

Conflict, Agriculture, and Women in Sudan

Research Brief



Introduction

The outbreak of conflict in Sudan has had a catastrophic impact on the country's food security. The Integrated Food Security and Nutrition Phase Classification System (IPC) has warned of a serious deterioration in food insecurity in Famine-affected areas in Kordofan and Darfur.¹ As life-threatening hunger rises in Sudan, vital sources of aid have been cut off due to restrictions on humanitarian access, and decisions to pull funding for assistance.

In the face of these extraordinary disruptions, farmers in Sudan continue to work against the odds to maintain local production and agricultural livelihoods, providing an invaluable lifeline for their families and communities. In three regions, East Darfur, South Darfur, and South Kordofan, CARE Sudan surveyed men and women on the ways conflict has changed the landscape for agriculturalists, and the particular challenges that women smallholder farmers face.

In this brief, we break down the key challenges that conflict poses at various points of the agricultural cycle in Sudan: planting, harvesting, processing, storing, selling and consuming. The study presents several meaningful opportunities for the aid community to support livelihoods and household food consumption, particularly targeting financial support to women farmers and supporting projects to improve storage facilities to limit post-harvest losses. Ultimately though, the power to mitigate the conflict's negative impacts on agriculture and food security rests primarily with the parties of the conflict, who have an obligation to prevent the destruction of crops, looting of agricultural production and equipment, refrain from directly or incidentally targeting civilian sites like markets, and allow free and safe movement of civilians, including farmers.

About this Study

To study the impact of conflict on agriculture, CARE utilized both quantitative survey tools and qualitative interviews, as well as secondary data sources. A household survey of 492 randomly selected small holder farmers was conducted between 21st March to 15th April 2025. For the qualitative tools, the study employed key informant interviews (KIIs) and focus group discussions (FGDs). These methods enabled the capture and triangulation of data from diverse perspectives across different regions of Sudan.

Table 1 Sample Distribution – Household Survey

State	Locality	Frequency	
South Kordofan	Abaasyia	45	
	Abu Jubyahah	96	215
	Rashad	74	
East Darfur	Abu Karinka	63	189
	Aldain	73	
	Bahr Alarab	53	
South Darfur	East Jaba Marra	30	
	Kass	58	88
Total		492	

Table 2 Sample Distribution – FGDs and KIIs

Locality	# of FGD Participants	# of KIIs
South Kordofan	8	8
East Darfur	8	7
South Darfur	8	7
Total	24	22

¹ IPC. 11 July 2025. *IPC Alert: Famine-Affected Areas in Sudan*. Rome, Italy.

The random sampling of households to participate in the survey resulted in stark gender disparities in survey respondents, with 87.3% of respondents being women. The prevalence of women respondents reflects recent demographic trends, as men increasingly migrate for alternative income opportunities, as well as a reported increase in men being unwilling to engage with people or activities outside the house due to fear of persecution or association with armed groups. The absence of men – and the difficulties this caused for farming – was validated and reinforced in the study's interviews. As a male farmer in East Jaba Mara noted in a focus group discussion, "We lack manpower because young men have fled or joined militias. What little we manage to grow can't feed our families anymore."

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FINDINGS

Planting & Harvesting

Most farmers (89.0%) have reported that their agricultural productivity has declined due to conflict, and 55.7% of all respondents noted that insecurity had directly impacted their ability to harvest. In qualitative interviews, male and female respondents stressed the difficulty reaching farming plots due to conflict-related violence, and the psychological toll of fear also emerged as a critical factor undermining agriculture.

Both men and women were more likely to note insecurity as a particular challenge for women farmers (65%), although the degree varied significantly throughout the study areas. In East Jaba Marra, South Darfur (96.7%) and Abaasyia, South Kordofan (91.1%), both men and women

We lost the entire harvest last season due to insecurity in the area. Armed conflict and violence made it too dangerous to access our fields. As Farmers, we were forced to stay away, fearing for our safety and lives. As a result, our crops withered, and our livelihoods suffered greatly.

- FGD Participant, South Kordofan

farmers stressed security concerns at alarming rates, while in other localities, such as Bahr Alarab (18.9%) and Abu Karinka (39.7%) in East Darfur, a significant but relatively smaller proportion of farmers were concerned. In contrast, in nearly all areas, respondents noted that lack of financial resources and high input costs were major barriers to women's ability to farm. **Overall, 88.2% of respondents on average reported financial resources as an issue for women**, with no locality reporting rates below 79%. While women's limited access to resources pre-dates the conflict, ² farmers noted in general that access to financing overall has declined since the start of the conflict – demonstrating the interaction between impacts directly attributable to the conflict, and the pre-existing structural limitations that hinder women's agricultural potential. Altogether, insecurity, labor shortages, and financial stress have caused farmers to curtail their land usage since the start of the conflict. Before the conflict, 20.9% of farmers surveyed were cultivating plots less than 1 feddan.³ Amidst conflict, **the proportion of farmers**

² A 2021 FAO report on gender and agriculture in Sudan found that factors contributing to women's lack of access to agricultural inputs include: less purchasing power, different spending priorities (preferring to spend on household necessities like food and education), less access to information and extension services, and more restrictions on their mobility. (FAO. 2021. *Country Gender Assessment of the agriculture and rural sector – The Republic of the Sudan*. Rome. https://doi.org/10.4060/cb7042en)

³ A unit of area used in Sudan. 1 feddan = 160 square meters or 1.037 acres

planting on only the smallest tracts of land has since doubled to 41.3% of farmers. While the proportion of men and women farmers who are cultivating less than one feddan are comparable, the decline in women's representation at the higher levels of land use (6 or more feddan) indicates that during conflict, women and their households face disproportionate struggles to cultivate larger plots and maintain these essential incomes - and food-generating agricultural assets.

Structural inequalities, such as women's unequal access to financial resources, and conflict-induced security incidents create a situation of extreme precarity in all study areas. In addition to impacting the food security of individual farming households, at scale, these factors serve to diminish overall food availability in Sudan, thus compromising a key pillar of the country's food security.

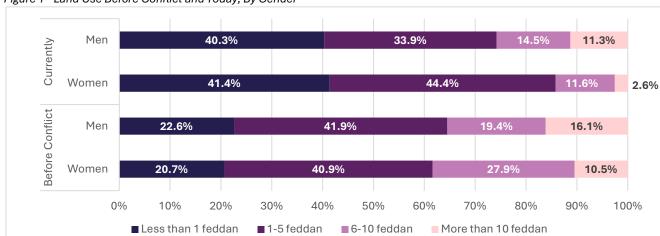


Figure 1 - Land Use Before Conflict and Today, By Gender

Processing and Storing

Given the enormous challenges that farmers face sowing and cultivating their land, the rate of post harvest losses – **reported by 76.2% of respondents** – represents another significant blow to local production and food security. Respondents in interviews discussed insufficient storage facilities, theft and looting, and difficulty accessing markets as the primary challenges they face when storing harvests.

A female respondent from East Darfur explained in an FGD, "We used to keep food in jars and pits, storing enough to last us through the dry season. But now, even if we manage to grow something, it's often lost to theft and spoilage, or we're forced to sell it early to survive. There's no more sense of security in what we harvest; everything feels temporary."

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We used to rely on community labor during harvest, but now many have left or are too afraid to come. No buyers are reaching us, and we can't carry the vegetables ourselves due to insecurity. Even when we harvest, there's nowhere safe to store everything, as it either rots or gets stolen. It's painful watching our hard work go to waste. - Woman FGD Respondent, South Kordofan

Particularly during the lean season or when insecurity prohibits travel to markets, stored harvests are a vital lifeline for families. Thus, issues of storing or selling crops come with profound implications for farmers, and in particular women, who often play central roles in post-harvest processing, storage, and household food provisioning. Without adequate storage or post-harvest handling mechanisms in place, women face increased pressure to sell perishable goods quickly and often at lower prices, reducing household income and economic autonomy. In many rural areas, women's income from surplus produce is crucial for meeting daily household needs, including healthcare, education, and nutrition. The loss of this income source exacerbates poverty cycles and limits women's capacity to cope with or recover from shocks.

Notably, while farmers in East Darfur were less likely overall to report security-related farming challenges, they were slightly more likely to report post-harvest losses. This could indicate that, even when farmers are relatively advantaged at one stage in the agricultural cycle, the pervasive impact of conflict nonetheless intercedes to compromise agricultural productivity and food security overall.

Markets and Distribution

As a key informant in South Kordofan told us, "Farmers in South Kordofan are facing a breakdown across the entire chain, from input shortages to harvest losses. Lack of tools, seeds, and fertilizers is delaying planting, and when they do manage to harvest, they can't store it safely. We've seen nearly half of the produce wasted post-harvest due to poor infrastructure and insecurity on the roads. Without urgent input distribution and repair of supply networks, next season's production will be at even greater risk."

For farmers who have managed to sow, harvest, and process their crops, attempting to generate income from their work comes with significant challenges. Across all three regions, **64.9% of respondents noted some kind of disruption to their market access, with 17.5% stating they had no access to markets at all**. Insecurity was widely cited as the attributing cause, with respondents in FGDs and KIIs noting that the riskiness of reaching markets combined with the unpredictability of prices lowered their interest in selling at all.

Another contributor to reduced market access is the sharp increase in transport costs. Conflict-related fuel shortages, insecurity on roads, and damage to transport infrastructure have significantly raised the cost of moving goods and people. This has discouraged traders and limited farmers' ability to sell or purchase agricultural products, further weakening already fragile market linkages. Considering the wide

In Kass, farming is purely for survival. People grow just enough corn, peanuts, and vegetables to feed their families—there's no market activity. It's all about putting food on the table, nothing more.

- FGD Respondent, South Darfur

acknowledgement of women's unequal financial access, these cost barriers are more likely to limit their access to markets, further reducing their income potential.

Indeed, for those farmers who are ultimately able to produce a surplus to sell and access markets, prices in the marketplace fluctuate and create instability for both producers and consumers:

81.3% of survey respondents reported that the market prices for agricultural products were

unstable, and 57.7% reporting that the prohibitive cost of agricultural inputs like seeds and fertilizer had impacted their community.

Consumption

The impacts of agricultural strain on household food security are hitting small holder families hard. As a female respondent in Rashad, South Kordofan told us, "This year, we ate only once a day during the rainy season because there simply wasn't enough food. The children became too weak and tired, and they couldn't help on the farm like they used to. It was a painful time—watching them suffer while the work in the fields piled up."

The study expands on the widely reported food consumption deficits in Sudan, by highlighting the gendered differences in men and women's consumption habits. Reductions in food availability were widely acknowledged by respondents, with 80.7% stating that there was low to very low food availability in their communities in the last three months. Given that data was collected during Sudan's post-harvest season, normally a high-water mark for food availability in the country, this assessment of low availability comes as a particularly dire warning for the trajectory of food security in Sudan.

When asked about coping strategies to deal with limited food, women were more likely than men to report adopting any given strategy but one: reducing meals. While more research is needed, this reality could be due to the fact that pre-crisis conditions and cultural norms often dictate that women already eat last

and least in their household. In times of more dire food insecurity, women's relative food consumption deprivation will therefore appear less drastic than men because of pre-existing gender disparities, but it leaves women with fewer options to adapt. It's notable that women were significantly more likely than men to report other coping mechanisms, especially eating less diverse nutritionally meals. This suggests that women are chronically deprived and have fewer options. They can not further restrict their daily food intake to sustain themselves, and are instead reverting to limiting the types of food they consume sooner than men.

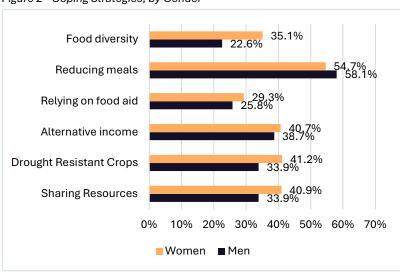


Figure 2 - Coping Strategies, by Gender

Conclusion

Conflict's impact on agriculture in Sudan compromises food insecurity with devastating and compounding consequences. Allowing the collapse of agricultural livelihoods in Sudan threatens to increase the risk of catastrophic and preventable loss of life due to food insecurity.

The study provides evidence of how direct conflict impacts (such as insecurity) as well as indirect factors (price volatility) ultimately compromise the agricultural livelihoods and food security in Sudan. It reflects systemic fragility where conflict worsens pre-existing agricultural challenges, disproportionately impacting districts in relation to their exposure to violence, displacement patterns, and market accessibility. This study confirms the disproportionate impacts of the conflicts on women's food security. For women farmers in particular, the impacts of conflict are not only more pronounced, but they are compounded by pre-existing gender barriers and inequality.

Addressing the gendered impacts of conflict on agriculture will take diverse stakeholders adopting the reality that agriculture initiatives save lives and should be considered as a core element of emergency food security strategies in Sudan. While information gaps make it difficult to determine funding levels for agriculture interventions,⁴ it is clear that assistance reaching farmers is insufficient. **As of July 2025, only 18% of the 15 million people targeted for agricultural support in 2025 have received assistance**.⁵ There is a critical and urgent opportunity to fund gender-responsive and localized agricultural programs, including programs led by groups of women small holder farmers, to meeting acute needs in the near term and restore food systems in the long term.

Recommendations

Cross-cutting recommendations

- Consider agriculture as a vital component of life-saving assistance. Without urgent support to farmers, food insecurity and nutrition needs will deepen with devastating consequences.
- Adopt a nexus approach, ensuring that investments related to agriculture in humanitarian, development, and peace arenas are harmonized and simultaneous to ensure that communities have the best chance to rebuild their lives sustainably, and with dignity.
- Work with women's organizations and women's farmers' groups from the start not just as beneficiaries of programming but as leaders, planners and evaluators. This requires directly funding women's groups to ensure their safe, direct and meaningful participation and leadership.
- Ensure that all interventions centre gender equality and the empowerment and protection of women and girls and are designed, monitored and evaluated through age gender and disabilitydisaggregated data and mixed methods.
- Integrate work across diverse actors by establishing multi-stakeholder working groups at the local level. Collaboration and communication across various actors including donors, humanitarian implementers, peace builders, development actors, climate specialists, local authorities, and the private sector will yield the most effective and sustainable results.

Donors

⁴ Agriculture interventions may be uncategorized or classified as food security programming in systems like OCHA's Financial Tracking service.

⁵ Sudan Food Security & Livelihoods Sector. 2025. *Interactive Response Dashboards 2025: Gap Analysis – Livelihood Support.*

- Through quality (multi-year, flexible) funding, support emergency gender responsive agriculture programs that are tailored to local dynamics and bolster local food systems.
- Fund solutions designed by and with women small holders that address women's financial inequality, including through the scale-up of village savings and loan associations (VSLA) and targeting women as recipients of key inputs like seeds, equipment, and fertilizer.
- Invest and finance improvement to key infrastructure that builds farmers' resilience to conflict-related shocks and considers the specific barriers women small holders face to access markets and use this infrastructure. Enhancements to roads, community storage facilities, solar dryers, empowers farmers by facilitating their ability to transport their harvest when they have market access, or store and consume it when transportation isn't possible.
- Along with funding for food security interventions, address the intersecting impacts of the food crisis
 such as increased protection risks and displacements by adequately funding protection and GBV programming as stand-alone or part of multi-sectoral programming.

Humanitarian and Development Actors

- Integrate gender responsive, climate smart and conflict-sensitive agriculture and livestock strengthening initiatives as part of the crisis and food insecurity response plans.
- Where conflict restricts land use, prioritize improving farmers' yields on the plots they can access and
 use by providing women-friendly extension services, efficient irrigation systems, and key agricultural
 inputs.
- Strengthen food systems with gender responsive cash assistance and market-based programming that boosts farmers' agricultural productivity by enabling them buy inputs and supports communities' economic resilience.
- Conduct robust assessment to ensure that food security interventions, including in-kind food assistance, don't undercut the functionality of markets or the viability of small-scale farming. Where possible, purchase commodities for in-kind assistance directly from small-scale farmers, ensuring women are included as vendors.
- Engage in advocacy with local authorities to support agriculture initiatives such as market stabilization interventions, rehabilitating infrastructure, and providing emergency market support to reduce volatility and support agricultural resilience.

For Member States and actors with influence over the parties to the conflict

• Utilize all available channels to influence parties to the conflict to comply with international humanitarian law, including the protection of civilians and civilian infrastructure, the prohibition of the use of starvation as a method of warfare, and obligations to facilitate humanitarian access