MARKET ASSESSMENT AND VALUE CHAIN ANALYSIS

IN SOUTH SUDAN REFUGEE AND FORCIBLY DISPLACED PERSONS HOSTING AREAS

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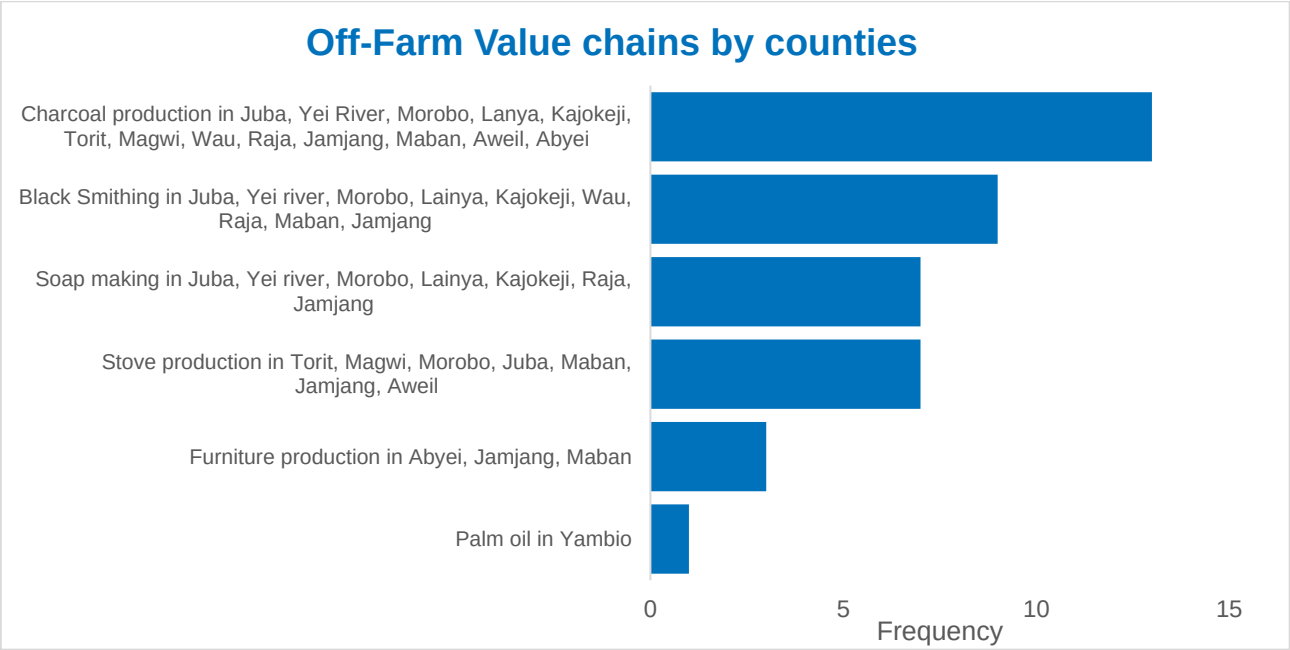
KEY FINDINGS

1. **Market Landscape**: Both on-farm and off-farm livelihood options were identified to capture the full scope of economic activities across South Sudan. While off-farm value chains play a role in local economies, they were not prioritized within the four selected value chains for each county. However, the main agricultural value chains of priority in each county are as follows: in **Maban County**, maize, sorghum, goats, and tomatoes; in **Jamjang County**, sorghum, maize, groundnuts, and sesame; in **Abyei County**, sorghum, milk, maize, and tomatoes; in **Juba County**, vegetables, maize, beans, and millet; in **Yei River County**, maize, sorghum, vegetables, and groundnuts; in **Morobo County**, groundnuts, sorghum, millet, and cassava; in **Lainya County**, sorghum, beans, maize, and groundnuts; in **Kajokeji County**, cassava, pigeon pea, groundnut, and maize; in **Torit County**, sorghum, maize, groundnuts, and cassava; in **Magwi County**, beans, cassava, maize, and sesame; in **Wau County**, groundnuts, honey, milk, and sorghum; in **Aweil County**, sorghum, groundnuts, maize, and sesame; and in **Raja County**, groundnuts, sorghum, goats, and honey.



2. **Age, Gender, and Diversity Considerations**: The study emphasized the importance of integrating age, gender, and diversity considerations into market systems. It was observed that youth and women often face unique barriers, key among them include low educational/literacy levels, restrictive social and cultural norms, and limited access to financial resources.

3. **Common Barriers Across Counties noted to impact the agricultural value chains include Limited access to quality inputs** restricting farmers and entrepreneurs from obtaining essential seeds, fertilizers, tools, and raw materials, leading to low productivity and weak market competitiveness. **High transport costs** worsen the situation as poor infrastructure

and expensive logistics limit producers from reaching broader markets, raising costs and shrinking profit margins. **Insecurity, conflict, and climate events** disrupt agricultural activities, deter investment, and create volatile markets, preventing long-term planning and reducing resilience. **Microeconomic factors drive market price fluctuations** and limit access to market data, making it difficult for businesses to predict earnings and plan investments. A lack of structured systems results in missed opportunities for growth and economic development. **Financial constraints**, including limited access to capital and credit, high-interest rates, and lack of collateral, prevent small businesses and farmers from expanding, stifling entrepreneurship and job creation**. Low literacy levels** further restrict economic empowerment by limiting financial literacy and business management skills, reducing access to wage-earning jobs and thereby reinforcing poverty cycles.

4. **Opportunities**

1) **Strong Local Demand for Staple Crops:** Consistent demand for sorghum, maize, and groundnuts ensures stable income and reduces reliance on imports, boosting market stability and food security.
2) **Growing Urban Demand for Fresh Produce:** Urbanisation, especially in Juba, is observed to fuels demand for fruits and vegetables. Better post-harvest handling is necessary to secure premium prices, while supply chain expansion would create jobs and strengthen small businesses.
3) **Private Sector Interest in Agricultural Exports:** Local traders see potential in high-value crops like sesame and honey. Increased capital and investment in infrastructure, and technology can improve competitiveness, opening access to regional and global markets and enhancing foreign earnings.
4) **NGO Support for Agricultural Growth:** NGOs provide training, inputs, and financial aid to improve productivity. Adopting a cooperative approach to farming can help farmers reduce costs, negotiate better prices, and expand market access.
5) **Community Interest in Cooperatives:** Farmers would benefit from bulk input purchases, shared transport, and collective marketing, lowering costs and stabilizing earnings while offering stronger bargaining power, ensuring fairer pricing and reducing post-harvest losses.
6) **Irrigation Potential:** Near water bodies and flood water harvesting can offer irrigation opportunities, reducing climate risks. Expanding promotion of irrigation infrastructure can improve yields, strengthen incomes, and support food security.

Recommendations

To address and mitigate the identified barriers and leverage potential market opportunities, the report suggests several strategic actions:

1. **Skills based training:** To bridge skill gaps in farm management, post-harvest handling, and value addition, vocational and skills training programs tailored specifically for youth and women should be supported. These programs will equip participants with essential

agricultural and business management knowledge. Additionally, fostering collaboration among NGOs, private investors, and Government institutions towards adopting a unified curriculum will help ensure that extension services are both nutrition-sensitive and gender-inclusive.

2. **Financial Support Mechanisms:** To address limited access to microfinance and financial literacy challenges, tailored financial initiatives should be developed for smallholder farmers, especially women and youth. These initiatives could include low-interest loans and grants, with Development and Humanitarian actors and private sector investors partnering with the Government to expand financial institutions, offer flexible repayment terms, and promote entrepreneurship. Additionally, the refugee-led organization model can play a key role in facilitating access to grant support for refugee structures that foster empowerment.

3. **Infrastructure Development:** To address high transport costs caused by poor infrastructure and expensive logistics, strategic investments should be made in community road networks, effective drainage systems, and well-equipped market facilities. Improving these infrastructures will reduce transportation expenses, enhance market access for producers, and enable the establishment of storage facilities to stabilize market prices.

4. **Policy Advocacy:** To overcome limited access to quality agricultural inputs-which restricts farmers and entrepreneurs from obtaining essential seeds, fertilizers, tools, and raw materials-there is a need for stronger policy support. Advocacy efforts should focus on improving regulatory frameworks that facilitate the availability and affordability of high-quality inputs, establish clear grading mechanisms, and ensure fair pricing to boost productivity, strengthen market competitiveness, and better support displaced and vulnerable communities.

5. **Climate-Smart Practices:** To address the disruptions caused by insecurity, conflict, and climate events-which undermine agricultural activities, deter investment, and create volatile markets, farmers should be supported to adopt climate-smart and resilient agricultural practices. This includes promoting drought- and flood-tolerant crop varieties, integrated water management, and localized irrigation systems. Additionally, providing access to seasonal early warning systems and training in climate-smart farming techniques will help bolster productivity, strengthen food security, and enhance the long-term resilience of communities facing instability and environmental shocks.

6. **Community Engagement and Cooperatives:** To mitigate low literacy levels that limit financial literacy, business management skills, and access to wage-earning opportunities, it is essential to strengthen cooperative structures and promote active community engagement. Empowering farmers and entrepreneurs through

cooperatives will enable resource sharing, bulk purchasing of inputs, and collective bargaining, making it easier to access markets and secure fair prices. Additionally, fostering community dialogue and investing in economic opportunities can help build essential skills, enhance economic empowerment, and break the cycle of poverty, while also contributing to long-term peacebuilding efforts.

Ongoing tractor ploughing in Makpandu Refugee Camp © UNHCR/Reason Moses Runyanga

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ACRONYMS

AfDB	African Development Bank
CRA	Commission for Refugee Affairs
EU INTPA	European Union International Partnership
FGD	Focus Group Discussion
IDP	Internally Displaced Persons
ILO	International Labour Organization
IGA	Income Generating Activity
KII	Key informant Interview
NGOs	Non-Governmental Organizations
RRC	Relief and Rehabilitation Commission
TREE	Training for Rural Economic Empowerment
UNDP	United Nations Development Programme
FAO	Food and Agriculture Organization
UNHCR	United Nations High Commissioner for Refugees
OCHA	Office for the Coordination of Humanitarian Affairs
USAID	United States Agency for International Development
USD	United States dollar
WFP	World Food Programme

EXECUTIVE SUMMARY

This report presents a comprehensive market assessment and agriculture value chain analysis in South Sudan, focusing on identifying viable economic opportunities and barriers faced by local communities. Conducted for the United Nations High Commissioner for Refugees (UNHCR), the study aims to promote employment through value chain development, stimulate green jobs via small and medium enterprise growth, and assess the local labour market with an emphasis on various demographic categories.

The assessment spans multiple counties, highlighting barriers such as limited access to quality inputs, high transport costs, insecurity, climate events and market inefficiencies. Farmers often have limited access to agricultural fields due to insecurity, exacerbated by droughts and floods, impacting productivity. Climate change complicates crop growth, leading to poor yields and higher pest pressure. Limited access to seeds, machinery, financial services, and farm management skills further hampers market participation. Youth and women face labour market barriers like low literacy and restrictive gender norms, but opportunities exist in growing agricultural sector, NGO training support, and cooperative models offering better market access. Moderate irrigation potential near rivers and flood water harvesting can enhance resilience. The sesame value chain presents growth export prospects.

Key agricultural value chains vary by county: maize, sorghum, groundnuts, vegetables, cassava, sesame, milk, honey, and goats dominate production across regions. Counties such as Maban, Abyei, and Magwi highlight different combinations of these key products, reflecting regional priorities.

To address identified challenges, recommendations include enhancing community dialogue, enhancing youth employment, and adopting climate-smart practices to improve agricultural resilience. Establishing cooperatives and strengthening refugee led organisations and supply chains for extension services and inputs like seeds and fertilizers are essential. Better access to microfinance and financial literacy can empower communities, while investments in transport, market facilities, and regulatory frameworks will improve market linkages and trade.

By leveraging local opportunities and addressing systemic barriers, the support programmes can foster sustainable economic growth and resilience among the displaced communities, ultimately improving livelihoods and enhancing food security. This report serves as a crucial tool for stakeholders aiming to support economic development and strengthen agriculture value chains in the displacement context.

A refugee woman skilfully crocheting at Renk transit centre © UNHCR/Reason Moses Runyanga

1. INTRODUCTION

South Sudan's economy struggles with high poverty rates, low GDP, and minimal household consumption and exports. Over 80% of the population lives below the poverty line, with subsistence agriculture and pastoralism contributing 15% of GDP and supporting 78% of households. Among workers, 53% are unpaid family labourers, and only 12% hold salaried jobs. Despite the 2018 peace agreement, political instability persists due to ongoing conflict, corruption, intercommunal clashes, humanitarian crises, and delayed reforms. Hyperinflation from currency depreciation and regional conflict in Sudan exacerbate economic challenges. Climate change and natural disasters intensify the crisis, hindering recovery efforts. Droughts (2011, 2015) and recurring floods (2014–2024) have caused fatalities, displacement, and severe livelihood losses. By September 2024, flooding affected 735,000 people in 38 counties, worsening food insecurity, economic decline, and disease outbreaks.

Future resilience in South Sudan hinges on implementing the peace agreement, strengthening institutions, improving governance, and addressing fragility to achieve inclusive, diversified growth. UNHCR supports these efforts through multisectoral assistance for refugees, IDPs, returnees, and host communities, focusing on protection, education, and livelihoods.

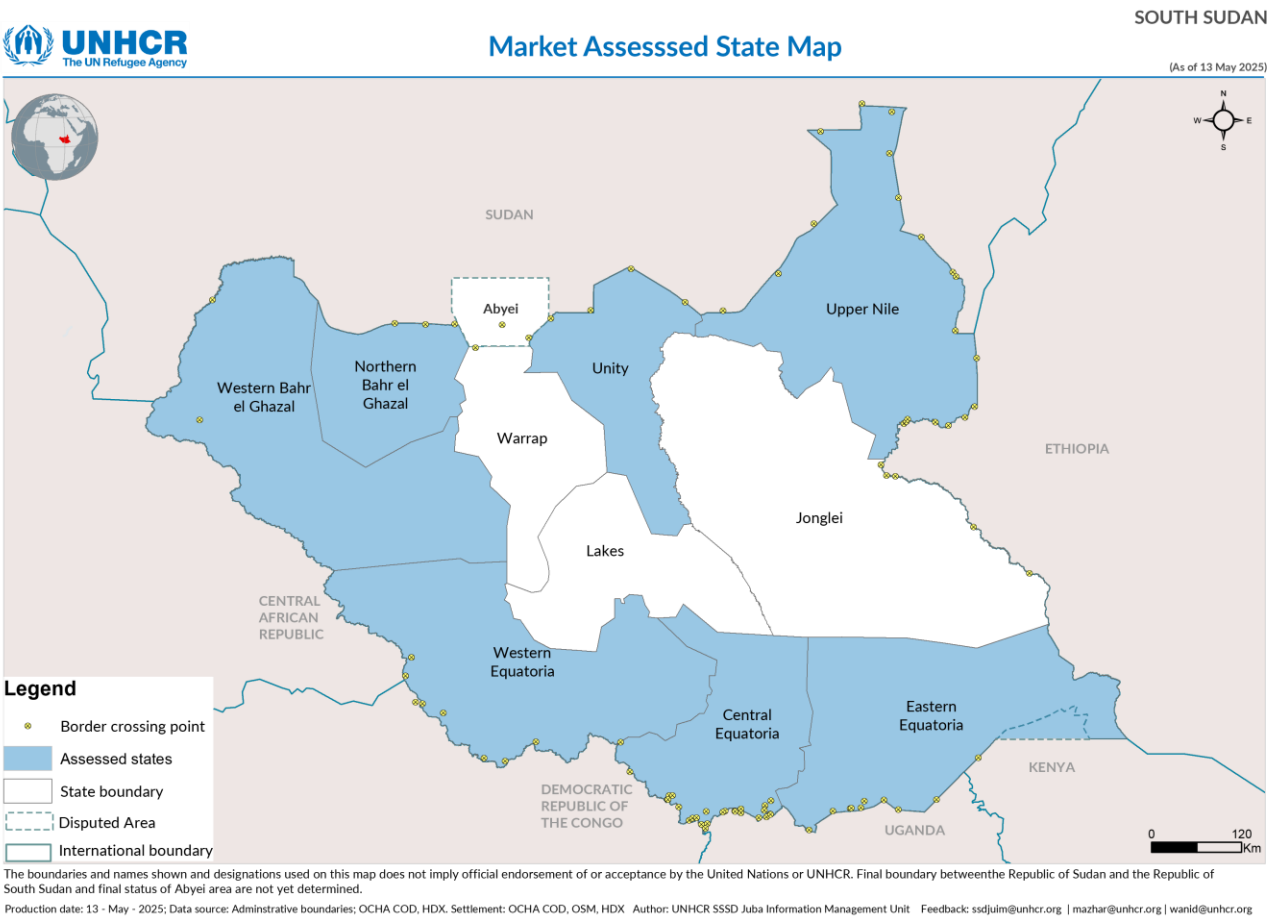


Figure 1: Map of Study States/Administrative areas

The study examined market systems and value chains across targeted areas, including Upper Nile (Maban), Ruweng (Jamjang), Abyei, Central Equatoria (Juba, Yei, Morobo, Lainya, Kajokeji), Eastern Equatoria (Torit, Magwi), Western and Northern Bahr El Ghazal (Wau, Aweil, Raja), and Western Equatoria (Yambio), see Figure 1 above. The study aimed to identify barriers, provide actionable recommendations, and promote sustainability, employment, and green jobs through SME development.

2. Project Background

UNHCR's Entrepreneurship Support to Refugees and Host Communities in South Sudan (ESRHC-SS) project, funded by the African Development Bank (AfDB), along with the EU-INTPA funded regional program supporting Chad, Ethiopia, and South Sudan in response to the Sudan crisis, and the Mastercard Foundation Sudan response grant programme are multi-year initiatives that aim at empowering displaced and host communities in South Sudan through skills development and economic empowerment.

The initiatives target three main outputs: enhancing access to entrepreneurial and vocational skills, offering business development services to women and youth, and building the capacity of key Government institutions. These efforts aim to promote livelihoods and economic

inclusion for vulnerable groups. The projects cover three strategic programme areas: 1) skills training to expand market-oriented opportunities, 2) support for women-led enterprises to reduce risks and foster sustainable businesses, and 3) efficient project management with institutional support to ensure compliance and effective monitoring.

3. Objectives of the Study

The study employed both qualitative and quantitative data collection methods to examine market situations, analyse value chains, and map stakeholders, with findings intended to inform livelihood response programming aimed at strengthening the impact and sustainability of livelihoods and self-reliance initiatives. This approach seeks to promote employment through the identification and development of value chains that include market actors and stimulate green jobs via small and medium enterprise development.

The study involved conducting a comprehensive market analysis to identify four viable value chains in each project target site while assessing the local labour market to illustrate the representation of various Age, Gender, and Diversity categories. This process also involved identifying constraints within the value chains and potential intervention areas that offer the highest sustainable growth and job creation opportunities across multiple countries (see fig. 2 below).

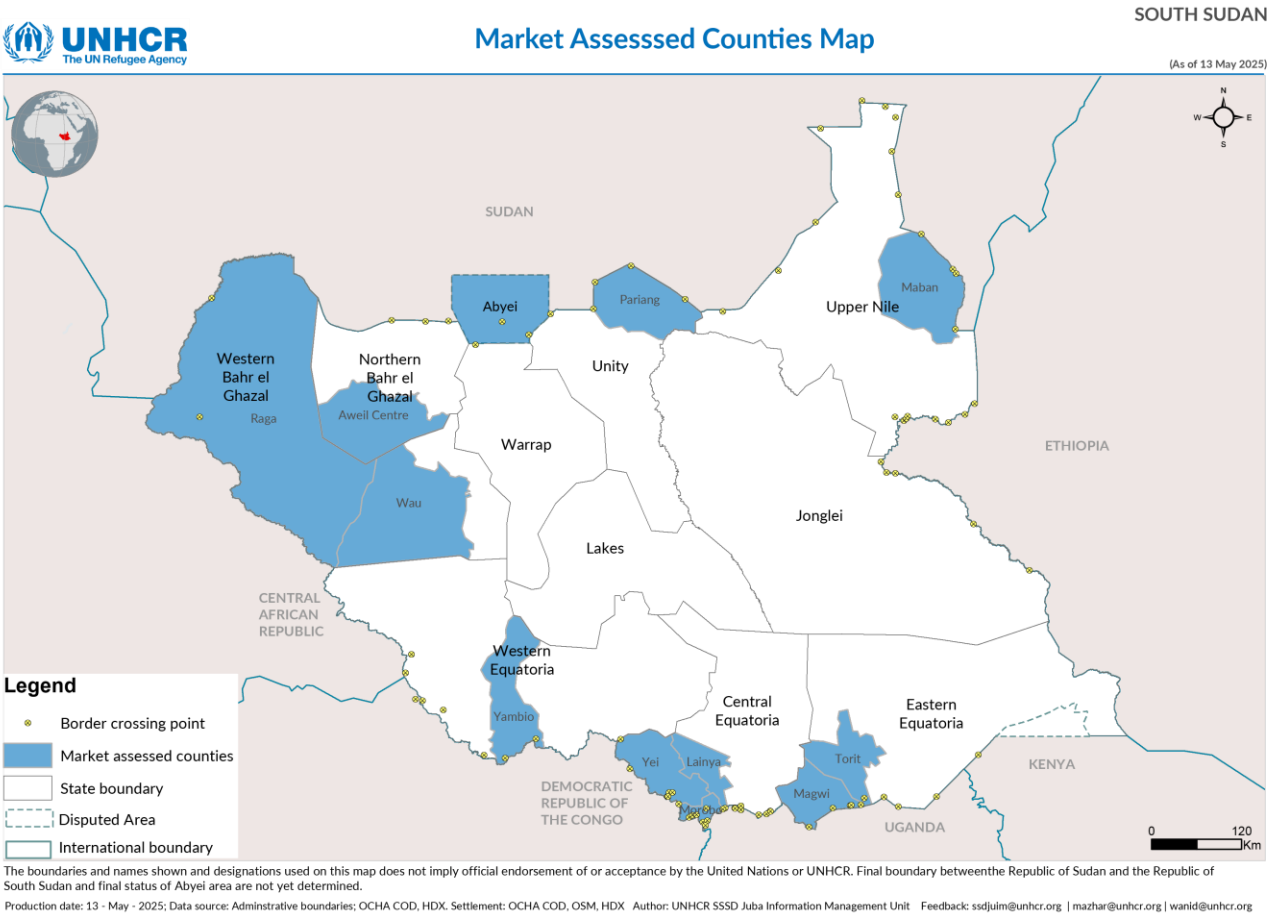


Figure 2: Map of Study Counties

4. METHODOLOGY

4.1 Study Approach and Processes

The study applied a participatory approach, engaging key stakeholders at all phases. Both quantitative and qualitative methods were used, employing the ILO's Training for Rural Economic Empowerment (TREE) methodology to assess socio-economic conditions, market opportunities, employment value chains, and barriers like skill gaps.

A non-experimental design gathered data from diverse groups, including consumers, traders, producers, input suppliers, refugees, IDPs, returnees, and host communities. Gender equality, environmental sustainability, accountability, and the do-no-harm principle were integrated as cross-cutting themes. Data collection involved three stages: 1) compiling a comprehensive list of potential value chains and livelihood options, ensuring no opportunities were overlooked; 2) selecting the top four value chains based on criteria such as market demand, nutrition security, economic impact, organizational support, and environmental effects; and 3) gathering detailed data on these selected value chains at each study location, involving focus group discussions (FGDs), key informant interviews (KIIs), and quantitative methods for effective triangulation and market analysis. The value chain analysis explored producer-market dynamics, identifying constraints and opportunities for households and markets. Supporting functions, such as finance, transport, logistics, and extension services, were assessed for their role in market sustainability. Policy and regulatory functions were also analysed, considering broader challenges like norms and external disruptions.

4.2. Data Collection Tools and Sample Sizes

To collect data for this study, various methods and sample sizes were employed as discussed below:

Desk Review: A desk review was conducted, involving the examination of numerous documents to generate relevant secondary data. The in-depth inspection of secondary sources included such as reviewing project documents (project proposal and log frame), and World Bank, FAO (2016), FEWS NET, USAID (2022), and UNDP (2022) reports.

Key Informant Interviews (KII): gathered in-depth qualitative insights using structured and semi-structured guides. Participants included Government officials, policy makers, regulators, service providers, and value chain actors like producers, traders, processors, and consumers. These interviews helped identify key livelihood means, refine quantitative tools, and validate data collected through various methods. A total of 267 KIIs were conducted across all study sites (Annex II).

Focus Group Discussions (FGD): These were conducted to gather data from refugees, IDPs, and host communities. Three discussions per county were held with separate male, female,

and mixed groups, totalling 48 FGDs (Annex II). Each group included 8–12 participants, selected based on age, sex, and occupation.

Purposive sampling identified participants for both KIIs and FGDs, involving Government officials, service providers, community representatives, community leaders, elders, refugees, IDPs, host communities, traders, producers, UNHCR staff, and NGOs staff.

For quantitative data, a sample was calculated using a 90% confidence level, 50% precision, a 5% margin of error, and a 1.5 design effect. The initial target of 271 individuals increased to 427 households, accounting for heterogeneity and non-response. Ultimately, 491 individuals were surveyed, exceeding the target by 15%. Probabilistic, multistage, multi-clustered sampling was used, reflecting county population sizes (UN OCHA, 2022) and participant diversity in age, sex, and roles such as traders, producers, youth, and women.

4.3. Data Analysis

Data collection involved using open-ended and semi-structured questions for qualitative data from KIIs and FGDs, employing paper-pencil and audio recording methods. Thematic analysis was applied to qualitative data from desk reviews, KIIs, and FGDs. Quantitative data was collected through individual interviews using a structured questionnaire, digitized with Kobo Toolbox. Data from Kobo was exported to Excel for cleaning and then imported into SPSS for descriptive analysis, including percentages and cross-tabulations.

5. KEY FINDINGS

5.1. Barriers, Opportunities and Recommendations

The study identified significant barriers impacting marketing systems in target refugee-hosting locations, highlighting the complexities of the nation's economic landscape. Addressing these challenges requires a multifaceted strategy to improve agricultural value chains and strengthen community livelihoods. Understanding key barriers, leveraging local opportunities, and addressing systemic issues are essential for fostering economic growth and resilience. This approach offers the potential for sustainable development and enhanced community wellbeing.

Table 1: Most common barriers and their respective recommendations

Barriers	Possible action		
	Short Term	Medium Term	Long Term
Conflict over territorial claims has led to insecurity among ethnic groups, mainly in Torit, Yei River, Abyei, Jamjang, Yambio, Raja, Maban, Morobo, and Kajokeji Counties.	DEVELOPMENT AND HUMANITARIAN ACTORS with respective Government institutions to facilitate community dialogue to address grievances and promote peacebuilding among conflicting groups.	Government and Development and Humanitarian actors to implement programs that promote economic opportunities and job creation, particularly for youth, to reduce the economic motivations for joining armed groups	UNHCR and Development and Humanitarian actors to advocate for national reconciliation initiatives to bridge ethnic and community divides. The Government to strengthen law enforcement
Absence of supportive agricultural policies, grading and pricing regulations.	Development and Humanitarian actors to aid in implementing the National comprehensive agriculture master plans and push for a regional framework to boost sesame exports.	The Government, with financial and technical support from Development and Humanitarian actors to support development of irrigation infrastructure, establish quality and regulatory standards, and institutionalise regulators for quality-based pricing	Development and humanitarian actors to advocate for developing and implementing comprehensive agricultural policies and strategies
Limited access to inputs	The Government and Development and Humanitarian actors to support subsidy input programs and provide training on proper input use. This can support local agro-dealers with training and financial aid to enhance their capacity to supply quality inputs	The Government and Development and Humanitarian actors can subsidize input programs and provide training on proper input use. UNHCR and Development and Humanitarian actors can support local agro-dealers with training and financial aid to enhance their capacity to supply quality inputs	Government to strengthen the research systems in developing improved seeds and agricultural technologies
Low access to microfinance, high loan costs and financial illiteracy	With the technical and financial support of the Development and Humanitarian actors, the Government to strengthen efficiency and expand the coverage of micro finance institutions	With technical and financial support from Development and Humanitarian actors, the Government to enhance the efficiency and expand the reach of microfinance institutions. They should also promote microfinance with lower interest rates and flexible repayment terms tailored to small-scale farmers and businesses	Development and Humanitarian actors and private sectors support the Government to enable microfinance institutions to expand and provide at lower interest rates and flexible repayment terms tailored to small-scale farmers and businesses
The lack of technology and skills in farm management, post-	Development and Humanitarian actors and private sectors in collaboration with Government institutions,	Development and Humanitarian actors and private sectors in collaboration with Government institutions, to deliver tailored, seasonal, nutrition- and gender-	Development and Humanitarian actors, alongside Government institutions, to deliver tailored, seasonal, and

Barriers	Possible action		
	Short Term	Medium Term	Long Term
harvest handling, and value addition	to deliver tailored, seasonal, nutrition- and gender-sensitive digital extension services and training.	sensitive digital extension services and training.	nutrition- and gender-sensitive digital extension services and training.
Limited access to market information	UNHCR should pilot digital market information systems to enhance market linkages and foster cooperative models to improve market access.	Development and Humanitarian actors, in collaboration with Government to institutionalize the development of seasonal based early warning and market information dissemination	Development and Humanitarian actors, in collaboration with Government to institutionalize seasonal early warning systems and market information dissemination.
Drought stress severely affects crop yields and impacts livelihoods (mainly in Magwi, Wau, Maban and Morobo Counties)	Development and Humanitarian actors and the Government to support the research and private sectors in introducing and distributing adaptive, productive varieties to diversify livelihood means, while Development and Humanitarian actors conduct rapid training for farmers on designing and implementing community-based irrigation schemes.	Development and Humanitarian actors and the private sector to support the Government by introducing small-scale irrigation projects, designing and implementing community-based irrigation schemes and infrastructure, promoting climate-smart agricultural practices, and institutionalizing seasonal early warning systems and market information dissemination.	Foster collaboration between the Government and private sector to advance investments in irrigation technologies and infrastructure; and promoting climate-smart agricultural practices.
Poor roads and seasonal flooding worsen transport challenges, resulting in significant post-harvest losses, particularly in Magwi, Jamjang, Maban, and Kajokeji counties.	The local road authority, with technical support from Development and Humanitarian actors, and the private sector, to prioritize urgent repairs to critical road segments for rainy season access and support the community in using cost-effective techniques to divert floodwater	UNHCR and other Development and Humanitarian actors to advocate for investment in durable road infrastructure capable of withstanding seasonal flooding through proper drainage systems, while institutionalizing the development of seasonal early warning and market information dissemination.	UNHCR and other Development and Humanitarian actors to advocate for investment in durable road infrastructure that can withstand seasonal flooding, including proper drainage systems
Limited access to education and resources hinders women's agricultural productivity	UNHCR, other Development and Humanitarian actors, and the private sectors to address these social norms through targeted interventions, education, and community initiatives.	The Government to establish supportive policies to encourage private sector involvement in educational services and allocate resources to invest in it	The Government to enforce policies for private sector involvement in educational services

Barriers	Possible action		
	Short Term	Medium Term	Long Term
Inadequate irrigation infrastructure and usage, particularly in Juba, Yei River, Abyei, Jamjang, Yambio, Wau, Raja, Maban, and Morobo counties,	UNHCR and other Development and Humanitarian actors to advocate for establishing a public-private partnership model to enhance irrigation technologies and develop infrastructure.	Government to address inadequate irrigation infrastructure and usage, by developing and utilizing potential water points to enhance agricultural productivity.	Government to address inadequate irrigation infrastructure and usage, by developing and utilizing potential water points to enhance agricultural productivity.
Cultural norms, mainly in Abyei, Raja, Aweil, Morobo, and Kajokeji counties restrict women's mobility and limit access to resources	UNHCR and other Development and Humanitarian actors should advocate for the development of inclusive laws and regulations	UNHCR and other Development and Humanitarian actors to address social norms through targeted interventions, education programs, and community initiatives.	Government to enforce bylaws
Local policies in Abyei, Jamjang, Wau, Raja, Maban, and Kajokeji often provide IDPs and refugees with less land access than host communities.	UNHCR and other Development and Humanitarian actors to advocate for the development of inclusive localized laws	UNHCR and other Development and Humanitarian actors to advocate for localized law enforcement and launch awareness campaigns	The Government to enforce laws ensuring equal access to resources for IDPs and refugees, fostering fairness and inclusivity
Limited access to extension and veterinary services,	Development and Humanitarian actors to advocate for policies enhancing private sector involvement in veterinary services.	Development and Humanitarian actors to assist the Government in piloting digital extension services and training local animal health workers.	The Government to institutionalize the provision of tailored, seasonal-based extension services.

Market Opportunities

South Sudan presents several promising market opportunities that, if strategically leveraged, can significantly enhance agricultural productivity and support livelihoods.

- **Strong Local Demand for Staple Crops**: Staple crops such as sorghum, maize, and groundnuts are essential to the diet of South Sudanese people, ensuring consistent local demand and providing a stable market for farmers, which reduces the risk associated with fluctuating export markets, as these crops are the main source of income for many households.
- **Growing Urban Demand for Fresh Produce**: The urbanization of cities like Juba increases the demand for fresh produce, creating a lucrative market for farmers, as urban consumers are more likely to seek fresh and nutritious food options, driving demand for vegetables and fruits.

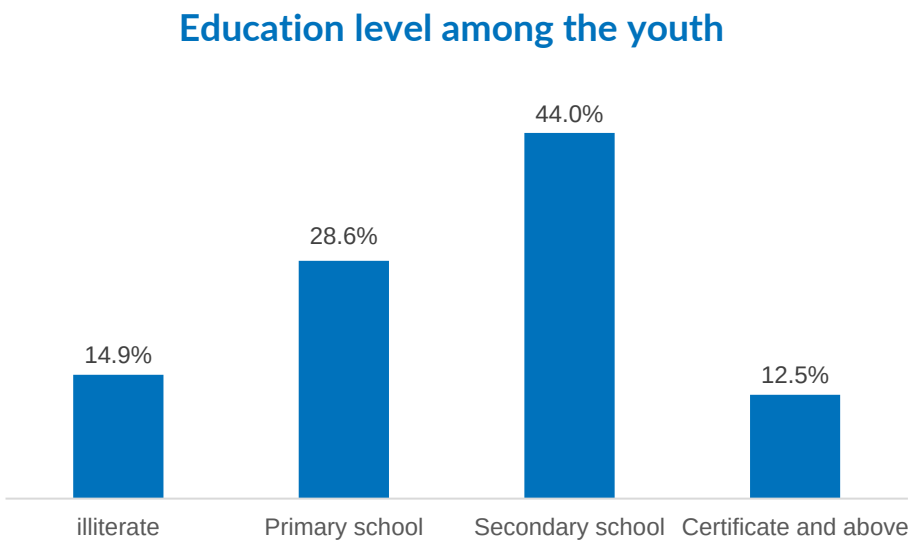
- **Humanitarian and Development Support for Agricultural Initiatives**: NGO actors provide essential resources such as seeds, tools, and training to farmers, enhancing agricultural productivity through training programs that improve farmers' skills in farm management, post-harvest handling, and value addition, with initiatives like the Food Security through Agribusiness in South Sudan (FSA) focusing on empowering smallholder farmers and improving sustainable productivity.
- **Community Interest in Cooperatives for Better Market Access**: Cooperatives enable farmers to pool resources, negotiate better prices, and access larger markets, improving market access and reducing poverty by providing a platform for sharing resources such as storage facilities, transportation, and marketing services, as emphasized by the Initiative for Community Prosperity.
- **Irrigation Potential, particularly in Areas Near Rivers and Streams**: Areas near rivers and streams have the potential for irrigation, which can significantly enhance agricultural productivity by reducing dependency on rain-fed agriculture and making farming more resilient to climate variability, with regions like Juba and Yei River identified as having moderate irrigation potential.
- **Increased Demand for Sesame in Export Markets**: Sesame has a high economic value and is in demand in international markets, providing a lucrative opportunity for farmers, as the increased demand for sesame in export markets can drive economic growth and improve livelihoods, with production increasing due to its high economic value and export potential.

By harnessing these opportunities, the refugee-hosting locations can strengthen existing market systems, increase agricultural outputs, make food systems sustainable and uplift their communities.

Women farmers participate in a focus group discussion (FGD) in Yambio © UNHCR/Reason Moses Runyanga

5.2. Analysis of Local Labour Market

The report presents key insights into youth demographics, education, employment, and involvement in agricultural value chain activities in South Sudan. Youths accounted for 33% of respondents, with females making up 39% of this group. These findings underscore the significance of female participation in education and economic activities for inclusive national development, as highlighted by World Bank (2021). However, only 44% of youths had completed secondary education (Fig. 3), falling short of regional averages reported by UNICEF (2022). This disparity reflects systemic challenges to accessing quality education in the study locations, where conflict and economic instability remain significant obstacles.



The document reveals that 35% of youths identify as traders and 30% as farmers, underscoring the dominance of the informal economy—a finding aligned with ILO (2020), which attributes widespread informal youth employment to scarce formal job opportunities. Nearly 60% of respondents engage in agriculture value chain activities, with 33.8% and 20% participating in the sorghum and maize value chains, respectively (Fig. 3), supporting FAO (2019)'s report that agricultural value chains are crucial for economic sustainability.

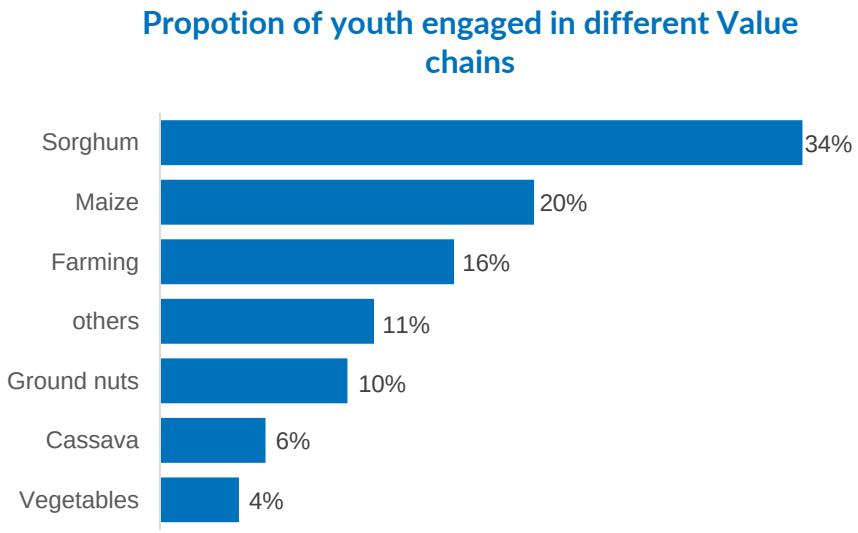


Figure 3: Proportion of youth engaged in different value chains

However, significant barriers remain: 29% of respondents reported limited access to financial services, a challenge which UNDP (2018) suggests also presents an opportunity for growth despite the scarcity of such services; 28% pointed to cultural perceptions that confine women to lower-value roles, consistent with GHA (2020)'s observations of entrenched norms restricting women's participation in the labor market; and 25.5% highlighted inadequate political and economic policies supporting youth market access, a gap exacerbated by ongoing

conflict and instability. Overall, key challenges impeding youth labor market engagement in South Sudan include low educational attainment, insufficient financial access, gender inequality, ineffective policies, and a lack of vocational training, as detailed in Table 2, which also presents opportunities and recommendations for youth and women in the labor market.

Table 2: Summary of the barriers and respective recommendations for improving the engagement of youth and women in the labor market

Barriers	Possible Actions		
	Short-Term	Medium-Term	Long-Term
High unemployment rates among youth and women	Development and Humanitarian actors to support the Government in implementing vocational training programs targeting youth and women.	Development and Humanitarian actors and private to collaborate with the Government to design youth-friendly policies and improve access to microfinance, particularly for women and youth	Development and Humanitarian actors to assist in implementing comprehensive labor policies that advance gender equality and foster youth engagement
Lack of access to quality education and skills	Development and Humanitarian actors, and private sectors, in partnership with the Government, to promote girls' education through awareness campaigns and foster connections with local and international organizations to develop entrepreneurship training programs.	Development and Humanitarian actors, and private sectors, in partnership with the Government, to promote girls' education through awareness campaigns and foster connections with local and international organizations to develop entrepreneurship training programs.	Development and Humanitarian actors and private sectors with the Government to implement targeted formal and informal education to boost literacy and vocational skills among youth to advance gender equality
Cultural barriers restricting women's participation	UNHCR and Development and Humanitarian actors to initiate community awareness campaigns to challenge and transform cultural norms	UNHCR and other Development and Humanitarian actors to pilot entrepreneurship support programs for women and youth, with plans for scaling up successful initiatives	The Government to design and enforce policies to ensure equal opportunities for all genders
Limited access to financial resources	Development and Humanitarian actors and the Government to collaborate to establish microfinance initiatives providing start-up capital for women and youth, while enhancing financial literacy programs to empower	Development and Humanitarian actors and the Government to collaborate to create microfinance initiatives that grant youth access to essential financial services	The Government to build a strong financial sector to support small businesses and foster entrepreneurship
Inadequate infrastructure and market access	Development and Humanitarian actors and private sectors to collaborate with the Government to enhance road and transport infrastructure, improving market access	UNHCR and development practitioners to assist in strengthening the institutionalization of market information systems	The Government to advance sustainable agricultural practices and foster value chain development

Barriers	Possible Actions		
	Short-Term	Medium-Term	Long-Term
Climate change and environmental barriers	Development and Humanitarian actors to collaborate with research institutions and agro-dealers to enhance access to and adoption of climate-resilient crops and practices	UNHCR and development practitioners to organize training sessions on sustainable farming techniques and effective water management practices	UNHCR and development practitioners to promote the formulation of long-term environmental policies

5.3. Market Systems by the study Locations

The report examined agricultural value chain actors from inputs to consumption, highlighting how investments create employment opportunities. It identified priority value chains via focus group discussions, KIIs, data analysis, and desk reviews, guided by criteria like market demand, nutritional value, economic feasibility, employment potential, environmental impact, and institutional support. Sesame emerged as unique due to exporter involvement, while other commodities primarily bolstered food security. Sesame production is shifting from subsistence farming to semi-mechanized systems, driven by economic value, farmer interest, and export potential. Exporters in Khartoum and Port Sudan handle raw seeds, while domestic processors produce oil and snacks for local and regional markets.

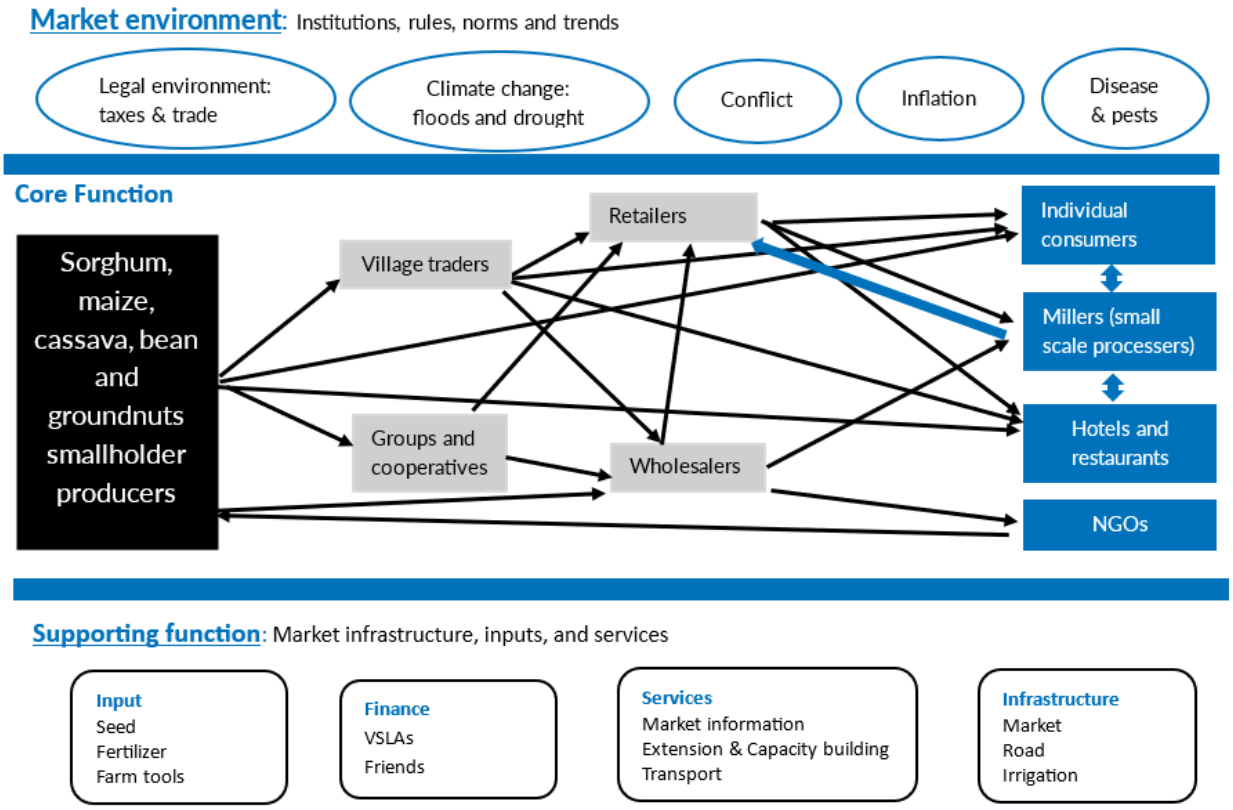
5.3.1. Value Chains and Market Maps (Torit and Magwi Counties, Eastern Equatorial State)

Rain-fed agriculture underpins the economy in both Torit and Magwi counties, with limited emphasis on livestock. FGDs identified key crop value chains, prioritizing sorghum, maize, groundnuts, and cassava in Torit based on market demand, nutritional value, economic impact, available support, and environmental factors. Magwi prioritized beans, cassava, maize, and sesame, although sesame faced unique challenges such as labor-intensive harvesting and timely seed collection. Notably, sesame's value chain includes exporters, distinguishing it from other crops focused on domestic markets. In Magwi, 75% of respondents are involved in crop production, while in Torit, 80% engage in agriculture, with 20% in the farm tools business. Additional income sources include petty trade and livestock sales. Crop market systems in both counties share value chain actors and domestic terminal markets, except for sesame, which is exported by large-scale exporters. Common challenges include agro-climatic shocks, insecurity, inflation, pests, diseases, and weeds, with mid-season dry spells in May–June further reducing crop yields.

Table 3: Value chains selected in Torit and Magwi Counties

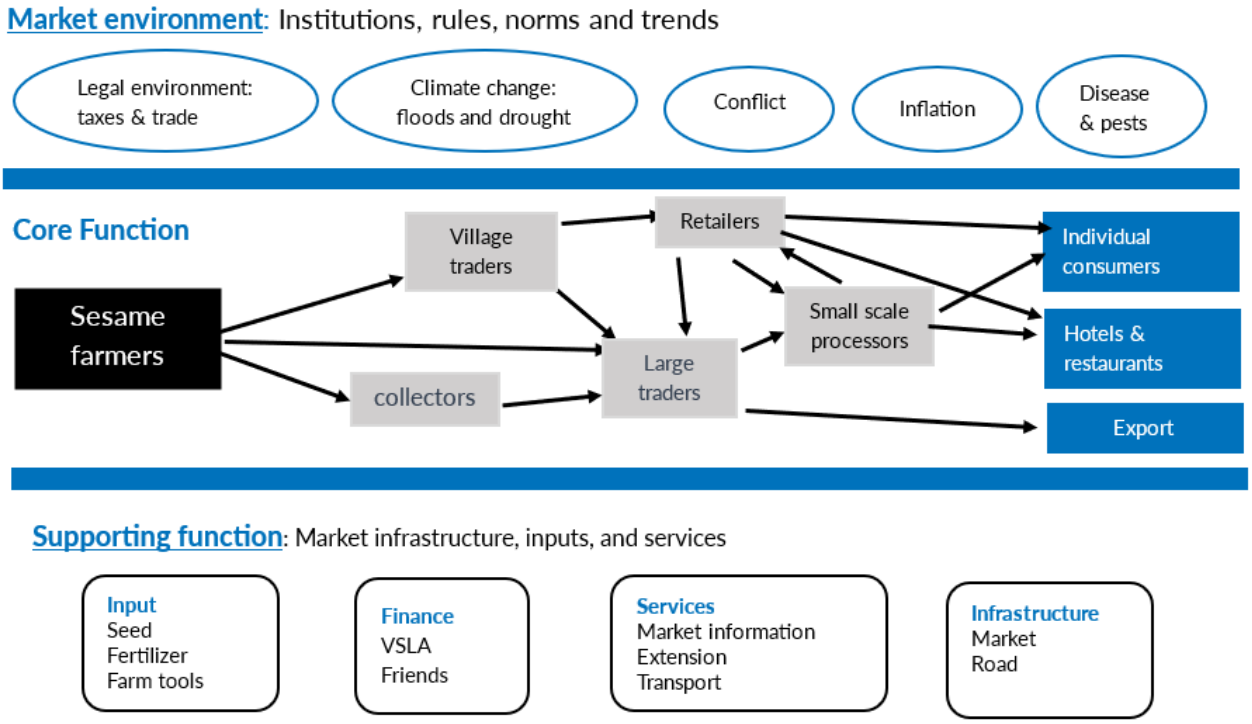
County	Long list of potential value chains	Prioritized agricultural value chains
Torit	sorghum, maize, groundnuts, cassava, sesame, beans, cowpeas, vegetables, chicken, goats, and dairy	sorghum, maize, groundnuts, and cassava
Magwi	maize, cassava, beans, sesame, groundnuts, peas, vegetables, and chicken	beans, cassava, maize, and sesame

A. Market system maps



Map 1: Market system maps for sorghum, maize, cassava, been and groundnuts, Eastern Equatoria

The maps showcase market systems for sorghum, maize, cassava, beans, and groundnuts in Torit and Magwi counties (Map 1 above), along with the sesame market system in Eastern Equatoria State (Map 2 below). They highlight the core function (central layer), interactions with market environment factors (top layer), and supporting infrastructures, services, and inputs (bottom layer) within the assessment scope.



Map 2: Market system maps for sesame in Torit and Magwi counties, Eastern Equatoria State

B. Core function

Farmers/ producers: Apart from sesame, cultivated by some semi-mechanized rain-fed and irrigation-based commercial farmers, all other crops are produced by smallholders. These farmers grow crops for consumption, income generation, and seed preservation for the next season. In Magwi, 75% of farmers benefit from NGO support, while in Torit, 80% rely on their savings. Farmers market their produce individually, through cooperatives and associations, or via village traders who supply larger traders in towns like Magwi, Torit, and Juba. Others sell directly to consumers, including hotels and restaurants. Sesame producers primarily use three sales outlets: village traders, collectors, and large traders.

Traders: Most traders rely on personal savings to launch their businesses but can only secure 40% of the needed stock due to price escalation. Key barriers to business expansion include security challenges and high transport costs (40% each), followed by price inflation (20%). Village Traders/Retailers: Unlicensed traders purchase grains from villages or small markets to supply wholesalers, retailers, and consumers (e.g., hotels and restaurants) in Magwi, Torit, and Juba. Some sesame exporters transport seeds to regional markets for bulking and export. Multipurpose cooperatives aggregate grain from farmers to supply wholesalers and retailers, with minimal sales to individual consumers. Wholesalers, categorized as large, medium, or small-scale, operate differently: large-scale wholesalers purchase directly from producers, often on credit, while medium and small-scale wholesalers source from large-scale suppliers, sell smaller volumes, and are more vulnerable to price fluctuations. Sales rely heavily on

informal networks involving village agents, small-scale traders, and wholesalers, who also supply processors and institutional buyers like NGOs. For sesame, large traders procure seeds from farmers or through village traders and collectors, supplying exporters and small domestic oil processors. Sesame, the sole major oil crop processed and exported by large traders, is transported as raw seeds primarily through Port Sudan for export.

Processors: Small-scale processors operate in tukuls, generating daily flour sales between $92 (12,000 SSP) and $307 (40,000 SSP) in 2023. Inputs are sourced from wholesalers, retailers, and consumers, with sales directed to individuals, hotels, and restaurants. Challenges include limited machine maintenance skills, low market prices, high fuel costs, and lack of funds for growth. Sesame oil production, though limited, involves cleaning, deshelling, drying, and crushing, with oil sold to retailers, consumers, or directly at processing sites.

Consumers: Consumers include individuals and businesses like hotels and restaurants. They purchase grains from producers, retail traders, or village traders for processing or buy flour directly from millers or retailers. Neighbor-to-neighbor purchases offer better prices. While most sesame seeds are exported raw, small quantities are processed into oil for local shops and consumers. Barriers include limited access to quality goods, price inflation, and high transport costs.

C. Market environment

Policy and regulatory environment: Prices are unregulated, with traders determining them based on market demand and USD exchange rates. Government policies grant free land access to IDPs, returnees, refugees, and host communities without gender restrictions. Women play a significant role in production and marketing, while NGO-supported youth benefit from limited irrigation farming. Most traders, except village traders and some collectors, comply with licensing policies and pay municipal and security taxes. Despite sesame's commercial value, its market is uncoordinated, with minimal private investment. Challenges include meeting international standards for processing, packaging, transport, and storage. Poor handling leads to aflatoxin contamination, making food safety crucial for exports. Barriers like limited trader finances are further exacerbated by licensing and taxes.

Climate challenge and man-made hazards: In Magwi and Torit, 60% and 75% of the land, respectively, remain uncultivated. Farmers face hurdles such as input shortages, unpredictable rainfall, pests, diseases, low commodity prices, insecurity, limited finance, market inaccessibility, high transport costs, and post-harvest losses. These challenges are common across both counties.

D. Market infrastructure, inputs and support services

Road and market infrastructure: Road conditions in Eastern Equatoria require significant improvement, especially the Bur Payam Road to Torit. While the Magwi road offers better access, transport heavily depends on foot and motorcycles (Boda Boda). Magwi County's

roads are insufficient for market transport, and Lafon County, a major sorghum and maize producer, remains inaccessible by road. Few can afford truck transport from Uganda and Kenya; most rely on Boda or carry goods by foot. Market infrastructure is concentrated in Torit headquarters. Heavy rains and flooding during the rainy season often isolate Lafon from June to December by closing the main route to Torit. Magwi is the most accessible county in Eastern Equatoria, reachable in an hour by car or five hours on foot, while other areas require up to six hours by car.

Irrigation Infrastructure and Access: Despite limited irrigation schemes, NGO-supported cooperatives, managed by 90% women in groups of 25-30, enable dry season vegetable farming. Key crops include okra, eggplant, kudra, tomatoes, cabbage, Sukuma, and some maize near streams.

Inputs: Seeds are supplied by humanitarian actors or from previous harvests, but low quality and untimely distribution remain challenges. Fertilizer use is rare due to cost and soil fertility beliefs. Key players include the Government, UNHCR, WFP, FAO, and others. The Government offers limited extension services, while RRC coordinates NGOs. WFP ensures a sustainable grain market, and FAO provides inputs and early warnings. FAO leads in seed procurement both internationally and locally.

Extensions and Market Information Services: Extension services are limited, and market information systems are unorganized. Barriers include inadequate storage and 50-60% post-harvest losses. Farmers use traditional methods like ashes to reduce losses. With significant skill gaps, only 38% of farmers are willing to pay for training due to financial constraints.

Financial Services: NGOs provide minimal financial support. Communities rely on VSLA savings and production sales. In Torit, 20% of farmers received NGO financial support, while 80% depended on personal savings. Limited access to formal finance is attributed to strict eligibility criteria, affordability, lack of documents, and poor financial literacy.

5.3.2. Value Chain and Market Maps (Juba, Morobo, Yei River, Lainya and Kajokeji- Central Equatoria)

In Central Equatoria State, the economy predominantly relies on rain-fed agriculture. FGDs with forcibly displaced persons identified both on-farm and off-farm income sources, though off-farm activities like charcoal making (Juba and Kajokeji) and soap, stove, and furniture production (Morobo) were not prioritized among the main commodities.

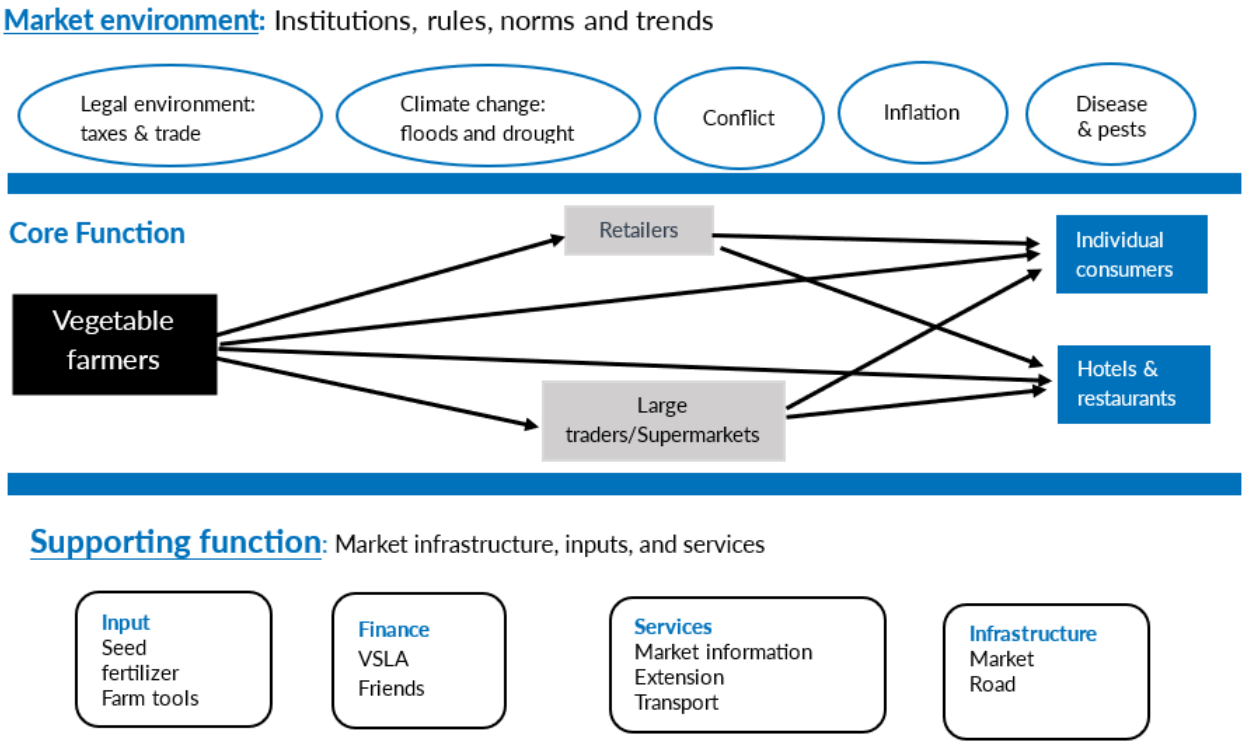
Table 4: Value chains selected in Juba, Morobo, Yei River, Lainya and Kajokeji Counties

County	Long list of potential value chains	Prioritized agricultural value chains
Juba	Vegetable and fruits, maize, beans, millet, charcoal, fishery, honey, goat meat, dairy, chicken and ducks	Vegetable and fruits, maize, beans, and millet
Morobo	Groundnut, sorghum, millet, cassava, maize, dairy, soap making, stove, and furniture production	Groundnut, sorghum, millet, and cassava

Yei River	Maize, sorghum, vegetable, groundnut, poultry, dairy	Maize, sorghum, vegetable, and groundnut
Lainya	Sorghum, beans, maize, groundnut, honey, cassava, millet	Sorghum, beans, maize, groundnut honey
Kajokeji	cassava, pigeon pea, groundnut, maize, charcoal, fishery, and agroforestry	cassava, pigeon pea, groundnut, and maize

Vegetable production in Juba and Yei River counties focuses on small-scale crops like onions, sweet potatoes, okra, and tomatoes. While market systems for value chain crops are similar in both counties, separate vegetable value chain maps have been developed. Honey, a high-value cash commodity in Juba and Lainya counties, attracts both international and national customers at premium prices. Fishing, though largely traditional, is an emerging income source in Juba and Kajokeji, albeit secondary. Charcoal production also generates income but poses significant environmental threats. Activities such as tree cutting, bush burning, and bark cracking for traditional honey production highlight the urgent need for intervention from development practitioners on sustainable farming practices and environmental protection.

A. Market system maps



Map 3: Market system maps for vegetables in the Central Equatoria State

The vegetable value chain features fewer core actors, largely due to limited processing technologies and value addition practices that would extend shelf life (Map 3). Farmers typically sell directly to consumers at retail points or to intermediaries like retailers, kiosks, and supermarkets, who then sell to end-users. In contrast, other crops, such as groundnuts, maize, sorghum, cassava, pigeon peas, beans, and millet, benefit from drying and processing

into flour by small-scale millers. This increases their shelf life and allows for long-distance transport. These major agricultural value chains in Central Equatoria involve a range of market actors similar to those depicted in Map 3.

B. Core function

Farmers/Producers: Vegetables had higher prices at Konyokonyo market in Juba, with other key markets including Jebel, Munuki, Gudele, and Custom. Leafy vegetables, due to their perishability, were sold mainly in smaller markets in Juba and Yei. Forcibly displaced farmers are mostly smallholders practising rain-fed agriculture, who use their produce for consumption, income, and seeds for future planting. They sold through cooperatives, associations, village traders, or directly to consumers, including to hotels and restaurants, while larger traders transported goods to local towns.

Traders: Refugee traders' financial sources averaged 68% personal savings, 28% small micro finance institutions (VSLA and SACCO), and 10% banks. In Yei River County, reliance on personal savings highlighted limited financial access and unfavorable loan terms. Only 61% of these traders' demand for goods was met, due to price escalation. Barriers to business growth included price inflation (43%), supply gaps (26%), insecurity (17%), and restricted transport access (14%). Juba faced higher price inflation, driven by demand and limited supply, while Morobo experienced the greatest supply gaps, with a lesser impact in Yei River County.

KII discussion with agro-dealer in Juba

Village Traders/Retailers were unlicensed village traders buy agricultural goods—except vegetables—from community markets to sell to wholesalers, retailers, or consumers like hotels

and restaurants in county cities and secondary markets. Due to perishability, vegetables are sold directly to consumers.

Large Traders/Supermarkets: Except for vegetables, commerce operates via informal networks of village agents, small-scale traders, and wholesalers who supply processors and institutional buyers like NGOs. Vegetables, with shorter supply chains, are sold directly to consumers. Costs include Government taxes and fees, with unregulated taxation reported as a concern in licensing and taxation.

FGD with male and female in Kajokeji

Processors: the forcibly displaced small-scale processors in Central Equatoria State convert crops into products such as flour and animal feed by-products. Vegetables have no reported processing activities. Inputs come from wholesalers, retailers, or consumers, and outputs are sold to individuals, hotels, restaurants, and retailers.

Consumers: Domestic demand includes individuals, hotels, and restaurants purchasing grains from producers, retail traders, or village traders for processing into flour, or buying flour directly from millers or processors. Consumers face challenges such as poor-quality goods, price inflation, and high transport costs.

C. Market environment

Policy and regulatory environment: The study revealed no grading or price-setting system, with traders basing prices on market demand and USD exchange rates. Government policy ensures equal land access, with IDPs, returnees, and refugees often receiving free land from chiefs. In Yei River County, traditional norms limit women to lower-value chain roles like food processing and retailing, despite significant economic contributions. Women face challenges such as limited market access, financial resources, and decision-making power, while youth struggle with land access, skills gaps, and financial constraints.

Humanitarian actors support for disadvantaged groups is minimal, though irrigation farming assistance benefits some young women and youth. Traders, excluding village-level ones, adhere to licensing, municipal fees, and security taxes. Inflation and currency devaluation affect input affordability, ad-hoc taxation disrupts equal Government service access, trade, and agro-dealers face fertilizer and herbicide restrictions potentially linked to environmental concerns.

Climate change and manmade hazards: Uncultivated arable land ranges from 40% in Morobo and Yei River counties to 85% in Kajokeji, driven by insecurity, lack of inputs, unpredictable rainfall, limited farm management skills, pests, diseases, financial constraints, weak market linkages, and high transport costs. These challenges, consistent across counties, also lead to significant post-harvest losses. Proposed strategies include adopting drought-tolerant crops, developing irrigation systems, enhancing water conservation, diversifying livelihoods, and employing early warning systems to address climate risks.

D. Market infrastructure, inputs and support services

Road and Market Infrastructure: Most respondents cited poor road and market infrastructure, worsened by rainy season floods. In Yei River County, Yei town serves as the main market but lacks sufficient facilities for efficient trade. Secondary markets like Jigomoni and Lutaya face issues like limited space, poor roads, and weak supply chains, reducing trade volumes.

Irrigation Infrastructure and Access: Despite presence of several rivers/streams, irrigation farming is minimal. Limited vegetable irrigation is practiced in Juba, Yei River, and Kajokeji counties, mainly by women's groups, covering 20% of irrigatable land in Kajokeji. Refugees, IDPs and returnees especially women in Juba benefit from NGO support, including facilities from Don Bosco.

Inputs: Agro-dealers supply local and imported seeds, fertilizers, and equipment, mainly from Uganda, Kenya, and China. However, high demand, inflation, and taxes limit their supply. FAO provides free seeds, farm tools, and veterinary services, with most seeds procured internationally. Locally produced seeds often remain unsold, with only a small portion reaching farmers directly.

Extensions and Market Information Services: Market information is shared via local radio. Central Equatoria benefits from better extension services, funded by the Government and UN agencies like FAO. Extensionists train farmers and cooperatives through door-to-door visits, mobile phones, and online platforms, but limited resources reduce their efficiency.

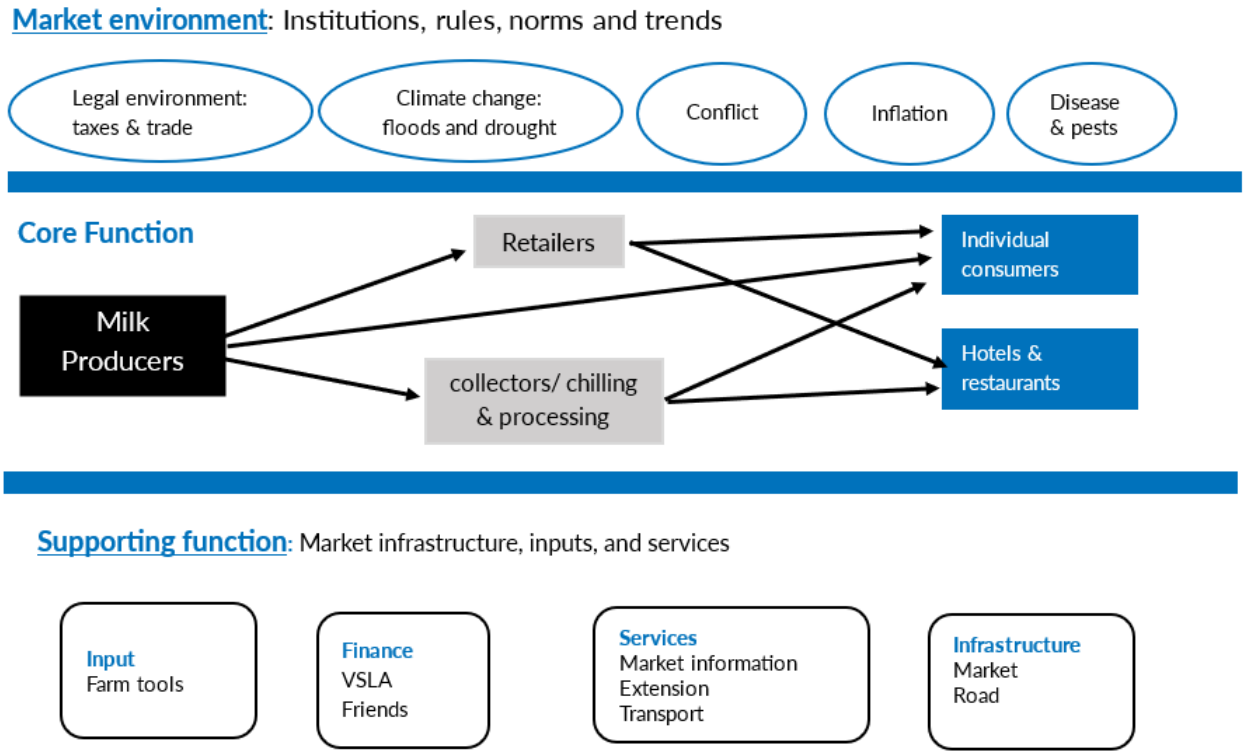
Financial Services: VSLAs dominate financial services in Yei River County, while SACCO and RuFi offer credit in Juba, Lainya, and Morobo. NGOs in Juba provide stronger financial support, often forming VSLA groups for women. Across counties, financial access is hindered

by inflation and eligibility barriers. Most loans are repaid on time, except by clients affected by natural hazards, who may receive exemptions.

5.3.3. Value Chain and Market Maps (Abyei County, Abyei Administrative Area)

In Abyei County, commodities included on-farm activities like sorghum, milk, maize, tomatoes, groundnuts, and fishery, alongside off-farm activities such as stove and furniture production. The prioritized value chains were sorghum, milk, maize, and tomatoes. The milk value chain mirrored Map 4. Below is a detailed narrative describing the milk value chain and its actors.

A. Milk market system maps



Map 4: Market system maps for milk in Abyei counties

B. Milk core function

The Abyei market offers a range of dairy products, with two primary segments: domestically produced fresh cow milk, which dominates the market, and imported powdered milk. Additionally, small quantities of goat and sheep milk are produced in certain areas.

Producers: Smallholder livestock keepers produce milk from indigenous dual-purpose cattle with low genetic potential, constrained by poor nutrition and diseases. Milk production is seasonal, linked to rainfall, grazing, and water availability, with the dry season lasting from March to May. Approximately 85% of the milk is consumed within households, while 15% is sold through a short supply chain directly to consumers, milk collection centers, and retailers. Sour milk is sold to consumers, while fresh milk is supplied to retailers or collection centers.

FGD with male and female group in Abyei county

Retailers: Retailers buy fresh milk from producers and sell it to consumers.

Milk Collection Centres: Milk collection centers purchase milk from producers, chill and store it to ferment, and then resell it to producers. However, challenges in handling and packaging remain significant obstacles to milk sales.

Consumers: Consumers buy both fresh and sour milk from three sources: directly from producers, retailers, and milk collection centers. Traders and consumers reported higher milk demand than supply. Therefore, there is a large gap between supply and demand, and per capita consumption might be lower than the FAO's recommended level of 62.5 kg. This indicates a large and fast-growing demand, presenting a business opportunity.

C. Market environment

Policy and regulatory environment: The lack of a grading system hampers goods quality and productivity, with unhygienic milk and processed foods posing public health risks. While Government policy avoids identity-based favoritism, high transport taxes and poor roads delay market transactions. Non-uniform taxes, low education in group marketing, and weak negotiation power in individual sales further erode profit margins. Awareness programs for youth and women, stronger market linkages, and controlling currency devaluation could reduce inflation for end users.

KII discussion with Rural Development Agriculture Agency, Managing Director

66% of respondents reported that current Government policies fail to support the strengthening of local market systems. Social norms also influence gender participation, with men dominating large-scale businesses such as imports, while women primarily engage in petty trade by retailing imported goods.

Climate change and manmade hazards: The Abyei Administrative Area, a contested region between Sudan and South Sudan, has 55% of its arable land uncultivated,

largely due to local conflict and displacement during insecure periods. Unpredictable rainfall further hinders agriculture, emphasizing the need for mitigation strategies such as drought-tolerant crops, irrigation development, water conservation, livelihood diversification, and early warning systems to address climate hazards.

D. Market infrastructure, inputs and support services

Road and Market Infrastructure: Most respondents highlighted inadequate road and market infrastructure, worsened during the rainy season when floods erode already poor roads. The limited accessibility and affordability of the transport system likely restrict local community participation in market activities.

Irrigation Infrastructure and Access: Limited irrigation-based vegetable production was reported, covering only 4% of the total crop produce in Abyei County, while the rest (96%) rain fed system of production.

Inputs: Forage seed, farm tool, and medicament supplies are limited by inflation and financial constraints. Agro-dealers operate through in-shop sales and direct delivery to farmers but face high taxation reducing profitability. Low-quality seeds impact crop productivity, while post-harvest losses, at 70%, stem from poor handling practices, mitigated traditionally using ashes. NGOs such as USAID, FAO, and AGRA provide agro inputs, including seeds, farm tools, and veterinary services.

Extension and Market Information Services: The lack of effective extension services and capacity-building has adversely affected livestock management. Although NGOs contribute, financial constraints and high population density limit their impact. Livestock production is challenged by diseases like Brucellosis, Foot and Mouth Disease, and Anthrax, alongside water shortages and poor management. Market system growth is hindered by limited farm management skills, financial barriers, weak market links, high transport costs, and 70% post-harvest losses. Market information is mostly available via local radio. However, in comparison, Central Equatoria State benefits from relatively better extension services, with FAO and the Government funding training programs.

Financial Services: Abyei County has no physically present formal financial service providers. Traders rely on personal savings (67%) and family loans (33%). Business expansion is primarily limited by lack of access to financial services (33%) and affordability challenges in repaying loans (67%).

5.3.4. Value Chain and Market Maps (Jamjang County, Ruweng Administrative Area)

A. Market system maps

In Jamjang, longlisted commodities included on-farm and off-farm activities such as sorghum, maize, groundnuts, sesame, fish, vegetables, milk, honey, rice, and charcoal. However, the prioritized value chains were narrowed to sorghum, maize, groundnuts, and sesame. Findings reveal crops as the main income source, with value chain actors focused on the domestic market. Similar to those main market actors presented in map 1 above for Torit and Magwi counties, the sorghum, maize and groundnuts have more actors than the sesame value chain which is shorter, with exporters playing a key role, leading to its market system map being presented separately (Map 1).

B. Core function

Farmers/Producers: Refugee farmers grow crops for consumption and marketing, with sesame and groundnut as cash crops. Livestock also provides income. Sales fund household needs and farm inputs. Produce is sold via cooperatives, associations, village traders, or directly to consumers like hotels and restaurants. Sesame producers sell to village traders, collectors, and large traders. Loan access is hindered by high collateral and interest rate requirements.

Traders/Vendors: Most refugee traders rely on personal savings or family loans. They sell to retailers, consumers, hotels, restaurants, and processors. In Jamjang, all traders reported unmet market demand due to supply shortages, poor quality, and high prices. Informal village traders buy from producers and sell to wholesalers and consumers. Wholesalers supply retailers, processors, hotels, and NGOs; sesame large traders export or supply oil processors. Sesame exporters source from large traders and ship raw sesame via ports like Port Sudan

Small-Scale Processors: Processors, except for sesame, source inputs from cooperatives and sell to retailers, consumers, hotels, and restaurants. Sesame seeds are processed for oil, which is distributed to retailers and consumers. Challenges include poor machine maintenance, low prices, high fuel costs, and limited finances.

Consumers: Consumers buy from retailers, processors, or farmers. Barriers include poor-quality goods, limited supplies, price inflation, and high transport costs.

C. Market Environment

Policy and Regulatory Environment: There are no Government grading or price-setting systems; traders independently determine prices. Most traders, except village traders and some collectors, comply with licensing policies and pay municipal and security taxes. Government policies provide equal access to market opportunities and land for returnees, refugees, and host communities, without identity-based preference.

Natural and Manmade Hazards: Floods significantly impact agriculture, reducing yields of sorghum, sesame, groundnut, and maize. Additional challenges include lack of improved seeds, limited extension services, post-harvest losses, pests, diseases, insufficient funds for pesticides and herbicides, and safety/security issues, all contributing to low productivity.

D. Market Infrastructure, Inputs, and Support Services

Road and Market Infrastructure: Jamjang faces poor road conditions, high transportation costs driven by fuel prices and taxes, and inadequate market outlets. High trader-set prices further hinder the market system. Solutions include improving negotiation power, market linkages, and access to market information.

Irrigation Infrastructure and Access: Irrigation-supported farming is limited due to high costs and lack of skills. Only a few individuals, mainly vegetable farmers, have irrigation access.

Inputs: Agriculture struggles with input shortages. Farmers rely on saved seeds, NGO support, and local markets, but poor seed quality and untimely distribution are common. Fertilizer use is minimal due to high costs. Key stakeholders like UNHCR, FAO, WFP, and the Government provide agricultural inputs and market opportunities. The Government offers limited extension services, while the commission for Refugee Affairs (CRA) coordinates NGOs and humanitarian efforts on behalf of the government.

Extension and Market Information Services: Extension services and market information remain inadequate, with barriers like poor storage and post-harvest losses estimated at 62%.

Financial Services: Access to financial services is limited by high interest rates, eligibility barriers, and low financial literacy. Most rely on personal savings or family loans and VSLAs.

5.3.5. Value Chain and Market Maps (Yambio County, Western Equatoria)

A. Market system maps

In Yambio County, Western Equatoria, FGDs with forcibly displaced persons identified various potential value chains, including maize, groundnuts, rice, sorghum, beans, vegetables, fruits, palm oil, honey, and sesame. After evaluation, groundnuts, maize, rice, and beans were ranked as the top value chains in order of importance. Market systems for these crops operate similarly across counties, with comparable value chain actors focused on the domestic market (Map 1).

B. Core function

Farmers/Producers: Farmers sell their produce through various channels, including commercial farmers, collectors, retailers, wholesalers, and directly to consumers. Among those

interviewed, 75% rely on personal savings, while the remainder depend on support from family or friends. None have taken loans due to the absence of lending institutions, high collateral demands, and prohibitive interest rates. Buyers from smallholder farmers who sell mainly to wholesalers, hotels/restaurants, and retailers, with a limited amount sold to individual consumers.

Traders: Yambio, Nabiapai, Makpandu, and Masai are key markets in Yambio County. Most refugee traders start businesses using personal savings. However, 36% reported unmet market demands due to limited supplies and rising price inflation. Large-scale wholesalers source from specific producers and can buy on credit, while medium to small-scale wholesalers purchase from larger traders but face price volatility due to limited capital. Wholesalers primarily supply retailers and hotels/restaurants.

Data collection with young woman using Kobo tool in Yambio

Processors: Small-scale processors receive inputs from wholesalers, collectors, and commercial farms, producing flour for retailers, consumers, hotels, and restaurants. Challenges include poor machine maintenance skills, low market prices, high fuel costs, and limited finances for growth.

Consumers: End users typically buy from retailers, processors, or smallholder farmers. Individual consumers often purchase flour from retailers supplied by processors. Key barriers include poor quality, limited supply, inflation, and high transport costs.

C. Market environment

Policy and Regulatory Environment: There are no Government grading or price-setting systems; traders set prices based on market demand and USD exchange rates, confirmed by 93% of respondents. Most traders, except village traders and some collectors, must adhere to licensing policies and pay municipal and security taxes. Government policies provide equal market access and cultivation land for IDPs, returnees, refugees, and host communities, with women participating freely in all production and marketing levels.

Climate Change and Manmade Hazards: Droughts and floods are major threats, reducing yields of groundnuts, maize, and rice. Production is further hindered by pests, diseases, and financial barriers limiting access to pesticides, herbicides, improved seeds, and fertilizers. Safety and security challenges also remain significant for Yambio's community.

D. Market infrastructure, inputs and support services

Road and Market Infrastructure: Poor road conditions, high transport costs due to fuel prices, and taxation on limited produce restrict agricultural trade in Yambio. Poor market outlets add to the challenges. Proposed actions noted include forming cooperatives/groups to boost negotiation power, lowering shared transport costs, providing training, improving market linkages, and enhancing access to market information.

Irrigation Infrastructure and Access: Irrigation is costly and limited, primarily benefiting vegetable production. Out of South Sudan's 1 million hectares of irrigation potential, only 32,000 hectares are utilized, including 500 hectares in Western Upper Nile. While irrigation isn't a priority for Yambio, it holds significant agricultural potential.

Inputs: Input shortages hinder Yambio's agriculture. Seeds are mostly sourced from NGOs or previous harvests, but poor quality and untimely distribution are key issues. Fertilizer use is minimal, as land is perceived as fertile or costs are prohibitive. Key agricultural stakeholders include Government bodies, UN agencies, and NGOs. The Government provides limited extension services, while the CRA coordinates NGOs in the refugee response. FAO and UNHCR supply inputs like seeds and tools, and WFP supports grain markets as a major buyer, alongside wholesalers and retailers (Cordaid, 2025).

Extensions and market information services: The study observed limited extension and market information services, with no sustainable Government or NGO support. Post-harvest losses were reported but not quantified. Farmers use traditional methods like neem, mahogany trees, cow dung, ash, and red peppers to combat pest-related losses. Secondary data from a USAID agricultural assessment (April 2022) confirmed a complete lack of storage facilities in Yambio. The community requested training in areas like ox-plough use, machinery maintenance, post-harvest handling, and processing. While many FGD participants were reluctant to pay for training due to financial constraints, a few expressed willingness to invest in it.

Financial Services: Producers, traders, and consumers face limited access to financial services due to high interest rates and other challenges. NGOs provide minimal financial support to specific groups. Personal savings, VSLA group savings, and income from produce sales are the main financial sources. Additional barriers include unmet eligibility criteria, poor loan repayment capacity, lack of required documents, and low financial literacy, further restricting financial access for all stakeholders.

5.3.6. Value Chain and Market Maps (Wau, Raja and Aweil, Northern and Western Bahr el-Ghazal)

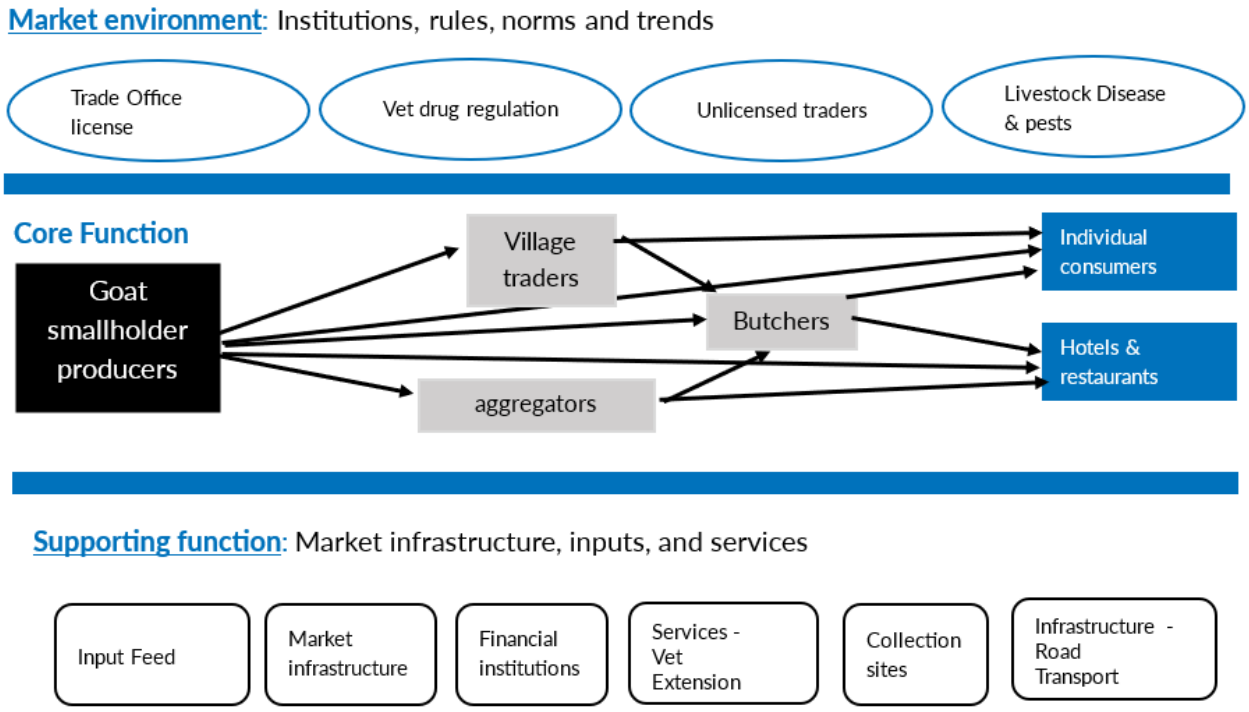
In Wau, the primary value chain crops are groundnuts, honey, milk, and sorghum, while in Raja, they are groundnuts, sorghum, goats, and honey, with 10% of the population selling livestock, primarily goats and chickens. Aweil County's main crops include sorghum, groundnuts, maize, and sesame, ranked by importance. Groundnuts are a significant cash crop with high demand, known for their nutritional value, income potential, and cultural relevance. Sorghum serves as a staple food that is vital for food security, widely cultivated, and has a strong market presence. Goats are valuable due to their high demand for meat, diverse income streams, and versatility, while honey is prized for its nutritional benefits, increasing market demand, contribution to biodiversity, and high profit margins for farmers.

Table 5: Value chains selected in Wau, Raja and Aweil, Northern and Western Bahr el- Ghazal Counties

County	Long list of potential value chains	Prioritized agricultural value chains
Wau	Groundnuts, honey, milk, sorghum, sesame, beans, maize, cassava, sweet potato, goat production, and chicken	Groundnuts, honey, milk, and sorghum
Raja	Groundnuts, sorghum, goats, chicken, honey, beans, cassava, yam, millet, tomatoes, sweet potatoes, and blacksmith	Groundnuts, sorghum, goats, and honey
Aweil	Sorghum, groundnuts, maize, sesame, vegetables, sweet potatoes,	Sorghum, groundnuts, maize, and sesame

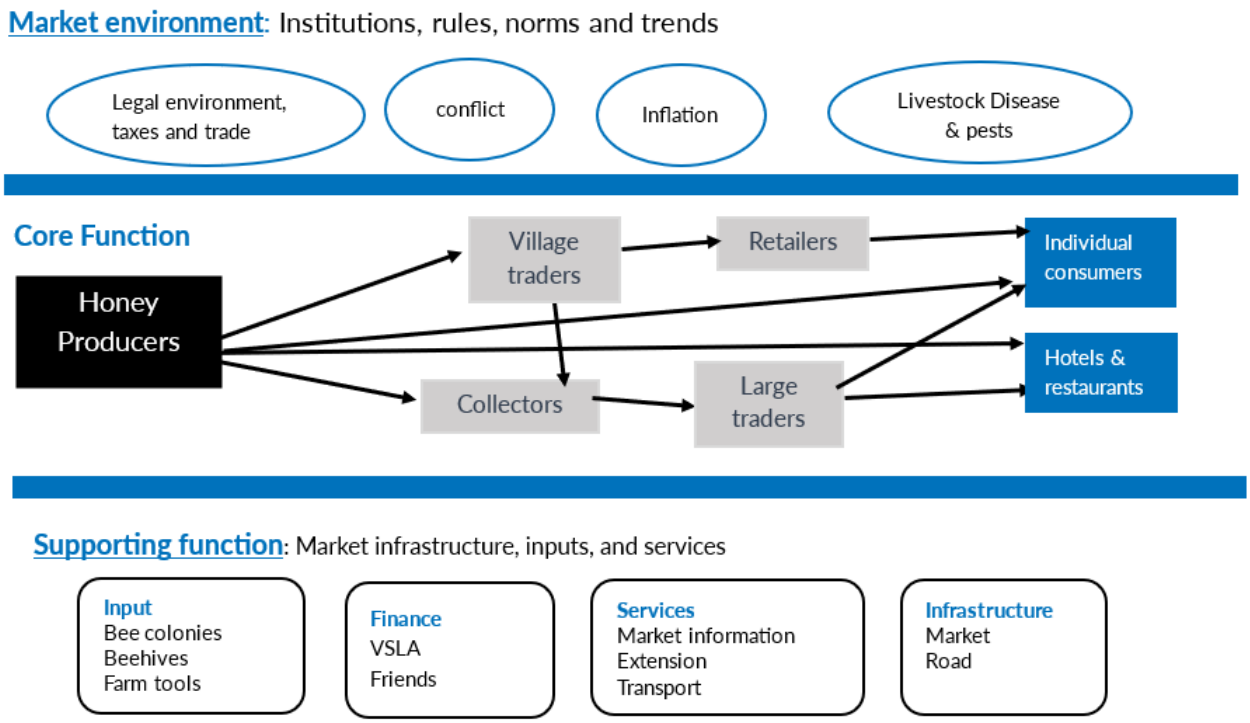
Wau County surpassed Aweil and Raja in sesame production, with 100% of respondents considering it somewhat sufficient to meet demand. Similarly, Wau's maize production was rated as adequate by all respondents. Sorghum production was deemed somewhat sufficient by 100% of households in Wau, 18% in Aweil, and 80% in Raja.

A. Market system maps



Map 5: Market system map for goat in Raja County

The crop market systems and value chain actors for sorghum, maize, and groundnuts closely mirror those in Map 1. Similarly, the sesame value chain aligns with Map 2, and the milk value chain corresponds to Map 4. Detailed narratives regarding the goat and honey value chains are presented, corresponding to Maps 5 and 6, respectively.



Map 6: Market system map for honey in Raja County

B. Core function

Farmers/Producers

Most crops, except sesame (grown by some semi-mechanized farmers), are cultivated by smallholders and a few commercial farmers. In Wau and Aweil, farmers rely entirely on personal savings, unlike Raja, where Government and NGOs provide support. Crops are sold via cooperatives, associations, or directly to village traders, who supply larger traders in towns like Aweil, Wau, and Juba. Some farmers sell directly to consumers, including hotels and restaurants. Wau's market serves Northern Bahr el-Ghazal and Warrap with imports from Sudan and Uganda. Aweil relies on Sudanese imports but produces sorghum, maize, and groundnuts locally. Farming groups among Raja returnees export surpluses to Wau and Aweil. Goat farmers focus on meat and milk, supported by veterinary and feed suppliers, while beekeepers produce honey using both traditional and modern methods. Dairy farmers primarily focus on milk production, occasionally raising goats, and are supported by suppliers providing veterinary care, feed, and milking equipment.

Traders: Most traders start with personal savings, with 91.7% in Wau and 86.7% in Aweil relying on own savings, while smaller proportions utilize family or microfinance loans. Supply shortages, price inflation, and transport costs are primary challenges across the regions, with Wau meeting 8% of business demand, Aweil meeting 40%, and Raja 80%. Price inflation affects all three locations, while transportation costs are more pronounced in Raja and Aweil.

Village traders: unlicensed and informal, buy grains locally to sell to wholesalers, retailers, or consumers in towns. Multipurpose cooperatives and associations aggregate grain from farmers, primarily selling to wholesalers and retailers.

Wholesalers: source directly from producers to supply processors and NGOs, while sesame wholesalers export or sell to oil processors. In the goat value chain, village traders and aggregators purchase live goats from farmers to sell at local markets or to larger buyers, while butchers prepare the meat for sale. Honey producers sell minimally processed honey directly to consumers or local traders, often during market days. In the milk value chain, traders purchase raw milk from farmers and supply it to local markets or processors for conversion into dairy products. For exporters, sesame seeds are exported mainly via Port Sudan and transported to international markets.

Processors/Butchers: Small-scale processors, often working in basic facilities, sell their products to individuals, hotels, and retailers. In 2023, groundnut prices ranged from 105,000 SSP for 50 kg in the rainy season to 150,000 SSP for 30 kg in the dry season, with daily sales averaging 30,000 SSP and profits of 10,000–15,000 SSP. Challenges include a lack of modern tools, low production, pests, marketing difficulties, and limited skills. Sesame is used for oil manufacturing in small volumes, and the oil is sold directly to retailers or consumers.

Consumers: Consumers purchase grains, flour, or processed sesame oil from producers, farmers, or retailers. They either process grains into flour at mills or buy ready-made products directly.

C. Market environment

Policy and Regulatory Environment

The counties face numerous challenges, including inadequate infrastructure and limited access to health services, resulting in limited Government services. No standardized grading or price-setting system exists; traders determine prices based on market demand, supply, and USD exchange rates. However, in Wau, individual traders or trade unions occasionally apply a grading system with varied pricing.

The study observed no significant gender-based restrictions. Most traders, except village traders and some collectors, comply with licensing policies and pay security taxes and municipal fees. In Wau and Aweil, women predominantly sell vegetables, while men handle meat and crop sales. Women often join cooperatives, benefiting from UN programs offering training, tools, seeds, and marketing assistance for sorghum and groundnuts. Vocational training for youth is available while the Malol Aweil Women Association delivers skills training for women. Private sector investment in the sesame value chain remains minimal, lacking adherence to international standards, as well as adequate infrastructure, packaging, labeling, transportation, and storage facilities, similar to challenges faced in other counties.

Climate and Manmade Hazards: Farming is gravely impacted by instability, violence, cattle raiding, and armed conflicts, causing displacement and leaving vast arable land underutilized. Adverse climatic conditions—flooding, drought, and irregular rainfall—diminish crop yields, while deforestation worsens soil degradation and amplifies the effects of climate change, further hindering agriculture.

KII discussion with UNCH staff in Wau County

Inflation drives up agricultural input costs, reducing farmers' purchasing power, while inadequate communication systems limit access to market data, weather updates, and best practices. In Wau, Aweil, and Raja, 80%, 90%, and 85% of arable land remain unused. Farmers face widespread challenges, including insufficient funding and seeds, water shortages (notably in January), marketing barriers, low demand, high transport costs, pests, unpredictable rainfall, and limited financial services, all of which severely impact agricultural productivity.

D. Market infrastructure, inputs and support services

Road and Market Infrastructure: Wau County's road access supports marketing activities, with key sites like Suk Jou, Suk Wau, and Owino Market located about 8 km from central areas. Despite this, unreliable transport forces residents to walk 7–8 km or depend on inconsistent vehicle availability, using options such as Boda Bodas. Aweil County also has road access but lacks adequate market infrastructure. Participants face challenges such as enduring heat while waiting for customers, with transport services available but costly, particularly for distant markets. Raja County struggles with market access due to the long distances between farms and markets and the absence of essential market infrastructure for major agricultural value chains. High transport costs driven by inflation further limit mobility, with residents often walking 2–3 km.

Irrigation Infrastructure and Access: In Wau County, irrigation schemes are utilized by young men and women based on their capacities, with 80% of irrigated land dedicated to cultivating tomatoes, eggplants, and onions. In Aweil County, financial resources determine access to irrigation; men use water pumps and generators, while women rely on watering cans due to financial constraints, focusing on vegetable farming. Raja County primarily cultivates tomatoes, okra, and other vegetables through irrigation. Across counties, systems are managed collectively by youth and adults, fostering community engagement and efficient usage.

Inputs: Most seeds are supplied by NGOs or purchased from local farmers' previous harvests. Producers face barriers such as the lack of modern tools, seeds, pesticides, smooth transportation, and blacksmithing and welding facilities, which undermine productivity and

sustainability. NGOs play a vital role in agricultural development in Wau, Aweil, and Raja by providing farm tools, seeds, and capacity-building activities.

Extension and Market Information Services: refugees and host community members, including women, men, and youth, have access to timely market information provided by public entities and traders through various channels. This information, however, is not aligned with specific production or marketing phases. Extension services are unavailable across all counties. For post-harvest treatment, people rely on traditional methods, such as using ashes, but lack proper storage facilities. Post-harvest losses range from as low as 3% to as high as 40–50% in Raja and Wau, primarily due to pests and diseases.

Financial Services: Financial services in Wau, Aweil, and Raja remain inaccessible and unaffordable. Key barriers include failure to meet eligibility criteria, affordability issues with loan repayments, lack of documents required by the financial institutions, and limited financial literacy. Refugee farmers face severe financial constraints that restrict their ability to invest in agricultural inputs, tools, and technologies. Insufficient funding from Government and NGOs worsens the situation, leaving farmers with limited resources to support agricultural activities.

5.3.7. Value Chain and Market Maps (Upper Nile State, Maban County)

The local economy in Maban County is driven by an agro-pastoral system combining crop cultivation and livestock rearing. FGDs with refugees identified the four primary agricultural value chain groups as maize, sorghum, goats, and tomatoes, selected based on market demand, nutritional value, economic impact, organizational support, and environmental factors. Sorghum ranks highest due to its strong demand as a staple food, its critical role in the local diet, and its income-generating potential. Its adaptability to diverse conditions makes it more resilient to climatic challenges than sorghum.

A. Market system maps

The value chain actors for maize and sorghum are closely related to those in most of the studied counties (see Map 1). Similarly, the tomato value chain aligns with the vegetable value chain depicted in Map 3, while the goat value chain corresponds to Map 5, specifically in Raja County.

Sorghum, while a staple crop, faces lower consumer preference and market demand, resulting in reduced income compared to maize. Goats provide meat and milk, offering income through livestock sales; however, their production scale is smaller than crops, and not all households own goats. Vegetables like tomatoes have consistent market demand and are vital for community health and food security. They generate year-round income and contribute to agricultural productivity, making up 20–30% of total irrigated crop production.

B. Market Chain Actors

Farmers/Producers: Most commodity producers in Maban County are smallholders, with 45.2% relying on crop agriculture, 6.5% on livestock, 32.5% on petty trades, and 3.2% on external support. Products are sold to consumers, village traders, and retailers. Eighty percent of respondents have not received loans, with 20% borrowing from friends. Loan barriers include ineligibility and high interest costs. Business growth is hindered by supply shortages (40%), price inflation (40%), and transport costs (20%). Markets in Renk County (Bati, Rabak, and Renk) and occasional trips to Uganda and Kenya serve trading needs. During the dry season (January–June), feed and water shortages lead 40–60% of livestock producers to sell goats.

Traders: Among traders, 87% rely on personal savings, and 13% receive family loans. Supply issues and price hikes prevent 65% from meeting demand. Key constraints include price inflation (52%), supply shortages (19%), and transport costs (29%). Village traders operate without licenses, sourcing grains locally for wholesalers, retailers, and consumers, including hotels and restaurants. Inputs for Maban come from Renk, Juba, Ethiopia, and Sudan, with peak sales during weekends and holidays. Heavy taxation and consumer resistance to high prices reduce profits. Multipurpose cooperatives aggregate grain for wholesaling and retailing, while wholesalers connect producers to processors and NGOs through informal networks. In the goat value chain, village traders link producers to consumers and larger buyers.

Processors: Agriculture focuses on subsistence farming and informal sales. Butchers buy goats from producers and village traders, preparing meat for local markets.

Consumers: Consumers source sorghum, maize, wheat flour, meat, and milk from Bunj Market. Seasonal road conditions allow travel to markets like Doro, supplied by smallholder farmers and traders. Prices are driven by market demand, scarcity, and USD exchange rates.

C. Market environment

Policy and regulatory environment: Frequent policy changes under new leadership weaken market systems, compounded by inconsistent taxation rates. Traders determine prices based on market demand, supply, and USD exchange rates in the absence of standardized grading or pricing systems. Government policies ensure impartiality, granting free cultivation land access to IDPs, returnees, refugees, and host community members. The study found no significant gender-specific restrictions in the community. Women freely participate in community events and have access to resources at all levels of production and marketing, often constituting the majority in marketing activities.

Climate change and manmade hazards: Agriculture value chains face significant barriers, including agro-climatic shocks, insecurity, inflation, pests, diseases, and weeds, all of which

hinder productivity. Prolonged dry spells during May-June drastically reduce crop yields. Despite agriculture being the backbone of the economy, 85–90% of land remains uncultivated due to security concerns, lack of investment, machinery, and crop diseases. Climate hazards have driven up prices for sorghum, maize, and other goods. To address these challenges, the community is enhancing production through irrigation systems.

D. Market infrastructure, inputs and support services

Road and Market Infrastructure: Market infrastructure in the area is inadequate, with markets 8–10 km away and unreliable transport services. Damaged and cutoff roads during the rainy season cause supply shortages, high demand, and price increases. Barriers include flood impacted roads, low incomes, and occasional insecurity. Suggested solutions involve road renovations, lower cargo fees, improved vehicle access, and regional stability.

Irrigation Infrastructure and Access: The irrigation scheme lacks differentiation between host and outsider participants, supporting 20–30% of total crop production, including maize, sorghum, tomatoes, onions, potatoes, and vegetables. Efforts are underway to enhance production through community initiatives.

Inputs: Seeds, fertilizers, and pesticides are mainly provided by NGOs like FAO, UNHCR, WFP, SP, and RI, along with farmers and the Government. Agricultural input usage is minimal, with farmers relying on saved seeds. Mechanized tools are rare and used facilitated by humanitarian actors. Large commercial farms in Renk, Manyo, and Melut use mechanized and irrigated production. Goat input suppliers offer veterinary services, feed, and essentials. NGOs play a vital role in agricultural development, providing seeds, land ploughing services, training, and veterinary medicine to selected beneficiaries.

Extensions and Market Information Services: Training in livestock production is needed, but inaccessible for many. Major livestock diseases include Newcastle disease (chickens), Salmonellosis (goats), Q-fever, PPR, mastitis, and metritis. Dry season forage shortages and market constraints hinder livestock production. Service provision includes seeds, fertilizers, farm tools, veterinary medicines, fingerlings, and saplings, along with demonstrations on pesticides and fertilizers. Initial service demand was low but is improving. Services are limited to selected beneficiaries. Lack of post-harvest treatment and poor storage facilities lead to 60–70% crop losses from pests.

Financial Services: Financial services for crops and livestock are available with installment-based repayment plans, though most clients exceed deadlines due to customer payment delays. Heavy taxation policies and loan burdens discourage borrowing. Expansion of financial services to additional areas is recommended.

6. CONCLUSION

The market assessment across counties in South Sudan—Maban, Jamjang, Abyei, Juba, Yei, Morobo, Lainya, Kajokeji, Torit, Magwi, Wau, Aweil, Raja, and Yambio—provides valuable insights into agricultural value chains and community engagement. Key value chains, ranked by county importance, include maize, sorghum, goats, tomatoes, sesame, and groundnuts. The study noted strong market demand and increased participation in crop and livestock systems, with humanitarian actors supporting inputs and training.

However, challenges persist due to limited resources, and transport facilities and capacity of the local institutions. Limited access to quality seeds, machinery, fertilizers, and pesticides, as well as fragility factors such as droughts, floods, and insecurity, hinder increased agricultural production and marketing. Financial constraints, coupled with low entrepreneurial skills and gaps in farm management, post-harvest handling, and value addition, further aggravate market inefficiencies. Poor infrastructure, insufficient market linkages, and weak regulatory environments also affect systems.

Opportunities for enhancing livelihoods include rising demand for agricultural products, support from Development and humanitarian actors and active community participation. Vocational training in agriculture and business management can empower youth and women, while microfinance tailored to smallholder farmers can improve access to capital. Infrastructure upgrades, particularly in roads and markets, will reduce transport costs and improve connectivity, especially during the rainy season, while climate-resilient practices, such as drought-resistant crops and sustainable techniques, should be promoted. These strategies will strengthen agricultural value chains, enhance livelihoods, and foster sustainable growth for forcibly displaced persons in South Sudan.

7. REFERENCES

Food and Agriculture Organization and World Food Programme. (2020). 2019 FAO/WFP Crop and Food Security Assessment Mission to South Sudan. Retrieved from http://www.fao.org/south-sudan/resources/cfsam/en/

Food and Agriculture Organization of the United Nations. (2019). Support to agricultural value chains in South Sudan. Retrieved from http://www.fao.org/south-sudan/resources/policies-and-strategies/en/

Food and Agriculture Organization of the United Nations. (2016). FAO situation report for South Sudan. Retrieved from http://www.fao.org/south-sudan/resources/situation-reports/en/

Famine Early Warning Systems Network (FEWS NET). (2018). Livelihood Zone Map for the Republic of South Sudan. Retrieved from https://fews.net/south-sudan

Gender in Humanitarian Action (GHA). (2020). Gender Analysis in South Sudan. Retrieved from https://www.ghaction.org/gender-analysis-south-sudan

International Labour Organization (ILO). (2020). Youth Employment in South Sudan: Barriers and Opportunities. Retrieved from https://www.ilo.org/south-sudan/publications/WCMS_760000/lang--en/index.htm

Project Appraisal Report (PAT) for Entrepreneurship support to refugees and host communities in South Sudan (ESRHC SS) project April 2023.

South Sudan World Bank Annual Report 2016.

UNDP. (2020). Labour market assessment in five targeted locations in South Sudan final report.

UNICEF. (2022). Education in South Sudan: A Crisis in Learning. Retrieved from https://www.unicef.org/southsudan/reports/education-south-sudan-crisis-learning

World Bank. (2020). South Sudan Economic Update: Poverty and Vulnerability in a Fragile Environment. Retrieved from https://www.worldbank.org/en/country/southsudan/publication/economic-update

World Bank. (2016). South Sudan annual report. Retrieved from https://www.worldbank.org/en/country/southsudan/publication/south-sudan-annual-report-2016

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