



## Terms of Reference

### Value Chain Assessment in Sudan

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**Date:**17/11/24  
**For:** ADRA Sudan

**Services Performed By:**

**Services Performed**

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#### 1. Agriculture Sector and Problem Statement

Sudan is experiencing a severe humanitarian crisis stemming from the ongoing conflict that began in April 2023 between the Sudanese Armed Forces (SAF) and the Rapid Support Forces (RSF). This conflict has led to widespread displacement, with approximately eight million people internally displaced, a significant refugee crisis, with over 2.3 million Sudanese refugees and asylum-seekers fleeing to neighboring countries<sup>1</sup> and an estimated 2.56 million people in need of humanitarian assistance<sup>2</sup>. The political instability and refugee crisis have severely impacted Sudan's economy through the loss of access to international funding and debt relief initiatives, deteriorating economic conditions, affecting access to basic services and food security, and increased risk of food insecurity. The situation remains volatile, with ongoing challenges to maintain food production, transportation, and marketing.

In these circumstances, Sudan's agriculture sector plays a crucial role in the country's economy and food security. However, it faces significant challenges due to this ongoing conflict, climate change, and economic instability. Subsistence and smallholder farming remain the backbone of Sudan's agricultural production. A large portion of rural households rely on small-scale and rainfed crop cultivation and livestock rearing for their livelihoods. These farmers typically grow staple crops like sorghum and millet, along with cash crops such as sesame and groundnuts. Without intentional climate change adaptations, increased drought and rainfall variability will constrain crop yields and reduce livestock pasture. Consecutive crop failures have already led to food shortages and famine – in Sudan because farmers rely entirely on rainfed agriculture, there is generally only one crop season.

Women farmers play a vital role in Sudan's agricultural sector, particularly in subsistence farming. They are often responsible for food production, processing, and marketing at the household level. However, women farmers face additional challenges, including limited access to land, credit, and agricultural inputs compared to their male counterparts. Some of the most important value chains in Sudan's agriculture sector include:

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<sup>1</sup> <https://dtm.iom.int/reports/dtm-sudan-mobility-update-07?close=true>, (accessed on September 19, 2024)

<sup>2</sup>

[https://www.ipcinfo.org/fileadmin/user\\_upload/ipcinfo/docs/IPC\\_Sudan\\_Acute\\_Food\\_Insecurity\\_Snapshot\\_Jun2024\\_Feb2025.pdf](https://www.ipcinfo.org/fileadmin/user_upload/ipcinfo/docs/IPC_Sudan_Acute_Food_Insecurity_Snapshot_Jun2024_Feb2025.pdf), (access on September 19, 2024)

- Sorghum and millet are the primary staple crops, with wheat becoming increasingly important.
- Sesame and groundnuts are major export crops and sources of income for smallholder farmers.
- Livestock is a large sector, including cattle, sheep, and goats, which is crucial for both domestic consumption and export
- Gum Arabic, Sudan is a leading global producer of gum Arabic, an important export commodity.
- Fruits and vegetables are produced in targeted areas, largely for domestic consumption

The ongoing conflict has severely impacted Sudan's agricultural sector. It has led to disruptions in farming activities, reduced access to inputs, and challenges in transporting produce to markets. This has exacerbated food insecurity and economic hardship for many rural households.

Despite these challenges, Sudan's agricultural sector has significant potential for growth and development. Efforts to improve agricultural productivity, enhance value chains, and support smallholder farmers, particularly women, could play a crucial role in addressing food security and economic development in the country.

## 2. Scope of the Value Chain in Sudan

ADRA International is planning a response to the upcoming USAID-funded Transforming Agriculture and Nutrition through Multi-sectoral Inclusive Approaches (TANMIA) activity. “TANMIA will improve food security, increase income of smallholder farmers, and support broader economic growth. The interventions will improve food security by increasing overall agriculture and livestock productivity by enhancing efficiency of the productive resources mainly land, and water while introducing modern production practices. In addition, the activity will facilitate farmers' access to quality inputs, technologies, information, credit and financial services and meeting market quality standards.”

- **Improving Agricultural Productivity** – the program aims to boost agricultural productivity of both crops and livestock by enhancing access to improved seeds and other inputs, promoting mechanization, irrigation, and appropriate technologies, and strengthening agricultural extension services. These activities are designed to improve the efficiency of agriculture through efficient, sustainable use of modern technologies and more productive use of land, labor, and capital.
- **Empowering Women in Agriculture** - the program recognizes the crucial role women play in Sudan's agricultural sector and aims to increase women's access to agricultural inputs, technologies, and services; provide targeted training and capacity building for women farmers, support women-led agribusinesses and cooperatives, address gender-based constraints in agricultural value chains
- **Value Chains and Market Systems Development (MSD)** - FtF is working to improve agricultural value chains that make up the wider market system, improve market access for smallholder farmers, especially women, support agro-processing and value-addition

activities, and strengthen linkages between producers and markets through agriculture-led growth mechanisms

- **Climate Change Adaptation** - given Sudan's vulnerability to climate change, the program is prioritizing climate-smart agriculture practices such as promoting drought-resistant crop varieties, introducing water-efficient irrigation techniques, supporting soil conservation and sustainable land management practices, and providing climate information services to farmers for better decision-making. This aligns with Sudan's adaptation priorities of the first Nationally Determined Contributions/NCDs under the Paris Agreement of October 2021 especially Adaptation priorities 4, 5,6,7, and 8 as follows: Resilient small-scale pump irrigation, Building resilience of crop production, Climate resilient agriculture, Climate-resilient irrigated cropping systems and Resilient livestock production systems, respectively.
- **Access to information** – Access to about markets, new production practices, financial services are all potential drivers of food production and agriculture led growth
- **Access to financial services** – Enhanced financial services is a key driver of agriculture-led growth. This includes access to credit for farmers and household enterprises, but also the credit, investment and other financial products required to drive non-farm jobs and income growth.
- **Building Resilience** – given Sudan's history of conflict and climate shocks, the program will emphasize diversifying livelihoods to reduce vulnerability, strengthening community-based organizations and farmer groups, and improving access to financial services and risk management.

ADRA international plans to learn more about agricultural production and market systems along key value chains, focused on Eastern Sudan, or specific, value chain opportunities elsewhere in the country. We will develop evidence regarding the challenges, opportunities, and constraints of the primary value chains that can drive household food security and agriculture-led growth, with specific interest in value chains and market systems with resilience in the current conflict context. This study will assist ADRA to build an evidenced-based approach to identification of value chains with the greatest opportunity, a detailed mapping of the value chain stakeholders, and knowledge of the specific actors in each value chain and the requirements to realize new business opportunities. In addition, we will gather information on how value chain development can be a) inclusive of women and youth, b) sustainable economically and in terms of natural resource management, and c) strengthen the resilience of households, communities, and systems.

### 3. Objectives of the Value Chain Assessment

This assessment will build upon earlier value chain and agriculture sector studies conducted 2-4 years ago. While much has changed in Sudan since then, due to conflict, the previous studies provide an analytical background for this review. For some value chains, this will update information from the previous studies, for others, there may be more work to be done. The assessment has three primary objectives:

**Objective 1: Identify value chains to include in the TANMIA activity** and to justify these choices based upon the potential for increased household food security and resilience, smallholder farmer income generation, and linkages with markets and agribusinesses that can drive agriculture-led growth and transformation in the conflict context in Sudan.

**Objective 2: Conduct a value chain analysis of the target value chains** that includes detailed value chain maps and provides details on value chain:

- Actors: the people and firms involved in the value chain (producers, processors, traders, consumers etc.)
- Activities: the steps involved in the value chain such as input supply, production, processing, marketing, storage, transport, distribution (etc.)
- Value: the value added to the product at each stage of the chain that should include mapping or table of gains distribution, how smallholder farmers could improve their incomes through value addition, and how increased economic value and off-farm employment can be created.
- Governance: The rules, norms and enabling environment to govern the value chain
- Supporting Actors: The additional stakeholders and participants such as the government, financial institutions, investors, information service providers etc.
- Environmental Sustainability and Climate Adaptation: assessment of environmental impact at each stage of the chain, how various practices could ensure long-term environmental health, and what strategies to adapt to climate change, such as drought-resistant crops and water-efficient irrigation techniques.
- Gender Considerations: identify the role of women in value chains and unique challenges faced by women farmers and propose specific interventions to address these challenges.

**Objective 3: Provide additional data and information in support of a proposal response to the solicitation.** Objective three will be prepared as a separate brief for ADRA to identify strategies, opportunities, and potential partners for value chain and market development. Data collection for Objective 3 can be managed concurrently with Objective 2.

## 4. Methodology and Phased Approach of the Value Chain and Market Systems Assessment

This assessment will provide an evidence-based value chain selection process and a comprehensive review of targeted value chains and related market systems in Sudan. The assessment will provide an analysis of each value chain and will identify the opportunities and constraints confronting value chain stakeholders in each. The study will also provide a prioritized list of interventions and opportunities to guide a TANMIA implementation strategy. The assessment will identify key barriers and gaps to smallholder farmer, women, and youth participation in agricultural value chains, both on-farm and off-farm, along with access to finance

for smallholder farmers, agribusinesses, and other stakeholders in the agriculture value chain. The assessment will also highlight opportunities and requirements for secondary stakeholder support for value chains (financial institutions, government agencies, investors etc.) that will facilitate agriculture-led growth and transformation

### **Phase 1 – Conducting Desk Review and Value Chain Selection**

The purpose of this phase is to rapidly conduct an initial desk review, refine value chain selections, identify the farmers, farmer organizations, businesses and other stakeholders that participate in the value chain. This information will be used to create an initial value chain map and define the data collection and analysis period for the study. The steps and methods for Phase 1 include:

- **Desk Study and Literature Review:** The assessment team will conduct an initial, rapid desk study on agricultural value chains in Sudan and the impacts of the conflict on those value chains.
- **Value Chain Selection:** ADRA will provide the assessment team with an initial list of fifteen potential value chains for inclusion in the assessment. These will include three potential value chains from the staple foods, livestock, fruits, vegetables, and other categories of commodities. The assessment team will use the desk review and interview knowledgeable specialists in agriculture to reduce the list to 3-5 commodities for further assessment. The assessment team will develop a list of criteria and score the value chains against those criteria to make their selections. The scoring sheet and selection analysis will be shared with and approved by ADRA.
- **Preliminary Stakeholder Mapping:** The assessment team will identify and engage diverse stakeholders, including farmers, input suppliers, processors, traders, distributors, consumers, and secondary stakeholders. They will use online source and social media platforms to reach out and gather insights from various demographics.
- **Value Chain Mapping** Initial value chain maps for each target commodity will be prepared. These maps will outline the agricultural value chains including key actors, value chain governance (policy and business enabling environment) and secondary actors (financial institutions, investors, suppliers, logistics, NGOs etc.)
- **Prepare a plan and strategy for conducting the data collection and analysis:** The initial analyses and assessment plan will be presented to ADRA for verification of the value chain selections and approval of the plan. Upon approval, the consultant will proceed with Phases 2 and 3 of the study.

### **Phase 2: Conduct Data Collection and Value Chain Analysis**

- **Data Collection:** Draw upon data from the literature review and public data resources along with key informant interviews with value chain stakeholders and focus group discussions with key groups of value chain actors (farmers, traders, women, and youth groups, etc.). Quantitative and qualitative data on production practices, processing methods, trading, market dynamics, and consumer and market preferences and

requirements will help to refine value chain maps and provide information and data for analysis of the value chain

- **Market Analysis:** Assess market demand, pricing structures, competition, and potential market opportunities for the products and services within each value chain
- **Financial Analysis:** Evaluate the cost structure, profit margins, and financial viability of different segments of the value chain. Create a waterfall chart that illustrates buying and selling price points at each stage of the value chain. Assess where value is created and how different stakeholders retain it
- **Policy and Regulatory Framework Assessment:** Analyze relevant policies, regulations, and institutional frameworks that impact the value chains. Identify the key policy and regulatory issues that incentivize, facilitate, or obstruct the development, and profitability of each value chain.
- **Impact of the conflict context on each value chain:** Provide a focused section of the analysis on evidence collected to describe the impact of the conflict on each value chain and its stakeholders
- **Data analysis:** Use statistical tools and software to analyze quantitative data. For qualitative data, thematic analysis can be employed to identify key insights
- **SWOT Analysis:** Using the data and information from the literature review, key informant interviews, focus group discussions and market and financial analyses, prepare a SWOT analysis for each value chain
- **Findings and Recommendations Development:** Prepare a list of findings for each value chain and, if common themes are identified, describe findings that apply across all selected value chains. In addition, provide actionable recommendations based on findings, focusing on enhancing value chain efficiency, sustainability and inclusion of smallholder farmers, women, and youth.
- **Conduct a stakeholder workshop:** Where feasible given security challenges, conduct a stakeholder workshop to present findings of the study and request feedback and comment on both findings and recommendations
- **Reporting and Presentation:** Prepare a comprehensive report and present findings ADRA through the written report and an online discussion of its findings and recommendations.

## 5. Focus Locations and Value Chains

Here is the list of illustrative focus locations and value chains in which to focus Phase 1 of the assessment:

Region	State/Wilayah	Value Chains
Northern Region	River Nile	Wheat
Khartoum	Khartoum	Sorghum

Eastern Region	Red Sea Kassala Gedaref	Alfalfa Absabeen (livestock fodder) Groundnuts
Rain-fed Farming Crescent	Blue Nile White Nile Gezira Sennar	Egyptian Beans Sesame Fruits: <ul style="list-style-type: none"> <li>• Citrus</li> <li>• Banana</li> <li>• Mango</li> <li>• Dates</li> <li>• Guava</li> </ul> Vegetables: <ul style="list-style-type: none"> <li>• Onion</li> <li>• Tomato</li> <li>• Okra</li> <li>• Eggplant</li> <li>• Potato</li> </ul> Sheep/goats Poultry Cattle Dairy (bovine) Gum Arabic Cotton

### 6. Expected deliverables

The Value Chain Assessment deliverables will include:

1. A preliminary report and assessment plan prior to implementation of Phase 2 and 3 along with the comprehensive report outline to be reviewed and approved by ADRA
2. A comprehensive report that presents the data, analysis, findings, and recommendations on agricultural value chain development in Sudan generally, and for each of the 3-5 target value chains, including an executive summary that provides an overview of the findings and recommendations
3. A PowerPoint presentation that summarizes the key points of the report
4. Annexes to the report contain lists of all the firms and individuals contacted and their email/social media contacts, all questionnaires and interview guides for KIIs and FGDs.
5. All data collected will be presented in tables and summarized notes of interviews and focus group discussions. Complete bibliography of sources researched
6. The Phase 3 report with recommendations of specific opportunities related to TANMIA activity implementation.

**Timeline:**

This assessment will be conducted within a seven-week period:

**Phase 1:** Conduct the literature review, value chain final selection, initial value chain maps, and assessment plan: 2 weeks

**Phase 2:** Conduct the data collection, key informant interviews, and focus group discussions, assemble and organize data, and conduct analysis. 3 weeks

**Phase 3:** Prepare a draft report for review by ADRA and incorporate ADRA comments into a final draft. 2 weeks.

## 7. Required Skills and Qualifications for the Assessment Consultant

The Consultant / Expert who will lead and conduct this assessment must possess the following main set of skills and qualifications:

- Previous experience and strong familiarity with the agricultural sector, market systems and value chain development in Sudan.
- Experience, strong expertise and understanding of inclusive value chain development that builds opportunities for smallholder farmers, and especially women and youth.
- Proven track record of operational experience in the field of agricultural development, agricultural-led economic growth and private sector engagement
- Consulting experience in the research areas for international development projects, specifically for the private sector and agriculture development. Proven track record of successful similar assessment assignments
- Desired familiarity with the Sudan market with recent experience working in Sudan
- Fluency in both Arabic and English, and strong presentation and report-writing skills in English is critical
- A master's degree in agriculture, agribusiness, or master's in business administration or related field is preferred.