there is incomplete integration. This incomplete integration is manifest in the lack of space given to the refugee farmers under the market stall in the market to over-taxation by the local council. Despite this incomplete integration, refugee farmers are shifting from subsistence farming to market-oriented farming to generate income. Notwithstanding these challenges, refugees have devised strategies to navigate agricultural markets in Ayilo 1 Settlement and beyond. These

strategies make them keep pushing in the face of the challenges in their market access in a bid to achieve their livelihood outcomes.

In conclusion, their agricultural market access can play important roles in their social and economic integration. These roles are summarized as follows: Food security, job creation/employment, increased income level, social cohesion and mutual understanding between refugees and hots, and economic development in their host area. Therefore, improving their agricultural market access will not only be beneficial to them alone but also to their host area(s).

7.2. Recommendations.

Findings from the thesis suggest that refugee farmers' market access needs serious intervention if idealized self-reliance, social and economic integration are to be achieved. It is apparent that agricultural market access has major roles it can play in these processes. Therefore, the recommendation in this thesis will serve two purposes; 1. Recommendations for action and 2. Recommendations for future research.

1. Recommendations for actions:

- First of all, the livelihood interventions being carried out in the area should be gender mainstreamed to create equity for women. This is because the majority of the population in Ayilo 1 Refugee settlement are women, and mostly elderly. They majorly engage in farming and local markets in the area. However, they are faced with challenges they are incapable of surmounting. One-size-fits-all or gender-blind programs bring about inequality in resource access. This is clear in Ayilo 1 settlement area. Women are unable to access enough land and credits depriving them of both natural and financial capitals.
- There is a need for improved collaboration and better coordination among the stakeholders involved in livelihoods and market integration projects. Refugee farmers should be one of the main stakeholders that have a voice instead of just target groups if the results of these projects are to be sustainable. The current nature implies that refugee farmers are just target groups, and after the end of each project, there is no communication and follow-up anymore. The impact of such a project ends as soon as the project ends. The same thing happens in the market as local council government pays less attention to the grievances and voices of the refugee farmers in the market. They are supposed to be one of the main stakeholders when decisions surrounding market are to be made.
- Over-taxation in the local market acts as one of the bottlenecks of economic inclusion. It contributes to refugee farmers' inability to increase their income. Therefore, a reasonable amount of taxation is good for the maintenance of the market and the provision of other services in the area. Excessive taxation is detrimental, thus the local council should look into this and adjust it

accordingly, considering that the old women in the market cannot cope with high taxation.

2. Recommendations for research.

This thesis mainly focused on the refugees without including the perspectives of the locals/nationals except the key informants. Though developments are going on in the area due to the presence of the refugees, it would still be crucial to involve the hosts' perspectives. Therefore, I propose some of the future research in this area by any willing researcher or by me.

- How is the social and economic integration for refugees perceived by the refugees and local population?
- What is the impact of the refugee farmers' agricultural market access on the locals?

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Appendices.

A. Semi-structured Interview guide:

Refugee farmers' interview guide

Introduction:

My name:

My occupation:

Purpose:

Participant's introduction:

Their occupation:

Informed consent.

Recording interviews and taking pictures(observation)

1. Agricultural market access practices.

- 1. Could you please provide a description of your present agricultural practices and elaborate on the methods you employ to access markets for your agricultural products?
- 2. What specific agricultural products do you predominantly cultivate and sell in the market?
- 3. What are the typical markets (local, regional, or other) that you typically access, and what is the frequency of your engagement with them?

2. Challenges while accessing agricultural markets.

- 1. What challenges/barriers do you face while accessing agricultural markets?
- 2. Are there particular obstacles associated with being a South Sudanese refugee that hinder your market access?
- 3. What problems or experiences have you had with transportation, market information, or market infrastructure?

3. Strategies to overcome challenges.

- 1. How do you adjust to or overcome these challenges in your efforts to gain agricultural market access?
- 2. Have you created community-wide strategies or networks to solve agricultural market access issues?
- 3. Are there any programs or support groups that have helped you form networks?

4. Opportunities for improvement.

- 1. In your perspective, what prospects are available to increase agricultural market accessibility for South Sudanese refugee farmers?
- 2. Are there any particular policies, resources, or services that you believe could enhance agricultural market accessibility and, as a result, foster economic and social inclusion?

5. Social dynamics.

- 1. To what extent does the social network and support system within the refugee population impact agricultural activity and market access?
- 2. Do you engage in any community-based or cooperative agricultural or marketing initiatives?
- 3. Could you please provide an analysis of the impact of gender and cultural norms on agricultural activity and market access? Do these dynamics present distinct obstacles or potential opportunities?

Experts' interview guide.

1. Exploring Current refugee farmers' agricultural market access practices.

- 1. From your point of view, what are the prevailing agricultural market access strategies employed by South Sudanese refugee farmers residing in Ayilo, Uganda?
- 2. Could you please identify any significant trends or patterns observed in their agricultural market engagement?
- 3. What are the main obstacles encountered by these refugee farmers in their efforts to access agricultural markets, as noted by your organization or agency?

2. Interventions.

- 1. Would you describe the interventions or support programs that your organization or agency has developed to support/help refugee farmers in enhancing their agricultural market access?
- 2. Based on your expertise, could you please elaborate on the strategies that have demonstrated effectiveness in mitigating the challenges encountered by refugee farmers?

3. Policies and coordination.

- 1. Are there any governmental policies or initiatives in place to enhance the economic and social inclusion of South Sudanese refugees by providing them with access to agricultural markets?
- 2. What is the influence of interagency coordination (collaboration with non-governmental organizations (NGOs), and engagement with other stakeholders) on the effectiveness of these interventions?

4. Opportunities.

1. In your perspective, what opportunities are present to increase agricultural market accessibility for refugee farmers?

2. Could you provide suggestions for policy recommendations or collaborative initiatives that have the potential to enhance social and economic inclusion?

Other information.

The End.

Appreciation!!

B. Short household survey: Screenshots from Kobo Collect Toolbox

Short Household survey-Ayilo l

Household information.

What is your name

Gender		
O Male		
Female		
O Others		
How old are you?		
in years		
What is your level of education?		
0		

Did not go to school

Primary School

Secondary School

Uinversity/college

Vocational training/school

How many members are in this household?

Who is the head of this household?

◯ Myself

My wife

My husband

O My mother

O My father

O Others

What is the highest level of education in this household?

Did not go to school

Primary School

Secondary school

University/college

Vocational training/school

Sources of income

What are the main sources of income in this household?

Employment
Agriculture
Business
Remittances
Animal husbandry
Other

Specify other sources of income

The most important source of income in this household is

 Employment
 Agriculture
Business
Remittances
Animal Husbandry
Other

Specify other

Land ownership

Do you have access to agricultural land?	
\bigcirc	Yes
\bigcirc	No
How do	you access this land?
	Renting/leasing
	Share cropping
	Ownership
	· · · · · · · · · · · · · · · · · · ·

What is its measurement(in feddans)? In hectares

What types of crops do you grow on that land?

- Cash crops
- Food crops
- O Both

What are the examples of cash crops that your household grows?

Okra
Onion
Cabbage
Watermelon
Eggplant
Leafy vegetables
Others

Specify others.

What are the examples of food crops that your household grows?

	Sorghum
	Maize
	Cassava
	Potato
	Others
Specify others	

What types of livestock does your household keep?



Do you keep poultry?

⊖ Yes

O No

What are the examples of poultry your household keeps?



Resource accessibility

Do you access the markets for the sales of your agricultural products?

0	Yes
0	No

How long is the distance of local market from your household/farm? In Kilometers

Does your household access other regional markets?

Ο	Yes
\bigcirc	No
\bigcirc	Sometimes

Are there agricultural credit services available in Ayilo?

0	Yes
\bigcirc	No

Is your household able to access agricultural credit for agricultural purposes?

0	Yes
0	No
0	Sometimes

Is your household able to pay off its agricultural loan each year?

0	Yes
\bigcirc	No
\bigcirc	It is very hard to pay back in one year
\bigcirc	Other
Specify	other

Other information

Please provide any supplementary remarks or details that you deem essential for comprehending your home's economic conditions, issues/challenges, or prospects/opportunities.