



# Market System Assessment of Sorghum, Millet, Fava Bean and Groundnut Oil Supply Chains in West and Central Darfur

CATHOLIC RELIEF SERVICES, DECEMBER 2024

In collaboration with IMPACT Initiatives for Research Design



Cover photo of Habila Market by Corrie Sissons/CRS

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# Table of Contents

Executive Summary .....	1
Background .....	2
Assessment Scope.....	3
Methodology.....	3
Main Findings.....	6
Cereals : Sorghum and Millet .....	9
Fava Beans (ful masrii).....	20
Groundnut oil.....	25
Chad.....	28
Conclusions .....	29
Recommendations.....	30

## Executive Summary

As the conflict in Sudan (2023-) persists, already vulnerable populations in West and Central Darfur continue to grapple with acute and prolonged food insecurity. The combined impact of heavy rainfall, flooding, displacement, and depopulation has significantly disrupted agricultural activities. As a result, farmers cultivating essential cereal crops such as millet and sorghum have experienced diminished yields, leading to a reduced supply of grain in local markets. Staple food prices remain high and continue to escalate, placing an overwhelming burden on impoverished households that have lost their sources of income and whose purchasing power has already been severely eroded. In the face of these challenges, market actors in Darfur demonstrate remarkable resilience. However, the collapse of formal credit markets, persistent insecurity, and weakened consumer demand have rendered these markets increasingly fragile. This report aims to analyze the market dynamics of key commodities essential to conflict-affected households in Darfur—specifically sorghum, millet, fava beans, and groundnut oil. It examines critical challenges, systemic bottlenecks, and existing strengths within these market systems while providing strategic recommendations for humanitarian agencies seeking to implement market-based food security interventions in the region.



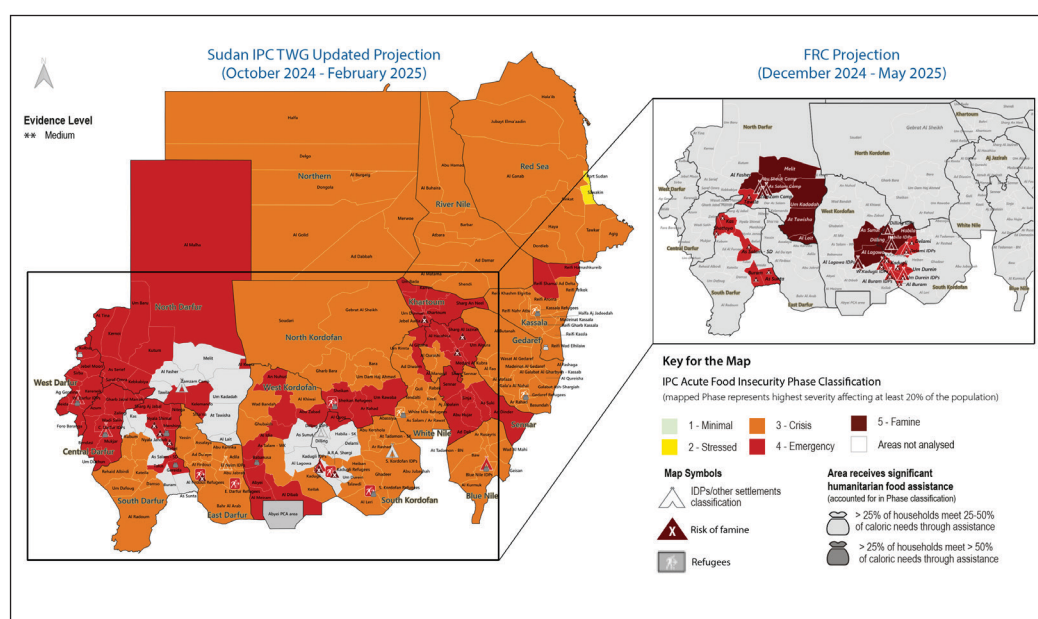
## Background

Since the outbreak of conflict in Sudan in April 2023, millions have faced violence and severe food insecurity. The December 2024 IPC update indicated a worsening crisis, with Famine (IPC Phase 5) confirmed in at least five areas and expected to spread to five more regions between December 2024 and May 2025.

Currently, 24.6 million people are experiencing high levels of acute food insecurity (IPC Phase 3 or higher), including:

- **15.9 million (33%)** in Crisis (IPC Phase 3)
- **8.1 million (17%)** in Emergency (IPC Phase 4)
- **At least 638,000 (1%)** in Catastrophe (IPC Phase 5)

**Image 1 : Sudan IPC Technical Working Group Projection (December 2024)<sup>1</sup>**



Key drivers of food insecurity include ongoing conflict, displacement, falling incomes, disrupted supply chains, and challenges in agricultural production—leading to soaring staple food prices.<sup>2</sup> The food security situation is especially dire for populations who lack protection from direct conflict, including in West and Central Darfur where adverse impacts of the conflict include reduced market functionality, limited imports of cereals, and severe limitations on domestic agricultural production. To address the crisis, Catholic Relief Services, with support from USAID's Bureau for Humanitarian Assistance (BHA), is establishing a complementary food pipeline to Darfur. This initiative will supply US sourced sorghum, split peas, edible oil, and locally sourced salt to households struggling with extreme food shortages.

<sup>1</sup> [https://www.ipcinfo.org/fileadmin/user\\_upload/ipcinfo/docs/IPC\\_Sudan\\_Acute\\_Food\\_Insecurity\\_Oct2024\\_May2025\\_Snapshot.pdf](https://www.ipcinfo.org/fileadmin/user_upload/ipcinfo/docs/IPC_Sudan_Acute_Food_Insecurity_Oct2024_May2025_Snapshot.pdf)

<sup>2</sup> Ibid



## Assessment Scope

A market supply chain assessment was commissioned prior to project launch to better understand market systems that are critical for supporting the food security of households in West and Central Darfur. Market systems chosen under the study were selected based on logistical, financial, and analytical limitations and those most closely aligned to commodities CRS plans to distribute as part of its ongoing programming. Four market systems were selected. These are:

- Sorghum – selected as the main staple which will be distributed under the CRS program and one of the main cereals available in markets in Darfur
- Millet – selected as a preferred cereal, also widely available in Darfur for comparison purposes with sorghum
- Fava Beans (Ful Masri) – selected as an alternative to yellow split peas
- Groundnut oil – selected as closest alternative to vegetable oil available on local markets

The analysis of these commodity market systems aimed to understand their relative functionality as well as the suitability of in-kind assistance as a response modality for CRS program responses. The scope of this study was therefore intended to understand functionality aspects (supply and demand factors, market integration, market power, prices, market infrastructure and environment) as well as seasonality and market access (physical, financial and social) for target groups. Critical questions for this assessment which drove tool design and analysis were:

- *How have these market systems been impacted by the ongoing conflict since April 2023?*
- *What is the current capacity of the market systems to meet emergency food needs (including the supply of critical food items in the market, affordability and trader capacity)?*
- *What are market-appropriate response options to meet emergency food needs?*

## Methodology

This market system assessment was conducted as part of CRS's Title II Food Assistance program launch in West and Central Darfur. It followed a modified 'EMMA' approach<sup>3</sup>, which is an iterative 10-step process, ranging from initial analysis to the communication of results. The key aspect of this approach is the creation of market system maps, which illustrate how market actors interact in a market chain (also called 'the value chain') and how environmental factors (such as institutions, rules, norms, and trends) influence market operations. These maps also reflect the impact of key infrastructure, inputs, and market support services. The study focused on mapping and analysing the current constraints affecting market systems for four key commodities, considering how they functioned before the current conflict (from April 2023).

Mapping the market systems and trade flow maps allows for identifying recommendations and conclusions to help affected populations access these commodities, as well as to strengthen the market systems themselves. The exercise was supported by a technical team from REACH and CRS, with data collection led by a small team of four dedicated CRS staff, supported by 25 enumerators.

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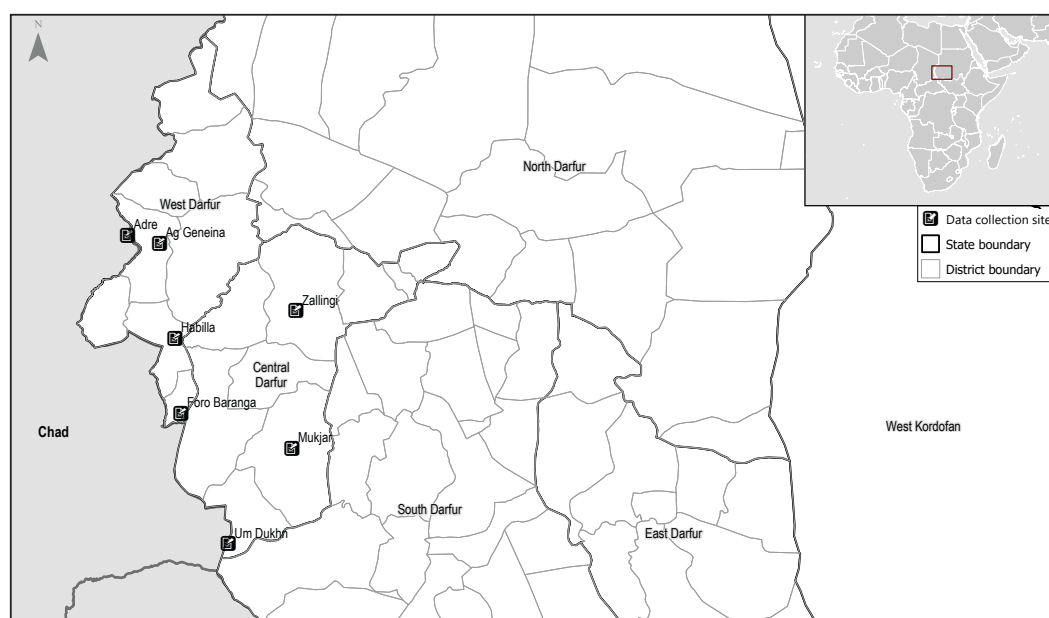
<sup>3</sup> Emergency Market Mapping and Analysis - MiC

The scoping phase of the assessment began in November 2024, with CRS technical advisors reviewing secondary information and drafting survey tools before data collection started. For security reasons, a Training of Trainers (ToT) approach was used, where four CRS staff received data collection training in Ag Geneina in early December 2024. They then conducted separate training sessions in West and Central Darfur for enumeration teams on survey tools.

The primary field data collection phase took place from December 11 to December 23, 2024. In each location, surveys were administered over three days. Virtual debriefings through WhatsApp allowed teams to share updates with REACH and CRS technical advisors, enabling preliminary data analysis to refine the market maps and adjust fieldwork plans accordingly.

A total of 250 interviews were conducted across six locations in West and Central Darfur with various market actors. Locations covered were Ag Geneina, Habila, and Foro Baranga in West Darfur, and Zalingi, Um Dukhun and Mukjar in Central Darfur.

**Map 1: Geographic Scope of Primary Data Collection**



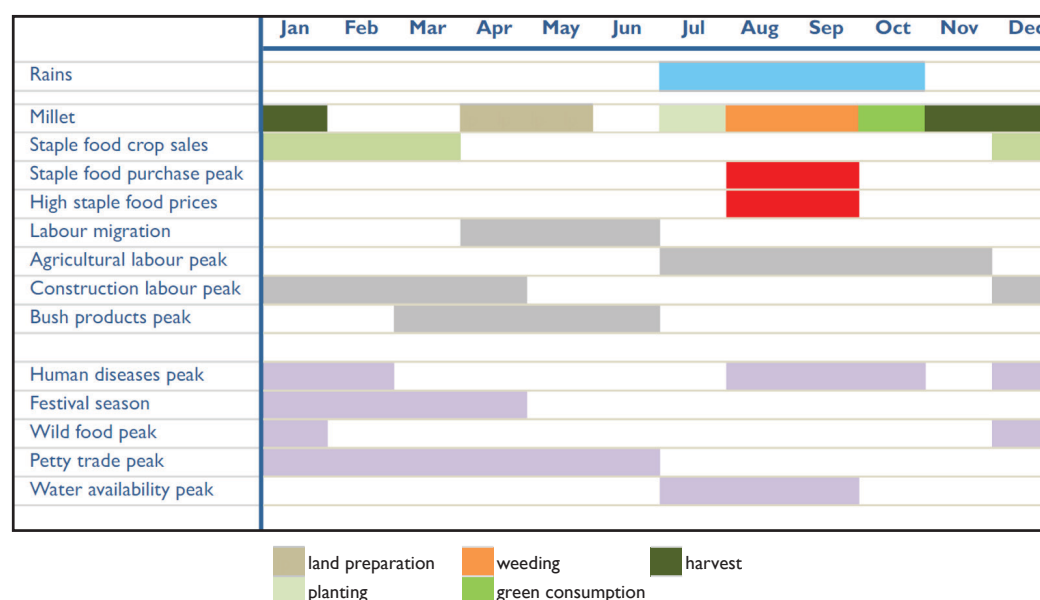
Per district, teams undertook 2-3 semi-structured interviews with key informants (such as local public officials, retailer associations, and local leaders), up to 6 surveys with wholesalers, 4 with cereal retailers, 4 with retailers selling groundnut oil and fava beans, 4 transporters, and 15 consumers. Additional surveys were conducted in Adre, Chad, where CRS staff received direct survey training and completed 4 wholesaler surveys and 2 key informant interviews. All interviews were conducted in pairs using paper-based, semi-structured surveys, carried out in a conversational style to allow for observations to be recorded as needed. Sample sizes were small and flexible, as they depended on a limited timeframe and on the actual market dynamics (key actors). Such market assessments are not intended to produce statistically representative analysis, but instead aim to capture changing dynamics.

**Table 1: Breakdown of Primary Data Collection Undertaken per geography and market actor**

	Ag Geneina	Habila	Foro Baranga	Zalingi	Um Dukhn	Mukjar	Adre	
Consumer	15	15	15	15	15	10		<b>85</b>
KIIs	3	2	2	3	2	1	2	<b>15</b>
Transporters	4	4	3	4	4	4		<b>23</b>
Small Retailers (Cereal)	4	4	4	4	4	3		<b>23</b>
Small Retailers (Bean and Oil)	4	4	4	2	2	3		<b>19</b>
Wholesalers	6	6	6	6	3	6	4	<b>37</b>
Producers (Sorghum)	4	4	4	4	4	4		<b>24</b>
Producers (Millet)	4	4	4	4	4	4		<b>24</b>
<b>Total</b>	<b>44</b>	<b>43</b>	<b>42</b>	<b>42</b>	<b>38</b>	<b>35</b>	<b>6</b>	<b>250</b>

It should be noted with reference to the seasonal calendar for Darfur<sup>4</sup> that this assessment took place during a delayed harvest for millet and sorghum in December and after the rainy period between July and October. Findings should be interpreted considering this seasonality, when road access was better than in the immediately preceding months, and prices for goods were potentially lower and availability of cereals was higher following harvests.

**Table 2: Seasonal Calendar Darfur<sup>5</sup>**



<sup>4</sup> <https://www.fao.org/giews/countrybrief/country.jsp?code=SDN&lang=fr>

<sup>5</sup> Livelihood Profiles Three Livelihood Zones in Darfur Region, Sudan Assessed Using Household Economy Analysis (HEA), Save the Children, August 2021



## Main Findings

### 1. Displacement and Depopulation

Active conflict during the first year of the war in Sudan (2023-) has led to mass displacement. According to the International Office for Migration, an estimated 11.5 million people were displaced within Sudan by January 2025 (the month following CRS-REACH data collection), and a further 3.4 million people had left the country between April 2023 and January 2025. This included nearly 940,000 people entering Chad, which shares a long land border with Darfur. One respondent to the CRS-REACH survey based in Chad estimated that 200,000 displaced Sudanese were based in or around the border town of Adre.<sup>6</sup>

In addition to the presence of active fighting along a moving frontline, the displacement and depopulation caused by the war in Sudan have impacted the production and supply of sorghum, millet, groundnut oil, and fava beans in Darfur. Farmers responding to the survey unanimously confirmed that there were fewer farmers than in previous seasons due to the war. Furthermore, the reduced number of traders and consumers in local markets has driven many farmers to produce less as there is a reduced market for their crop. In Chad, many of these effects are reversed as the population in Adre has grown considerably with the influx of displaced Sudanese, leading to a larger market for local farmers and retailers.



Juma Adam Abdalla works at his farm in Haraza village, West Darfur, Sudan. Photo by Carlos Barrio/CRS

### 2. Poor production means less grain available in markets

Across cereal supply chains – from producer to consumer – there was a clear picture of supply side shortages in markets, in particular for cereals, due to a variety of factors. Sorghum and millet farmers mentioned rains and flooding as well as the intrusion of animals onto their farms as factors affecting yields. Similarly, KIIs cited displacement from agricultural land either to Chad or within Darfur as leading to an inability of farmers to cultivate their plots as

normal, or ongoing conflict leading to a lack of access to land for those who were not displaced. This seems to have not changed over the past few months; the FAO reported similar dynamics earlier in 2024, stating *‘Cereal output in these areas has plummeted to as much as 80% below average, with West Darfur state experiencing a complete failure of the crop season because widespread insecurity has prevented farmers from accessing their fields.’*<sup>7</sup> Cereal traders cited low production by farmers as one of their main challenges alongside poor purchasing power of consumers. Farmers themselves also repeatedly mentioned lack of inputs and low demand as a challenge. Wholesalers appeared to be attempting to supplement poor availability from producers by buying goods from Chad.

<sup>6</sup> International Office for Migration, Sudan Regional Response. Situation Update (23 January 2025). Available online: <https://mena.iom.int/resources/sudan-crisis-regional-response-situation-update-66-january>

<sup>7</sup> <https://www.fao.org/newsroom/detail/sudan-fao-issues-stark-warning-over-deeply-concerning-scale-of-hunger/en>



Small trade in Haraza village, West Darfur, Sudan. Photo by Carlos Barrio/CRS

### 3. Reversal of trade dynamics across the Chad border

Respondents in both Sudan and Chad confirmed the tendency for Darfur to export cereals, groundnuts, and groundnut oil to Chad prior to April 2023. Since the start of the war in Sudan, the direction of this trade has reversed. Farmers and traders in Chad can sell produce in Adre at higher prices as the population has grown with an influx of displaced Sudanese. Furthermore, they are also exporting into Sudan. Wholesalers in Chad are themselves importing goods from international suppliers in Nigeria and Cameroon to meet the cross-border demand. This corroborates similar findings from a CCS August 2024 report which speculates that *‘It could be argued that the existing trading relationships, with established levels of trust and agreed ways of working, has facilitated the imports of commodities we see today.’*<sup>8</sup> Conversely, an embargo on cereal exports is effective within Darfur as RSF authorities are seeking to bolster the local supply of food at the expense of exports.

### 4. Low purchasing power/consumer behavior

The erosion of household purchasing power was cited across multiple market actors. The ongoing and compounding effects of a loss of livelihoods and income, coupled with rising prices and currency depreciation, have exacerbated this. As a result, demand in markets is much lower. This disincentivises traders from purchasing goods in large amounts beyond what they can afford. When discussing challenges, multiple traders across different markets mentioned a dynamic of consumers increasingly bargaining over both prices and quantities in marketplaces: *‘Buyers request to reduce the price and increase the quantity’* (Trader, Habila market). Consumers almost exclusively purchase in SDG in cash, with the shutdown of internet and mobile connectivity across the region as part of the conflict preventing the use of mobile banking applications such as “bankak.”

<sup>8</sup> Commercial Market Actors in Sudan. Cash Consortium of Sudan: Commercial Markets Analysis (2024): <https://reliefweb.int/report/sudan/cash-consortium-sudan-sudan-commercial-markets-analysis-summary-july-2024>.



## 5. Credit market collapse

Almost all vendors, across all supply chains, mentioned that they had almost no ability to access credit at the time of surveys. This limited their capacity to scale up the supply of key products. The closure of bank branches in RSF-controlled areas in the west of Sudan, including Darfur, has been well documented.<sup>9</sup> It should be noted that farmers often rely on formal or informal credit at the start of seasons to finance inputs for cultivation, and that the loss of these facilities is a major factor impacting production.

Whereas most traders and wholesalers stated they would previously have been able to respond to an increase in demand by accessing credit, the majority of small retailers and wholesalers now reported that they could respond to demand, albeit not by accessing formal credit through banks or cooperatives. Some reported delaying payments to their own suppliers, but many traders stated they do not have enough capital, most notably to purchase grain. The loss of formal credit has impacted the production of groundnuts (which is a labour-intensive crop requiring the financing of preliminary costs) and groundnut oil (which requires access to milling equipment). Meanwhile, traders reported that they only imported fava beans to Darfur in response to specific orders from purchasers.

Transporters mentioned that they could respond to increased demand for services, but that this might take some time due to the difficulty in securing loans. Many customers appeared to be currently paying in part or in full using informal credit. Although informal credit works as an effective supplement to formal credit in peacetime conditions, insecurity and uncertainty regarding debtors' ability to repay means that market actors across supply chains are now less likely to extend credit. Despite poor credit access, restocking times cited by retailers did seem to be relatively fast (less than one week, and sometimes less than a day when well-supplied wholesalers were operating in the same market), indicating market resilience despite these challenges.



Community members gather under a tree in Hashaba village, West Darfur, Sudan. Photo by Carlos Barrio/CRS

<sup>9</sup> Radio Dabanga, Cash crisis exacerbates famine in Darfur and Kordofan (22 September 2024): <https://www.dabangasudan.org/en/all-news/article/cash-crisis-exacerbates-famine-in-darfur-and-kordofan>



## Cereals : Sorghum and Millet

### Market Environment

In Sudan, a significant portion of rural households rely heavily on rainfed agriculture as their primary source of food and income. This dependency makes them highly vulnerable to fluctuations in rainfall patterns, as droughts or excessive rainfall can severely disrupt crop production. Cereals such as sorghum and millet have been historically affected by erratic weather conditions, leading to food shortages and income instability. Sorghum has long been the cheapest grain available in Sudan, and it is produced in both the east and the west of the country. In Darfur, millet is preferred culturally to sorghum. In

peacetime conditions, Darfur has typically accounted for approximately two-thirds of millet production in Sudan.<sup>10</sup> The long-term trend in Darfur has been for rain-fed cereal cultivation to increase in acreage and output, but at declining yields per acre.

The average yields for sorghum and millet have varied over recent years. According to data from the International Production Assessment Division (IPAD) of the United States Department of Agriculture (USDA), the average sorghum yield between the 2019/20 and 2023/24 seasons was approximately 0.57 metric tons per hectare (570 kg/ha). For millet, the average yield over the same period was around 0.39 metric tons per hectare (390 kg/ha).<sup>11</sup> There is also evidence from the previous war in Darfur (2003-20) that there was a partial shift from millet towards sorghum production since the latter crop is cheaper to produce and to purchase in markets. Sorghum also has export potential as it is exported to Chad, South Sudan, and Saudi Arabia, where it is used for animal feed.<sup>12</sup>

Prices for all goods in Sudan have risen since the start of the conflict. The Joint Market Monitoring Initiative (JMMI) overseen by IMPACT Initiatives has observed an increase of the MEB from 273,696 SDGs in January 2024 to 421.731 SDGs in December 2024 in Central Darfur, while West Darfur registered a slight decrease, from 403.622 SDGs in January 2024 to 389.841 SDGs in December 2024. Combined with stagnant incomes and a loss of liquidity, this has been a major source of crisis for the inhabitants of Sudan. However, by carrying out this research during a harvest period, many respondents were experiencing a respite compared with previous months as stocks and incomes were rising while prices were falling.



Photo by Corrie Sissons/CRS

10 Margie Buchanan-Smith et al., *Against the Grain: The Cereal Trade in Darfur*. Feinstein International Center, Tufts University. *Markets and Trade in Darfur* (2014), 7-8.

11 <https://ipad.fas.usda.gov/countrysummary/default.aspx?id=SU&crop=Sorghum> / <https://ipad.fas.usda.gov/countrysummary/default.aspx?id=SU&crop=Millet>

12 Margie Buchanan-Smith et al., *Against the Grain: The Cereal Trade in Darfur*. Feinstein International Center, Tufts University. *Markets and Trade in Darfur* (2014), 29.

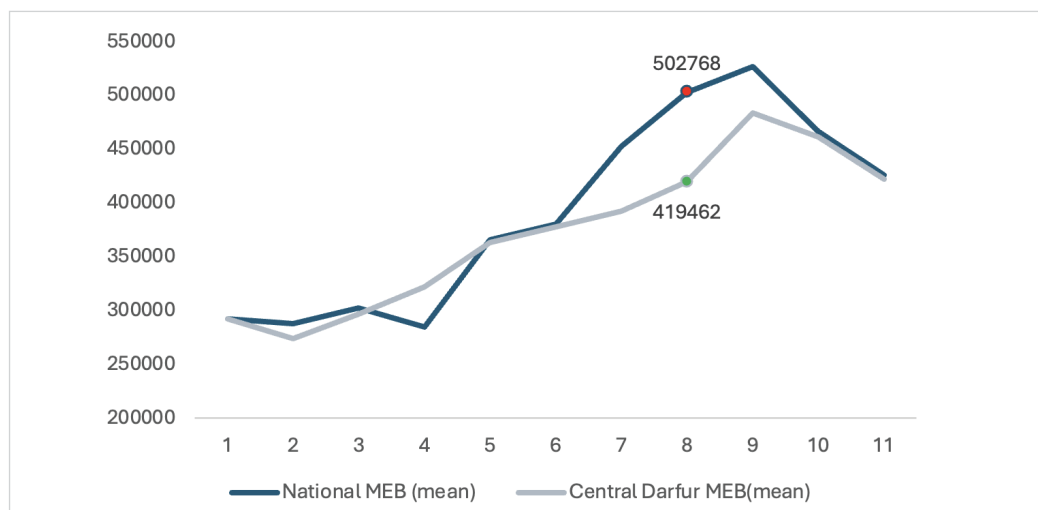


Figure 1a: National MEB fluctuation across 2024 in SDG with a comparison of MEB in Central Darfur

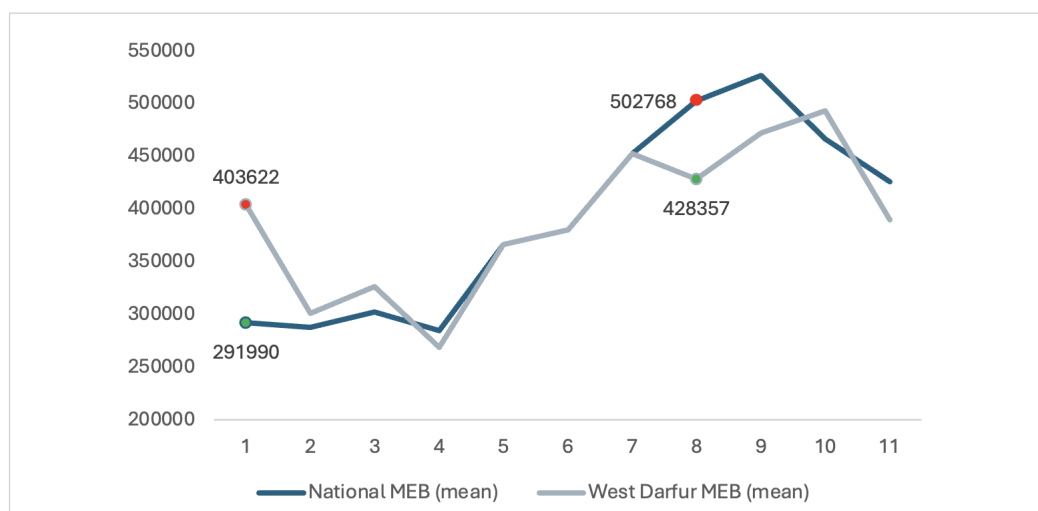


Figure 1b: National MEB fluctuation across 2024 in SDG with a comparison of MEB in West Darfur

*“Cereal trade is losing money these days because production is high and humanitarian food aid is available.”*  
—Retailer, Mukjar, Central Darfur

The Sudanese Pound (SGD) has fallen in value from SDG.575 being equivalent to one dollar before the start of the conflict to SDG.1,987 being the equivalent of one dollar cited by commercial banks at the time of the survey. An even lower value of the currency operated on informal markets. The Central African Franc was broadly equivalent in value to the Sudanese Pound at the time of the survey in December 2024.

Sorghum and millet are typically sold in local markets in measures called a *kora* (West Darfur), *mid* (Central Darfur), and *shawal / jawal*. Volumes vary per household preference but a household of 6 people may purchase around 100kg/45 kora of sorghum and/or millet each month to meet household food needs.<sup>13</sup>

<sup>13</sup> Humanitarian food rations are currently 70% of 2100 Kcal needs at approx. 10kg of sorghum per person per month / 60kg of sorghum for a family of 6.

1 Kora	2.2kg
1 Mid	5.5kg
1 Shawal / bag	110kg

Photo by Corrie Sissons/CRS



**The Kora:** A *kora* is a local unit of measurement that is equivalent to 1.7kg in North Darfur (outside of the area of this study) and 2.2kg in Western Darfur. In Central Darfur, mid are preferred where they are equivalent to 5.5kg. In these highly seasonal markets, merchants will often adjust quantities as well as prices to respond to seasonal changes. Accordingly, the size of kora in a retail market transaction can vary with time and place and be subject to fierce negotiations. Some prices were also reported which suggested a mathematical halving or doubling of a standard kora. Finally, some prices reported by merchants suggested a small adjustment of local units to correspond with metric values, such that 1 kora = 2.5kg, 1 mid = 5kg, and 1 shawal = 100kg.

*"Sorghum and millet must be provided in large quantities at lower prices."*  
—Retailer, Ag Geneina, West Darfur

The current war in Sudan (2023-) saw a decline in production in some locations by over 40% during the first year of the conflict as farmers and consumers abandoned their localities.<sup>14</sup> Many consumers consequently commented on the shortage of sorghum and millet in markets in Darfur, and the decline in millet consumption since the start of the conflict. However, some retailers in Central Darfur reported sufficient stocks of sorghum.

**Interstate Trade:** A clear factor mentioned by many key informants (KIs) and traders were laws which restricted the sale of cereals between states. As noted by Margie Buchanan Smith *'There is a long history in Darfur of local authorities restricting the movement of cereals during years of poor harvest in an effort to protect supply.'*<sup>15</sup> Authorities in West and Central Darfur appear to have restricted the transport of grains outside of localities. It can be speculated that this dynamic exists to secure the supply of food within different localities and to prevent the loss of crops to export, especially towards areas controlled by the SAF. As such, markets in eastern Sudan are no longer available to producers in Darfur. Many farmers in Zalingi cited this law as a challenge. These conditions shaped some respondents' views on their preferred aid modality, saying that cash was preferable as it could be taken outside of localities in contrast with food and grains.

<sup>14</sup> Food & Agricultural Organisation, 2023 FAO Crop and Food Supply Assessment Mission (CFSAM) to the Republic of the Sudan (19 March 2024). <https://www.fao.org/newsroom/detail/sudan-fao-issues-stark-warning-over-deeply-concerning-scale-of-hunger/en>

<sup>15</sup> Margie Buchanan-Smith et al., *Against the Grain: The Cereal Trade in Darfur*. Feinstein International Center, Tufts University. *Markets and Trade in Darfur* (2014), 62.



*"Heavy rains caused crops to fail, meaning that the agricultural season has failed."*  
—Millet Farmer, Um Dukhn, Central Darfur

*'Merchants do not import or store goods for fear of plunder and theft.'*  
—Wholesaler, Mukjar

**Rainfed production:** Most agriculture in Darfur is rainfed (with small amounts of irrigated agriculture sustaining wheat production before the war), but varying rain levels are a major and chronic source of insecurity. The rains that caused road closures and inaccessibility in November were also reported to have destroyed some cereal crops. Conversely, the rest of the year witnesses acute water shortages in Darfur as there is a scarcity of rivers or accessible reservoirs.<sup>16</sup> Several farmers requested water from humanitarian organizations.

**Security concerns** and checkpoints were mentioned by cereal transporters, retailers, and wholesalers. Market actors all mentioned these as a challenge to doing business, as fees needed to be paid to 'security guards' on main roads connecting production areas to markets. In Zalingi in particular, cereal traders reported 'looting' and 'insecurity' as concerns they had for themselves and customers when asked if it was safe to travel to and from markets over the past month. Customers in Zalingi further cited security concerns and only feeling safe accessing the market in the morning.

Retailers in some markets reported now having to pay fees to 'protect the market' and some customers mentioned fears of militants or fear of being robbed as factors determining their market access. Note that Zalingi is near to a front line between areas controlled by the RSF and the Sudan Liberation Movement (SLM, aligned with the SAF in the current conflict), meaning that it is nearer to active fighting than the other markets surveyed.

**Livestock and crop damage:** Multiple farmers – most notably in West Darfur – cited the issue of animals entering their farmlands and eating crops. Issues such as this are exacerbated by depopulation and labour shortages, and an inability of farmhands to watch over their crops. Follow-up discussions with enumerators confirmed that the animals in question were not wild, but rather belonged to pastoral herds. Land disputes between pastoralists and farmers have been a major source of communal



Halom Ali working at the farm in Hashaba village, West Darfur, Sudan. In the summer they harvest products such as millet, sorghum, sesame and groundnut. Photo by Carlos Barrio/CRS

<sup>16</sup> Abdo, Gamal, and Abdin Salih. "Water resources management in Darfur." *Khartoum University Engineering Journal* 1.1 (2011).

conflict in Darfur over many decades. Farmers in both West and Central Darfur cited the collapse of ‘committees to protect the agricultural season’ as a challenge. These are local and state level committees which existed pre-war but whose functionality was disrupted by the ongoing conflict. These committees initiated convoys to steer herds away from agricultural land and to prevent trampling and damage to crops.

## Map 2: Trade Flow Map – Sorghum and Millet supply chains

### Market Supply Chain

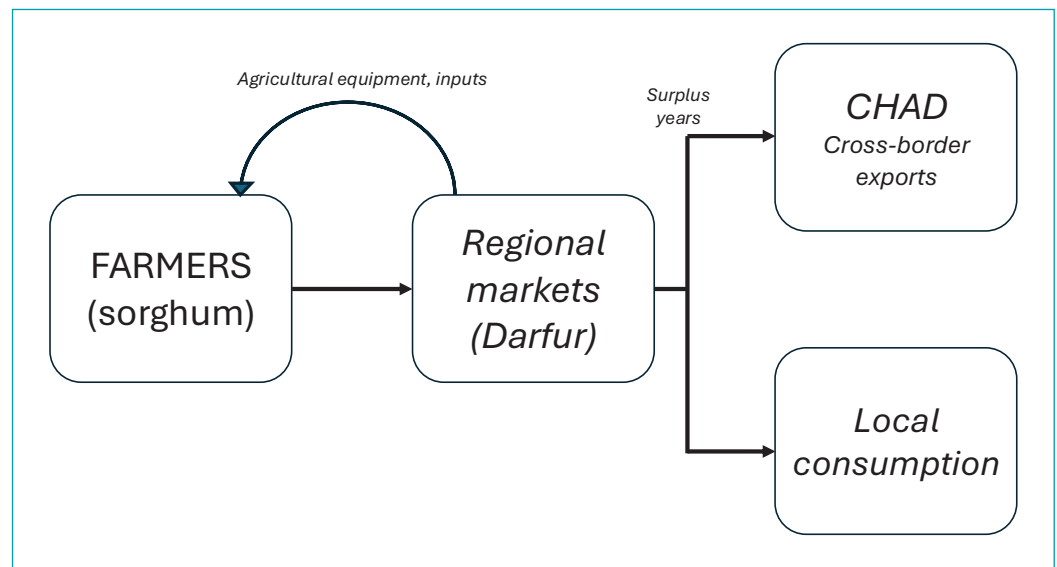
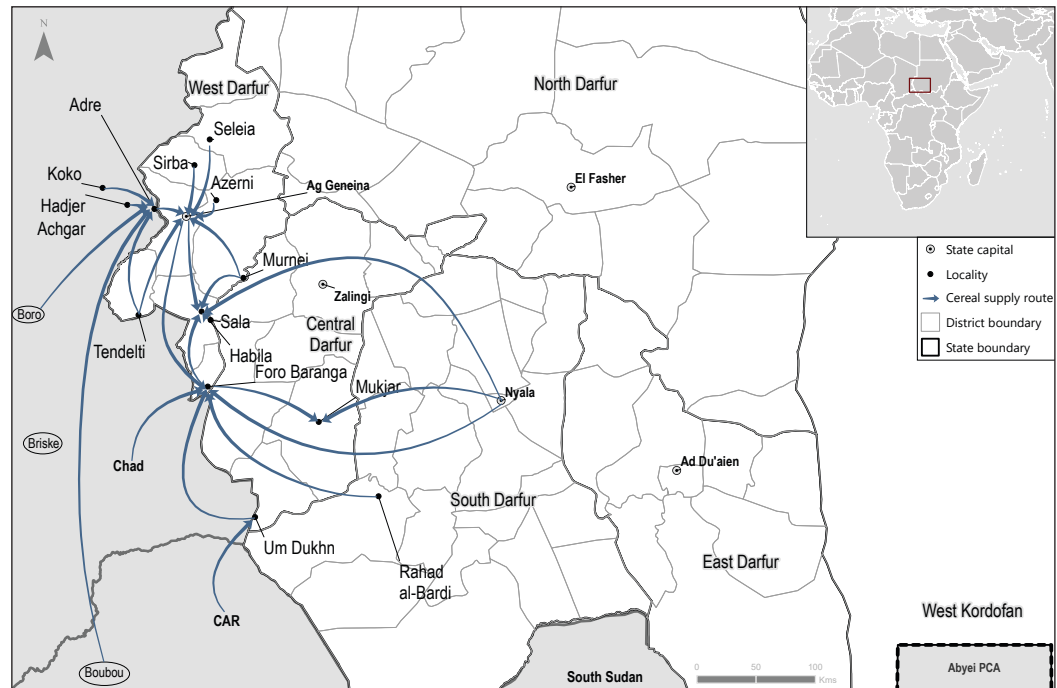


Figure 2. Market map (sorghum), Darfur (pre-April 2023). Based on survey data collected in December 2024.

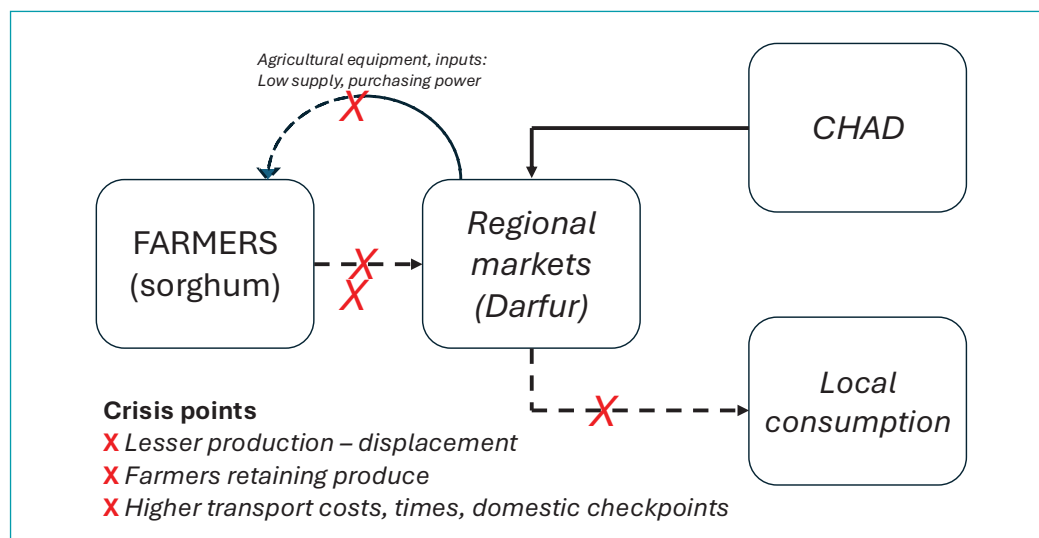


Figure 3. Market map (sorghum), Darfur (December 2024)

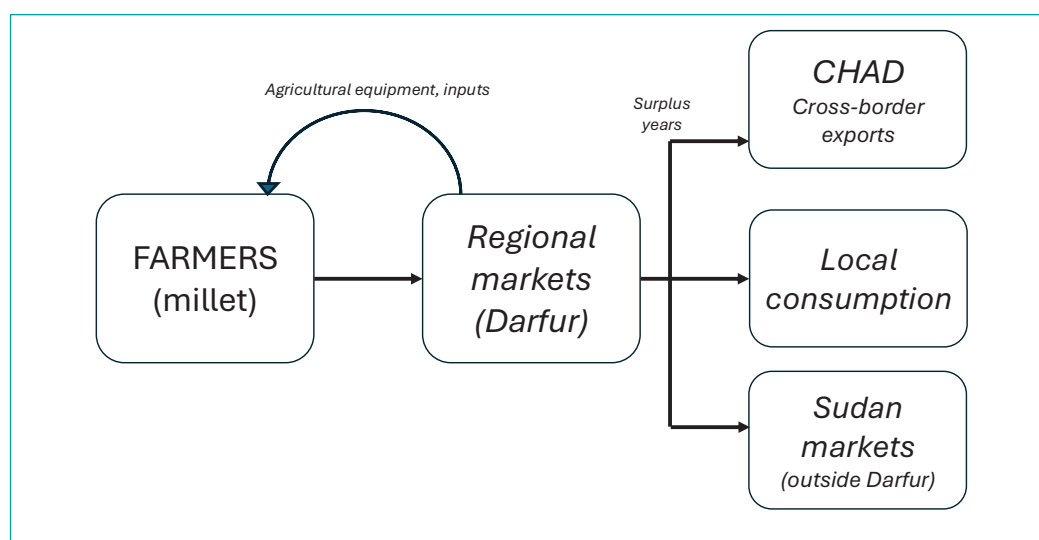


Figure 4. Market map (millet), Darfur (pre-April 2023) based on survey data collected in December 2024

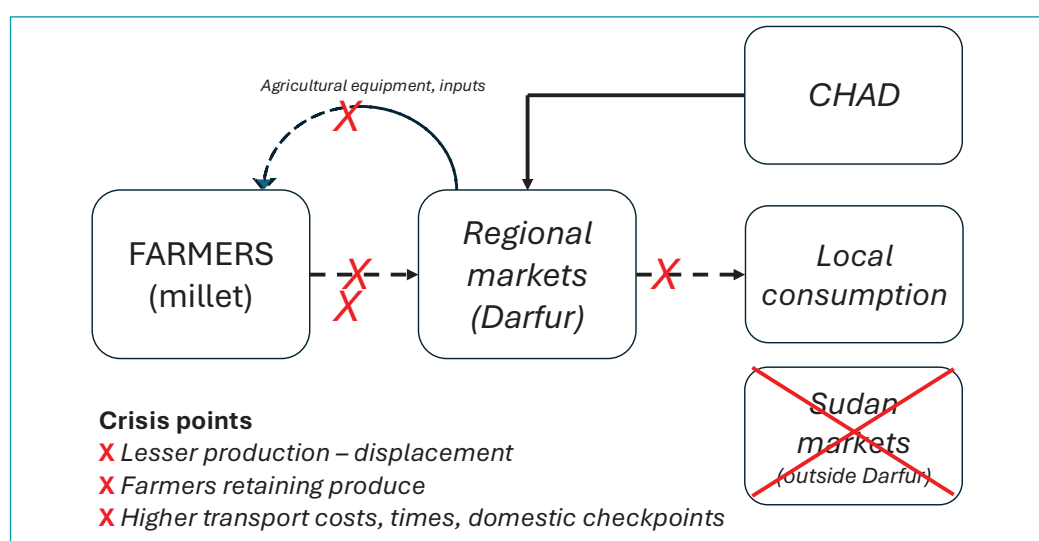


Figure 5. Market map (sorghum), Darfur (December 2024)



Despite traders supporting sorghum and millet supply chains, it was noted by many that dynamics had shifted and that the numbers of market actors had fallen during the conflict. Transporters mentioned that the number of cereal wholesalers had decreased with many displaced to Chad, while KIs reported that many farmers had fled their lands.

*"The crop is not sold, it is stored for self-sufficiency."*  
—Millet farmer,  
Mukjar, Central  
Darfur

**Crop sales:** The sale of crops from farmers to traders and wholesalers proved a significant pressure point in the supply chain for cereals in Darfur. Several farmers who reported selling part of their crop to local markets prior to April 2023 also confirmed that they were not selling any of their crop in 2024 and that they were keeping all of it for home consumption. This change was most noticeable in West Darfur.

The decline in the number of farmers, the declining amount that farmers were likely to cultivate, and the increased number of farmers retaining their crops for consumption meant that there was a major shortfall in the amount of grain reaching local markets. An HEA baseline report in 2021 stated that in this livelihood zone poor households usually tend to sell around 10% of their sorghum and millet production.<sup>17</sup> Some farmers also reported bartering at this time. For their part, wholesalers complained that farmers were not selling their grain, but they attributed this to speculative calculations as the cost of millet was rising.

“The increase in demand for millet led to an increase in its price, and the unwillingness of farmers to sell it.”

— WHOLESALER, MUKJAR, CENTRAL DARFUR

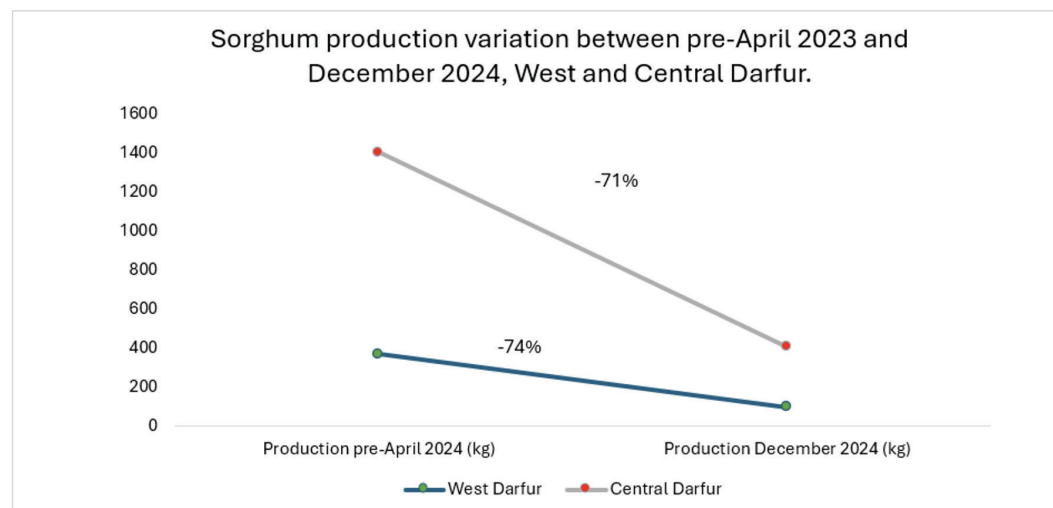


Figure 6. Average production of sorghum (in kg) and variation between pre-April 2023 and December 2024, according to farmers in West Darfur and Central Darfur. For sorghum, the conversion was 1 sack= 10 kg, and 1 Shawal=110 kg.

<sup>17</sup> Livelihood Profiles in Three Livelihood Zones in Darfur Region, Sudan Assessed Using Household Economy Analysis (HEA), Save the Children, August 2021.

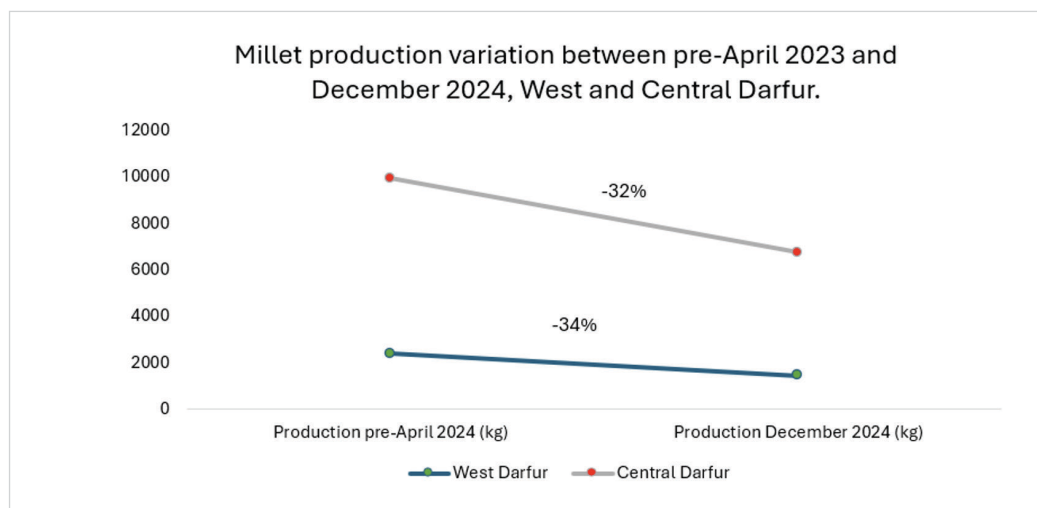


Figure 7. Average production of millet (in kg) and variation between pre-April 2023 and December 2024, according to farmers in West Darfur and Central Darfur. For millet, the conversion was 1 sack=100 kg, 1 Shawal=110 kg.

Despite the challenges cited, wholesalers and retailers expressed optimism about their ability to adapt to circumstance and to activate different supply routes. They consequently reported that they would be able to respond to an increase in demand should they be asked to do so.

Wholesalers in Um Dukhn and Zalingi reported buying cereals directly from small producers. In contrast, the wholesalers interviewed in West Darfur were more likely to have been supplied by other traders either in their local market or in the state capital of Ag Geneina. This demonstrates a geographic structure in the local marketplace with markets in Central Darfur being situated nearer to producers.

There is a clear abundance of small cereal traders in markets, both large and small. In the Ag Geneina market for example (the state capital in West Darfur as well as a border town supplied by Chad), KIs and retailers estimated that there were 40-50 traders in the cereal market alone and retailers cited selling to on average 10-15 customers per day. Numbers of cereal traders varied between markets selected. However, in all markets there appeared to be strong competition and a diversity of retailers for customers to choose from. Retailers did not tend to buy directly from farmers.

**Humanitarian Food Assistance:** An additional market environmental factor for these cereals was humanitarian assistance, with a mixed picture around its impact on local markets and household food security. Darfur has historically received large quantities of in-kind emergency food assistance,<sup>18</sup> a dynamic which continues to this day.<sup>19</sup> Many consumers preferred in-kind food assistance and when asked why they frequently referred to the price of goods: *'We prefer in-kind food because the cash amount is not enough...because food prices are always increasing'* (Consumer – Um Dukhun). However, one retailer did specify how grain provided through humanitarian in-kind assistance could be resold in local markets (including by the retailer himself).

18 Margie Buchanan-Smith et al., *Against the Grain: The Cereal Trade in Darfur*. Feinstein International Center, Tufts University. *Markets and Trade in Darfur* (2014), p.44.

19 In November 2024, despite movement restrictions WFP alone reported dispatching 148 trucks carrying 4,760 MT of commodities into Darfur. WFP Sudan External Situation Report November 2024.

This confirms findings during the war in Darfur (2003-2020).<sup>20</sup> This consequently underscores how in-kind assistance can sustain market dynamics by increasing supply and lowering prices, even if it is not all consumed directly by beneficiaries. Some KIs specifically cited a preference for organizations practicing in-kind cereal distribution to refrain from purchasing grain locally. This was to keep prices low and to not buy up available cereal stocks. However, one trader specified how humanitarian in-kind distributions were leading to losses for traders.

Consumers overwhelmingly reported that they purchased both sorghum and millet on a regular basis and were happy with the quality. However, high numbers reported that cereals were unaffordable in the past 30 days (36 out of 85 consumers said that sorghum prices were 'high' or 'very high', and 41 out of 85 said that millet prices were 'high' or 'very high'). Around half of respondents reported limited or no availability. The main reason for unaffordability cited by consumers most consistently was lack of money: *'I do not have enough physical currency on hand to pay vendors.'* Some respondents appeared to be paying in part or in full using credit (delaying payment for goods to vendors).

Out of 85 total consumers interviewed	Sorghum	Millet
Bought the product at least weekly if not more frequently	78/85	41/85
Have had times when they have not been able to afford the product over the past 30 days	55/85	46/85
Paid either in part of full by credit / delaying payments to vendors	31/85	10/85
Thought produce had either limited availability or was completely unavailable	46/85	43/85
Thought produce available was very good or good quality	73/85	65/85



Small trade in Haraza village, West Darfur, Sudan. Photo by Carlos Barrio/CRS

<sup>20</sup> Margie Buchanan-Smith et al., *Against the Grain: The Cereal Trade in Darfur*. *Feinstein International Center, Tufts University. Markets and Trade in Darfur* (2014).

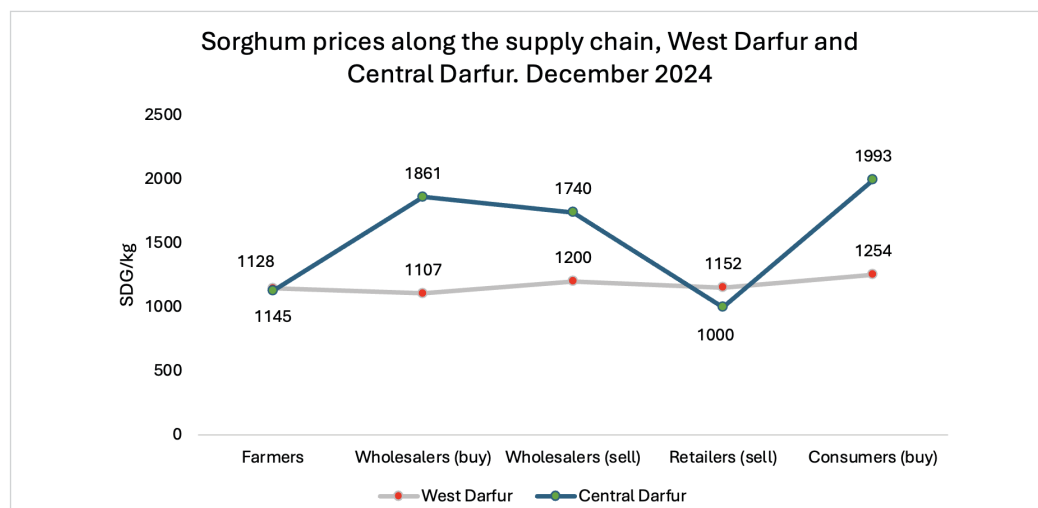


Figure 8. Reported prices (mean) for sorghum according to survey respondents (December 2024).

**Commodity prices:** In West Darfur, farmers sold sorghum for between SDG.700 and SDG.1,400 (\$0.35 and \$0.70) per kilogram. In Central Darfur prices were approximately 20% higher from around SDG.900 to SDG.1,700 (\$0.45 to \$0.85). See Figures 8 and 9 below.

Wholesalers in West Darfur reported buying sorghum for between SDG.550 and SDG.1,600 (\$0.27 and \$0.80) per kilogram. This large spread reflected where wholesalers were able to buy in bulk. Note that wholesalers in Ag Geneina could import from Chad, and they were not necessarily buying from the small farmers interviewed for the survey who only sold a small proportion of their crop, while keeping the rest for personal consumption.

Wholesale prices for sorghum increased to between SDG.750 and SDG.1,800 (\$0.37 and \$0.90). In Central Darfur. Wholesalers reported buying for SDG.1,000 to SDG.2,500 (\$0.50 and \$1.25) per kilogram and selling at comparable rates.

Reported selling prices varied considerably. Retailers reported selling for SDG.900 to SDG.1,400 (\$0.45 to \$0.70) in West Darfur, but the upward limit of prices increased to SDG.2,500 (\$1.25) when interviewing consumers. In Central Darfur, some consumers reported sale prices over SDG.3,500 (\$1.75) per kilogram. In contrast, sorghum had sold in retail markets in Darfur for between SDG.525 and 750 per kilogram (between \$0.64 and \$0.91 at contemporary exchange rates) in December 2023, according to data from the Sudan JMMI.

In sum, reported sorghum prices show considerable variation, shaped by factors such as a market actor's proximity to production and their market power (reflecting, for example, whether they could purchase in bulk). Despite variation in prices, median prices for each category did not rise considerably until sale to consumers, suggesting limit scope for mark-ups by specialized actors along the supply chain.



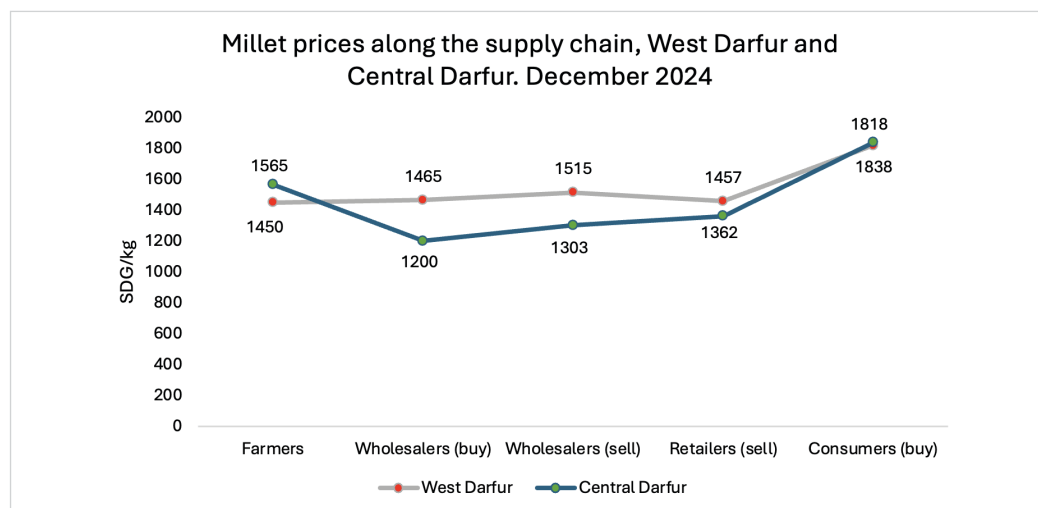


Figure 9. Reported prices (mean) for millet according to survey respondents (December 2024).

Comparable dynamics can be found for millet. Sale prices by farmers were between SDG.1,300 and SDG.1,600 (\$0.65 and \$0.80) in West Darfur, and between SDG.1,300 and SDG.2,200 (\$0.65 and \$1.10) in Central Darfur (see Figures 9 and 10).

Prices cited by wholesalers and retailers in both areas then varied between SDG.1,000 and SDG.1,700 (\$0.50 and \$0.85); this variation indicates again the market strength of different traders, and the fact that they likely secured stocks from suppliers other than the small farmers interviewed for the survey.

Prices reported by consumers were between SDG.1,400 and SDG.2,500 (\$0.70 and \$1.25) in West Darfur, and between SDG.1,100 and SDG.3,300 (\$0.55 and \$1.65) in Central Darfur. Note that the range of prices was greater in both directions in Central Darfur.

There was a consistent difference between prices paid by market actors along the millet supply chain. Wholesalers paid between SDG.1,000 and SDG.2,000, or \$0.50 and \$1 per kilo, and consumers in retail markets paid prices exceeding SDG.2,500 or \$1.25 per kilo. Prices paid by individual actors in the supply chains were shaped by the size of their operations and their market power, rather than their market function as farmers, wholesalers, or retailers.

## Market Infrastructure

Market infrastructure has suffered for both sorghum and millet, with wholesalers citing that some storage warehouses have not re-opened since April 2023. Consumers, in particular in Um Dukhun, Zalingi and Habila, mentioned that some of the last year's sorghum crop had been kept and stored for a long time for 'the purpose of monopolization,' but the product had degraded in the process and was being sold in poor condition as pests and rain had affected quality in storage.

“ We ask for financial and humanitarian support for eating, drinking, buying, selling, and building, because agricultural pesticides are not available and the situation is changing for the worse, and [we ask for] the provision of tools.”

—FARMER, UM DUKHN, CENTRAL DARFUR

In addition to the depopulation of many areas in Darfur, farmers reported a shortage of inputs. This could have occurred for a range of reasons in the conflict, such as a loss of seasonal financing from the state-owned Agricultural Bank, challenges replacing spare parts, and farmers being forced to sell agricultural equipment to acquire cash.<sup>21</sup>

Farmers responding to the CRS-REACH survey cited multiple needed inputs in their request for humanitarian assistance. Required inputs or infrastructure included agricultural machinery, seeds, pesticides, ploughs, sacks, barrels, storehouses, donkeys for transport, and financing for preliminary costs. This points towards forms of market-strengthening interventions that humanitarian and developmental organizations can explore alongside cash, voucher, and in-kind assistance of consumption goods.

## Fava Beans (*ful masri*)



Photo by Corrie Sissons/CRS

## Market Environment

Fava beans, despite not being an historic cultural staple in Darfur, were selected for this research in line with previous assessments<sup>22</sup> and monitoring.<sup>23</sup> Livestock reared through local pastoral cultures is often a readier source of protein, and, across Sudan, fava beans are associated with urban consumption. Furthermore, they are traditionally consumed with bread which relies on wheat imports.<sup>24</sup>

21 Radio Dabanga, Sudan war dashes hopes of good harvest in Nuba Mountains (11 June 2024). Available online: <https://www.dabangasudan.org/en/all-news/article/sudan-war-dashes-hopes-of-good-harvest-in-nuba-mountains>. This report on a different region in Sudan describes how “One of the calamities as a result of the war is that many farmers abandoned their agricultural machinery, selling it to pay off their debts for the previous season, or losing it to looting, especially in areas that witnessed battles and fighting between the parties to the war in the state.”

22 Commercial Market Actors in Sudan. Cash Consortium of Sudan: Commercial Markets Analysis (2024): <https://reliefweb.int/report/sudan/cash-consortium-sudan-sudan-commercial-markets-analysis-summary-july-2024>.

23 WFP Sudan Market Monitor – October 2024

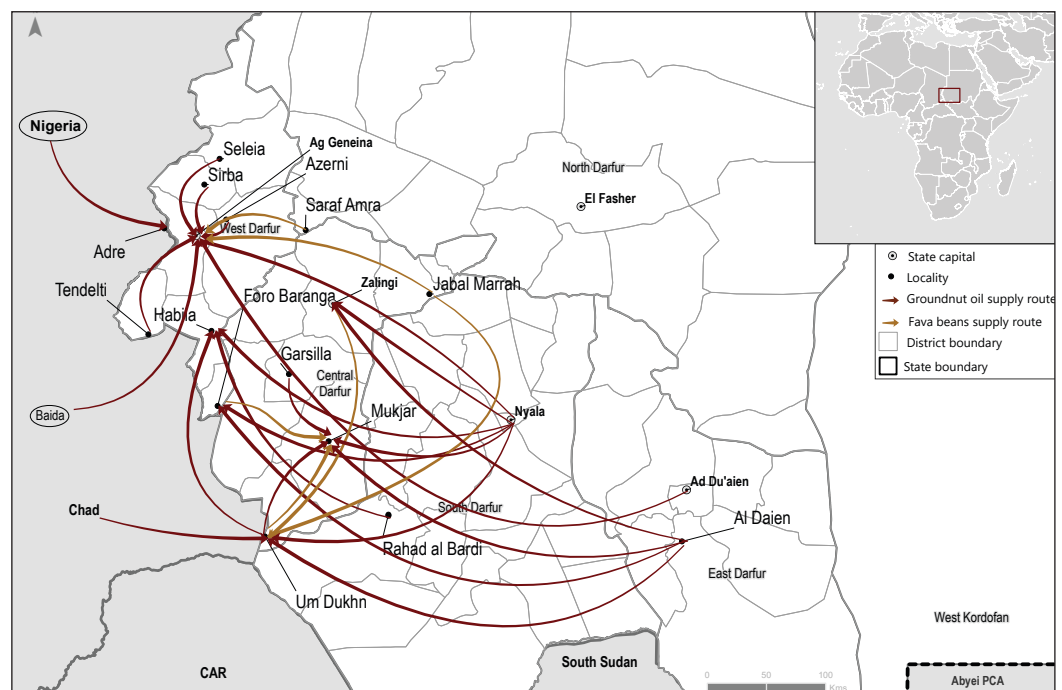
24 Edward Thomas & Magdi El Gizouli, Sudan’s Grain Divide: A Revolution of Bread and Sorghum, *Rift Valley Institute* (2020).

Conflict in Darfur since 2003 has greatly accelerated urbanization in Sudan's westernmost region. The influx of IDPs transformed Nyala in South Darfur into the second-largest city in Sudan, with large population increases also experienced in the other urban centres such as the other state capitals of Al Fasher (North Darfur), Ag Geneina (West Darfur), and Zalingi (Central Darfur). Many respondents reported how fava beans were now being consumed in restaurants or cafeterias in urban centres. Fava bean traders also noted falling consumption patterns since April 2023 due to decreasing household purchasing power. Note that fava beans are traditionally consumed with bread, which requires the production or import of wheat and its transformation through mills and bakeries. Bakeries have been significantly impacted by the war and ongoing market support projects to sustain bakeries are well received by the local population.<sup>25</sup>

Fava beans are exempt from the laws which govern the movement of commodities such as cereal between states. However, due to an increasing reliance on imports from countries such as Chad for fava beans, key informants mentioned some new factors influencing the sale of beans such as import taxes and agricultural quarantine laws which raise prices and delays import.

### Map 3. Trade Flow Map - Fava bean and groundnut oil supply chains

Market Supply Chain



<sup>25</sup> <https://www.darfur24.com/en/2024/12/27/fears-of-price-hikes-after-end-of-bakeries-support-project-in-darfur/>

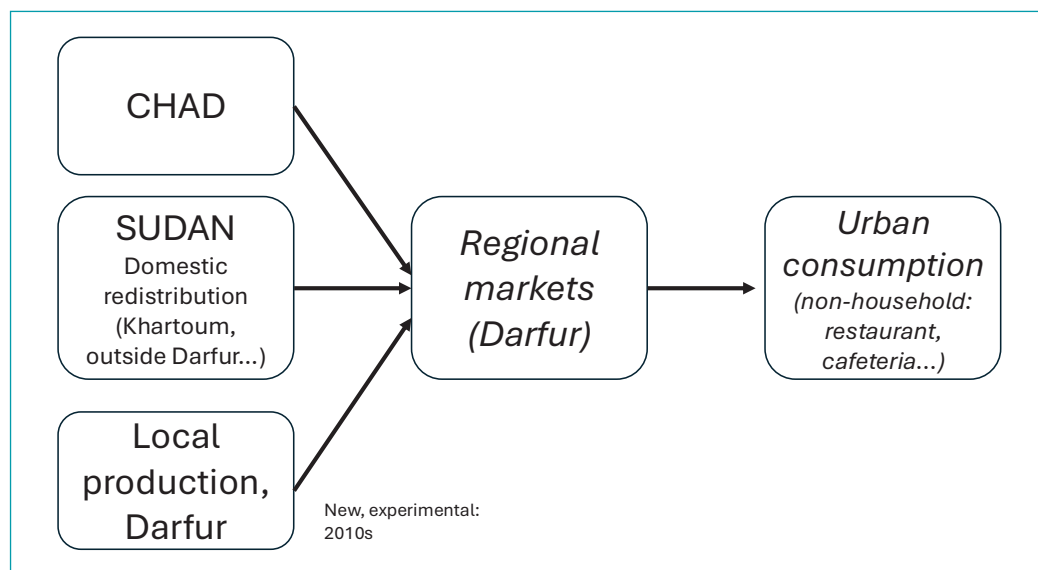


Figure 10. Market map (fava beans), Darfur (pre-April 2023) based on survey data collected in December 2024

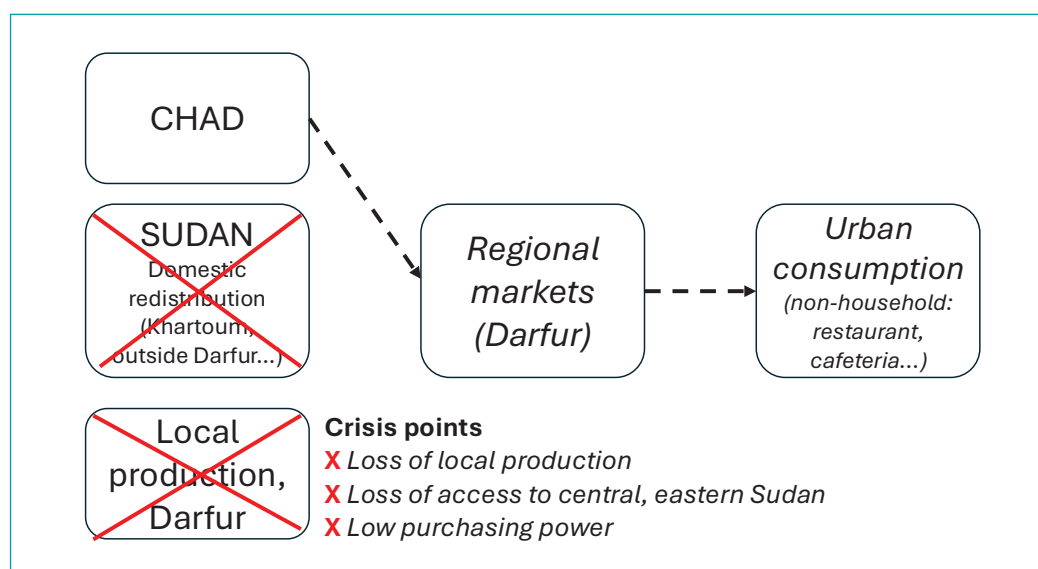


Figure 11. Market map (fava beans), Darfur (December 2024)

*“They attributed the lack of bean production to the high cost of seeds and farmers’ fear due to insecurity.”*  
—Enumerator summary of wholesaler interview, Mukjar

The production of fava beans began in Darfur for the first time during the 2010s. Consumers in West Darfur in 2024 consequently reported how fava beans were a new crop, with a majority estimating that the supply was likely to stay the same or increase over the coming month. Consumers in Central Darfur were more likely to report the unavailability of fava beans in their area. They also cited concerns with quality due to the short storage time of fava beans in contrast with other crops.

One wholesaler in Mukjar also reported the impact of security and the high cost of seeds on the local production of fava beans. Retailers commented on the lack of fixed supplier of locally produced fava beans in the area. This contrasted with other commodities studied, where wholesalers and retailers could buy directly from farmers.





Daralsalam Yahya is a farmer and mother of 7 children in Haraza village, West Darfur, Sudan. Photo by Carlos Barrio/CRS

All consumers who reported consuming fava beans accessed these via market purchase (rather than household production). However, reported problems of accessibility and affordability of this product were widespread. 32/85 consumers stating that they found fava beans in the last 30 days to be unaffordable. Only 20/85 consumers thought fava beans were 'widely available' and 60/85 thought prices were 'high' or 'very high' for the time of year. In Central Darfur in particular, consumers cited transport restrictions affecting supply chains, a shortage of transporters and conflict-related restrictions.

Wholesalers and retailers in West Darfur reported prices for fava beans between SDG.4,000 and SDG.6,000 (\$2 and \$3) per kilogram, with the upper bounds of this range rising to SDG.8,000 (\$4) in Central Darfur. Prices for consumers were between 7,000 and 11,000 (\$3.5 and \$5.5) per kilogram.

“There is no import or export of Fava beans in this market except for restaurants that order it specially from some places like Ag Geneina.”

— WHOLESALER, HABILA

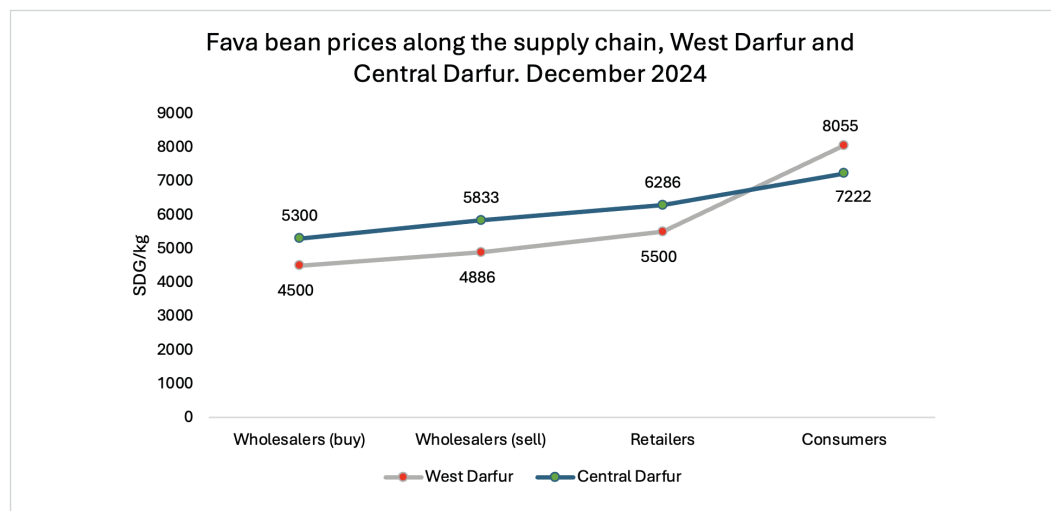


Figure 12: Reported prices (mean) for fava beans (ful masri) according to survey respondents (December 2024)

## Transportation

CRS teams interviewed a total of 22 transporters of these four commodities. These included small and large transporters. For commodities which rely heavily on transportation services between states and across national borders (such as groundnut oil and fava beans), these services are of particular importance. Transporters interviewed tended to use trucks or 4-wheel drive cars to move goods, with cars being stated as a preferred means of moving items in more rural areas where road access was bad.

The main issue transporters cited as affecting their business was bad roads, with many noting that this was particularly challenging during rainy seasons when roads degraded. Many also mentioned increased checkpoints and taxes as well as increasing fuel prices affecting their ability to operate. This in turn meant the prices of doing business were rising. Some said that if demand increased for their services then they could meet it, but it might take time to find additional trucks. There was also reference to difficulties in securing loans to purchase new vehicles. Many transporters interviewed were working for or with importers from Chad, and they cited increased volumes of these commodities from across the border.



Community members keep the farms fenced to avoid crop destruction by animals. Hashaba village, West Darfur, Sudan.  
Photo by Carlos Barrio/CRS

## Groundnut oil

### Market Environment

Groundnuts and groundnut oil are both produced and consumed within Darfur, as well as being exportable products towards other markets inside and outside of Sudan. However, groundnut production is more labor-intensive than the production of sorghum and millet, which makes the crop less resilient to conflict due to the need for an available and reliable workforce. Credit is also required to finance seasonal costs during cultivation and harvesting. Furthermore, the production of groundnut oil is more capital-intensive than sorghum and millet, as it relies on access to mills. During the war in Darfur (2003-20), the number of large mills operating in Darfur decreased, but capacity was recovered in part through an increased number of small mills. This has made this step in the supply chain more resilient to new conflict due to adaptive measures taken in the 2000s and the 2010s to sustain livelihoods.



Photo by Corrie Sissons/CRS

The centers for groundnut production and processing in Darfur are in South and East Darfur, meaning that traders in this survey (which was carried out in West and in Central Darfur) were likely to have sourced this crop from outside of their own localities. Nyala in South Darfur was often cited as a source of groundnut oil.

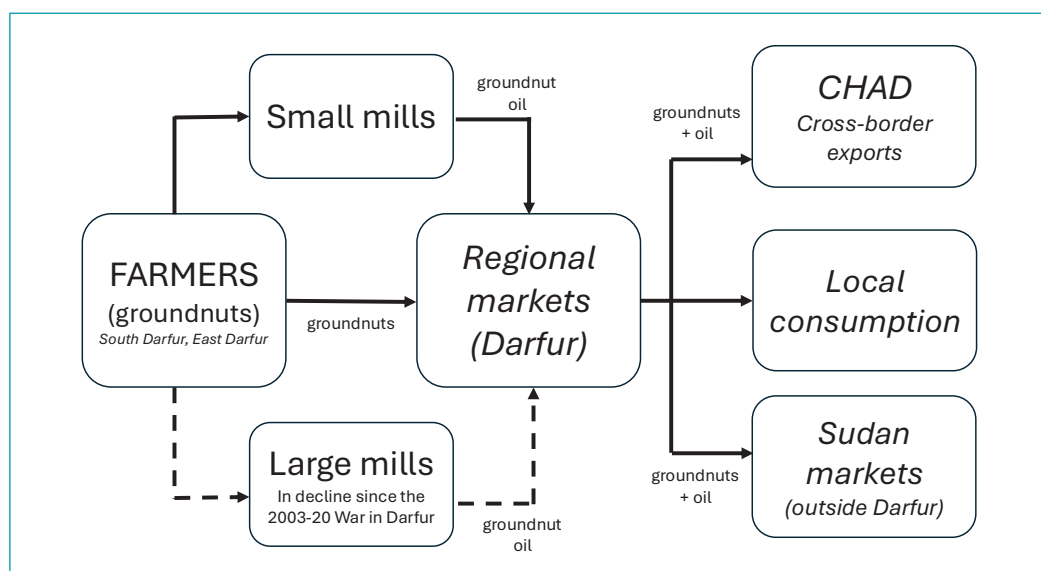


Figure 13. Supply chain for groundnuts and groundnut oil in Darfur before April 2023



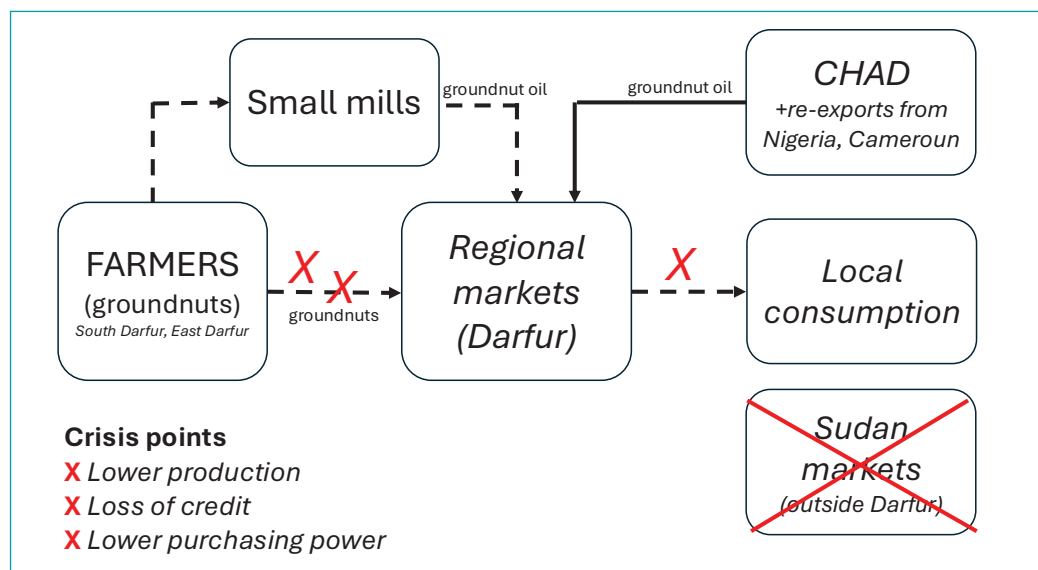


Figure 14. Supply chain for groundnuts and groundnut oil in Darfur in December 2024

Respondents in Chad confirmed selling groundnut oil to displaced Sudanese in Adre and over the border into Sudan itself. Local supply in Chad was consequently supplemented by imports from Cameroon and Nigeria to meet this demand. Anecdotal information from transporters, KIs and other retailers suggests that war and displacement has impacted groundnut production over time. Multiple transporters who moved groundnut oil noted a reduction in the numbers of traders over the past 18 months.

“ There are insufficient stocks of groundnut oil this year due to low production.”  
—RETAILER, MUKJAR

Wholesalers reported buying from small producers, but of the 30 wholesalers interviewed only 11 mentioned small producers, compared to 25 who mentioned ‘importing’ from other suppliers, most notably in South and East Darfur. It should be noted that generally ‘import’ was used by many traders interchangeably to mean buying goods from other states in Sudan as well as other countries. Retailers almost exclusively cited purchasing groundnut oil from wholesalers or directly from importers, indicating that groundnut oil is a market which relies on trade flows across state and national borders.

All 85 consumers interviewed said they currently purchased groundnut oil. However over the last 30 days, 37/85 said that they had not always been able to afford buying groundnut oil. 20/85 paid for their groundnut all either entirely or in part by accessing informal credit/delaying payments to vendors. Additionally, as with other commodities there were concerns with availability, with 40/85 consumers saying that they felt groundnut oil had either limited availability or was completely unavailable in their market.



“Production is weak and there are no oil traders.”

—CONSUMER IN HABILA

Groundnut oil could be purchased by wholesalers at approximately SDG.60,000 (\$30) for a jerrycan of 16 litres in West Darfur (SDG.3,750/L, or \$1.38/L), for resale to retailers at SDG.65,000 (\$32.50) to 70,000 (SDG.4,062 to 4,375/L, or \$2.03 to 2.19/L). Wholesalers in Central Darfur did not report buying in the same quantities and instead cited buying prices per litre. However, their buying prices per litre were similar to those cited for large quantities in West Darfur, with resale to local retailers occurring between SDG.4,700 and 5,300/L (\$2.35 and \$2.65/L).

Retail prices for groundnut oil could typically exceed SDG.4,000 per litre in West Darfur and SDG.5,000 (\$2.50) per litre in Central Darfur. Consumers responded to the survey by citing prices per bottle, but a lack of certainty over the size of different bottles makes it difficult to estimate consumer prices.

“[The sale of groundnut oil] has changed because of the war, which led to a decrease in population and a shortage of manpower.”

—RETAILER IN FORO BARANGA

### Market Infrastructure

Issues of storage and deteriorating quality were reported by a minority of consumers, possibly referring to the groundnut crop rather than oil. A lack of manpower for groundnut production was also cited in multiple markets as areas have depopulated due to the war.

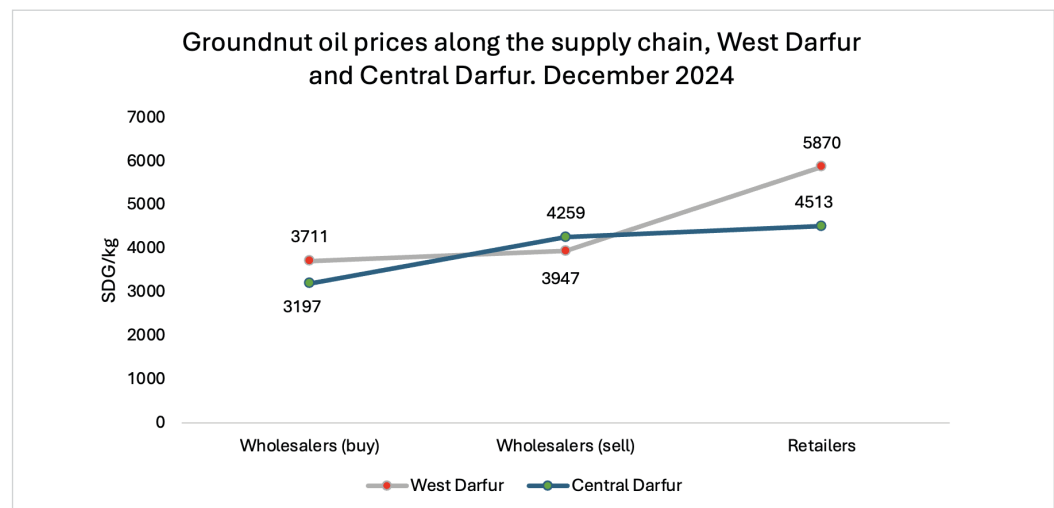


Figure 15. Reported prices (mean) for groundnut oil according to survey respondents (December 2024)

## Chad

CRS carried out interviews with wholesalers and members of trade associations based in Adre in Chad. This was done to understand supply chain dynamics that cross the Sudan-Chad border. Adre is a border town situated 30 kilometres from Ag Geneina in Sudan. It is a market and transit town that traditionally receives goods travelling to and from Sudan. In addition, Adre has received many Sudanese migrants displaced by the war in Sudan since 2023. In total, 940,000 are estimated to have crossed from Sudan into Chad since the beginning of the current conflict.<sup>26</sup> According to the Adre Head of Zone for ANADER (*l'Agence Nationale d'Appui au Développement Rural* – the National Agency for Support to Rural Development), 200,000 displaced Sudanese are situated in Adre alone.

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*"Yes there has been a big impact [from the war] on my business. Today I have more customers."*  
—Wholesaler 1

Interviewees reported the large increase of the population in Adre. This is the reverse image of the situation on the Sudanese side of the border, where displacement has led to fewer consumers and farmers engaged in active production. Accordingly, traders in Adre encounter a high demand for their products and have enjoyed the benefits of rising prices (paying CAF.17,500 to 18,000 per 20kg bag of red sorghum from farmers, which are resold to consumers for CAF.20,000; millet meanwhile could be purchased for CAF.12,500 per 20kg but resold for the same amount as sorghum). Wholesalers reported a strong preference for cash assistance, as in-kind distributions by humanitarian organisations in settlements for displaced Sudanese reduced the demand for goods on the local market.

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*"Before the crisis I could not sell half a bag per day."*  
—Wholesaler

Sorghum, millet, and groundnuts are all grown in Chad with small producers in the proximity of Adre selling directly to wholesalers. Wholesalers were optimistic about their ability to scale up supply if demand continues to increase (reflecting a bias in such surveys wherein traders are optimistic about their ability to scale their business). However, members of ANADER and the Adre Chamber of Commerce who were interviewed were more reticent. Both cited existing pressures on the price and availability of goods, and the fact that low quality goods were now circulating to meet demand. Notwithstanding, one wholesaler indicated their capacity to increase supply with imports, with groundnut oil already being imported from Nigeria and Cameroon to supplement local supply.

It was reported that sorghum, millet, and groundnut oil were all exported toward Sudan with no imports from Sudan travelling in the other direction. This was in addition to other products such as onions, pasta, rice, sugar, flour, salt, soap, and watermelon. This reflects an embargo on grain exports by the RSF faced with conditions of severe hunger, but also a wider reversal of the direction of agricultural trade flows between Chad and Sudan since the start of the war.<sup>27</sup>

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“*In the current period of crisis and since April 2023 it is Chad that supplies Sudan in contrast to the period before the crisis.*”

—DIRECTOR, ANADER

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<sup>26</sup> International Office of Mobility (IOM), Sudan Mobility Overview (4), Bi-Monthly Report: November/December (2024), 18. Available online: <https://reliefweb.int/report/sudan/sudan-mobility-overview-4-bi-monthly-report-november-december-2024>.

<sup>27</sup> This was reported in July by research examining the effect of the conflict on Commercial Market Actors in Sudan. Cash Consortium of Sudan: Commercial Markets Analysis (2024), 2. Available online: <https://reliefweb.int/report/sudan/cash-consortium-sudan-sudan-commercial-markets-analysis-summary-july-2024>.

# Conclusions

The war in Sudan that began in April 2023 has led to a substantial decrease in agricultural production, as has been demonstrated by this research carried out by CRS and REACH in West and Central Darfur. The war disrupted agricultural production, first, due to the presence of active fighting. The first year of fighting resulted in large-scale displacement within Sudan and into neighboring countries, with almost 1 million Sudanese now living in Chad.

There are fewer farmers operating in Darfur. Production has been reduced and the remaining farmers are often producing for home consumption. There are fewer traders and consumers to purchase produce and consumers have experienced a decline in purchasing power. Farmers in Darfur no longer supply markets in central and eastern Sudan to which they would have once sold millet, groundnuts, and groundnut oil, as these regions are now on the other side of the frontline in the ongoing civil war. Prior to April 2023, surplus agricultural produce from markets in Darfur could also have been exported to Chad via Ag Geneina; the direction of this trade has now reversed, with Chadian markets supplementing supply in Darfur. Additionally, there are differences between the functionality of these market systems between West and Central Darfur. West Darfur enjoys proximity to Chadian markets, whereas Central Darfur is nearer to producers of millet and groundnuts. Conversely, it is more exposed to conflict and experiences greater challenges with security and liquidity.

Bank branches have closed across the west of Sudan, including Darfur, which is under the control of the paramilitary RSF. This means that formal credit is no longer available, including to farmers financing seasonal production costs and traders funding stock and transport activities. The willingness to extend informal credit has also declined due to uncertain market conditions. Challenges in organizing financial payments are compounded by the Sudanese Armed Forces cutting off the supply of cash as well as mobile and internet connections into Darfur. Both cash and alternative digital payment mechanisms are consequently difficult to come by. Supply chains were found to be broadly functioning but at much lower quantities than in peacetime conditions. Transport costs and transport times within Darfur had increased due to the increased number of paying checkpoints, which are often a counterpart to militarized groups ensuring security in market areas.

Respondents expressed a range of preferences regarding the options of in-kind or cash humanitarian assistance. Sometimes, this was determined by respondents' role in local markets. Consumers in Darfur often preferred direct in-kind assistance, and traders in Chad (who were unlikely to be prospective beneficiaries) more likely to favour cash assistance for displaced Sudanese who would then purchase their products and support local supply chains. Perspectives in Sudan were more mixed, with some key informants stating a preference for in-kind assistance to continue, while some traders preferred cash support to boost their business.

Farmers specifically called for the provision of agricultural inputs, such as seeds and equipment. All categories of respondents expressed a desire of peace and security.





# CRS Recommendations<sup>28</sup>

## 1. Both In-Kind and Cash Assistance for Food Needs

Markets are still functioning in Darfur, which shows the resilience of market systems. However, household purchasing power is in decline. Farmers are producing less and selling less produce into the markets. Supply is being supplemented somewhat by imports to border towns from Chad. Supporting access to key commodities, using both cash and in-kind assistance is appropriate for meeting basic needs in these locations. To support highly vulnerable communities, in IPC 4 and 5 humanitarian agencies should provide in-kind food assistance, procured outside of Darfur, in the short term particularly for cereals such as sorghum and millet. Low production is leading to higher prices. KIs requested agencies not to buy up local grain for in-kind distribution and to thereby cause shortages. Around half of consumers said that they would prefer in-kind support to cash-for-food. Of those who said that they preferred cash, it was almost exclusively to meet other basic needs. Multiple basic needs were cited – including health, medicine, paying off debt and clothing. Therefore, in-kind assistance could be combined with multi-purpose cash assistance (MPCA) where feasible and appropriate to ensure in-kind food is not sold in markets to meet other households basic needs. Cash assistance can also support economic recovery in the medium term.

## 2. Provision of agricultural inputs

Humanitarian agencies should expand co-investment channels to support farmers in West and Central Darfur with agricultural inputs (such as improved seeds, tools, and fertilizers) to boost yields in next year's season. There has been considerable success in programs that support input supply and this is an effective way to ensure farmers have higher yields that can provide food security and surpluses to supply local markets. Increased productivity will improve livelihoods and strengthen food security for the wider population as more grain becomes available for sale. Increased supplies into the market may also lower prices. Given the high dependence of populations in West and Central Darfur on rainfed agriculture, livelihoods programming is critical to building resilience. Consequently, such programming can be leveraged alongside MPCA to invest in local market systems and to support households seeking to earn a sustainable income and to meet their own basic needs, including for food.

## 3. Market strengthening activities

Despite markets being functional, they remain fragile and humanitarian agencies should complement resource transfer (either cash or in-kind) activities with market support programs to incentivize increased production and sales. Farmers should have access to markets and household consumers should be able to support their local supply chains for critical food items. This could include supply-side activities to facilitate inputs for farmers, incentivizing local SMEs to supply agricultural inputs, establishing provisions for lines of credit for cereal farmers and traders and smart subsidies to support transporters selling into more remote areas.

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<sup>28</sup> It should be noted that these programmatic recommendations for humanitarian actors outlined are those of **Catholic Relief Services** only as IMPACT Initiatives does not provide/endorse specific programmatic recommendations as a rule in their work



Amira Ishag Yaseen (second from left), mother of 7, together with some of her neighbors and friends at her house in Mornei, West Darfur, Sudan. Photo by Carlos Barrio/CRS

Market strengthening work could also include work done in advance of the upcoming rainy season to re-enforce market roads which are predicted to become impassable for transporters due to poor condition. Furthermore, demand-side work such as facilitating mobile and internet connectivity services in markets for digital payments such as “bankak” could be considered.

#### 4. Market monitoring

Due to the inflationary environment in both west and central Darfur as well as the currency depreciation and recent introduction of new notes (which will have an unknown impact on Darfur states), agencies implementing the humanitarian food security response should consider regular market monitoring of food prices. Furthermore, they should assess household capacity to buy in the markets and to adjust any resource transfers to market conditions. Catholic Relief Services and many other NGOs participate in the Joint Market Monitoring Initiative (JMMI)<sup>29</sup> which is one such mechanism which is crucial for ensuring that feasible and appropriate modalities for assistance are provided.

#### 5. Additional research

This research was limited in scope for security reasons, but humanitarian actors are encouraged to undertake further complementary work to understand additional supply chains in the area. Supply chain dynamics for agricultural inputs and fuel, as well as research to understand the unfolding introduction of new bank notes would be highly relevant to better understand the ongoing market functionality and access dynamics for conflict-affected households in West and Central Darfur.



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