

# Impact of Conflict on Employment, Income, and Household Welfare in Sudan

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Sudan has been embroiled in a high-intensity conflict between the Sudanese Armed Forces and Rapid Support Forces since April 2023, leading to widespread displacement and an escalating humanitarian crisis. This conflict, centered on Khartoum, Sudan's economic hub which historically has contributed nearly one-third of Sudan's GDP, has caused unprecedented economic and social upheaval. As of January 2025, over 12.3 million people have been displaced, and reported fatalities were approaching 30,000.<sup>1, 2</sup> Sudan's GDP has contracted sharply—estimates from the IMF, World Bank, and African Development Bank for 2023 alone showing declines of between 18 and 38 percent. This poor economic performance has continued with further drops in output in 2024. Unemployment surged from 32 percent in 2022 to 46 percent in 2023. The average household income is estimated to have declined by nearly 50 percent relative to pre-conflict levels. Urban households, especially in Khartoum, have been disproportionately affected due to the destruction of economic infrastructure and loss of industrial jobs, while rural households face severe disruptions in agriculture and access to essential farm inputs. The conflict has strained household welfare systems and exacerbated food insecurity. Many households are increasingly reliant on remittances and humanitarian aid to meet their basic needs. These dynamics underscore the urgent need for effective policy interventions to address both the immediate humanitarian needs and long-term recovery challenges of Sudan.

## Methodology

This research draws on data from three nationally representative household surveys providing data on the 18 states of the country: the 2022 Sudan Labor Market Panel Survey (SLMPS), the 2023/24 Sudan Rural Household Survey (SRHS), and the 2024 Sudan Urban Household Survey (SUHS). SLMPS captured pre-conflict baseline data on household livelihoods, income, employment, and food security, while SRHS and SUHS provide comparable data for households in rural and urban Sudan, respectively, under the current conditions of conflict.<sup>3</sup> SLMPS was implemented through in-person data collection. Given the barriers to in-person

interviews during the conflict, computer-assisted telephone interviewing (CATI) was used to interview sample households for SRHS and SUHS.

## Key Findings

### Employment loss and income decline

- Employment loss was particularly acute among displaced households, with the heads of conflict-affected urban households being 12.7 percentage points more likely to experience job loss than were the heads of non-conflict-affected households (Table 1). Better market access mitigated some of the impacts of job losses on household welfare, underscoring the importance of trade networks in economic resilience.
- The per capita income of rural households dropped by 28 percent, reflecting the compounded effects of agricultural disruptions and reduced market access. Urban households experienced an 11 percent decline, primarily due to job losses in trade and the services sector.

### Food security deterioration

- The proportion of food-secure households plummeted from 49 percent pre-conflict to between 10 percent and 20 percent during the conflict. Severe food insecurity rose from 13 percent to 50 percent (Figure 1).
- Female-headed households in rural areas experienced the sharpest declines in food security, with reductions of 83 percent, compared to 74 percent for male-headed households. Larger households also faced heightened vulnerability due to their more limited resources per capita.

### Role of assistance and remittances

- Outside assistance has predominantly reached the most vulnerable households (Table 2). As households receiving assistance often started from a baseline of severe food insecurity, assistance only had limited effects on improving overall food security metrics.
- Remittances provided essential financial lifelines for many households adversely affected by the conflict but had a minimal direct impact on reducing food insecurity. Complementary policies, such as cash transfers and improved market access, are also needed.

## Detailed Analysis

### Employment and income loss

The conflict's impact on employment was widespread and severe (Table 1). Logistic regression results indicate that heads of urban households affected by the conflict were 12.7 percent more likely to lose employment, with displacement further increasing the probability of a head losing their employment by 13.2 percent. Urban centers, like Khartoum, experienced heightened vulnerability due to their reliance on formal sector jobs, many of which ended as the conflict continued. Individuals with higher educational attainment were paradoxically more likely to lose employment. This reflects the conflict's significant adverse impact on sectors that typically employ skilled workers, such as finance and education,

leading to job displacement across professional domains. Heads of urban households with better market access, which correlates with economic resilience, had a reduced likelihood of employment loss, emphasizing the protective role of functional trade networks during crises.

Table 1 Impact of conflict on employment of heads of urban households in Sudan, logistic regression results

Variable	Marginal Effect, %	Significance
Conflict affected, 0/1	12.7	***
Displacement, 0/1	13.2	***
Market access, 0/1	-13.8	***
Female-headed, 0/1	14.4	***
Adequate housing, 0/1	-5.2	***

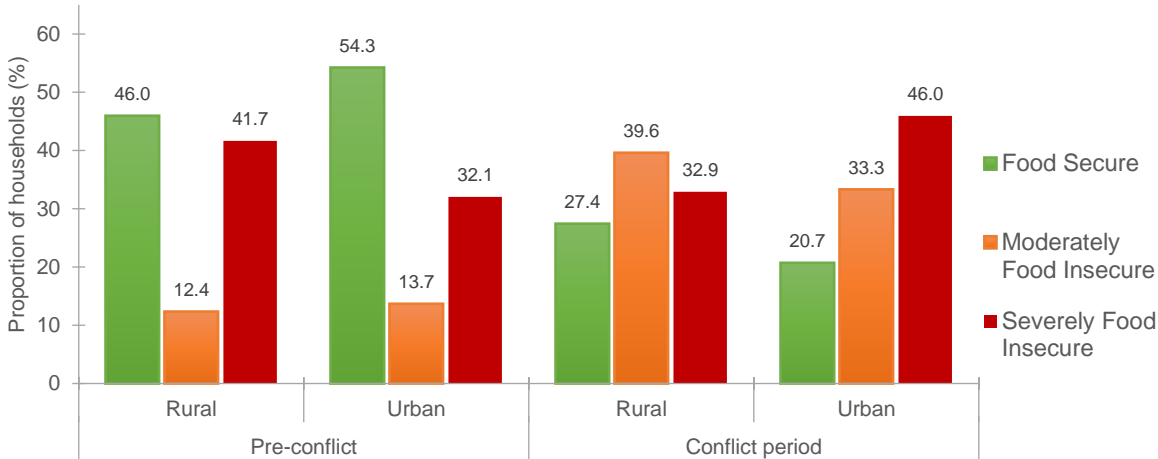
Source: Analysis of 2024 Sudan Urban Household Survey data; Ahmed et al. (2024).  
 Note: Significance: \*p<0.10, \*\*p<0.05, \*\*\*p<0.01.

Significant declines in household income levels further highlight the conflict’s impact. Rural households experienced a 28 percent decline in per capita income after the conflict began, reflecting the compounded effects of agricultural disruptions and reduced market access. Urban households, while more resilient, saw an 11 percent decline in incomes, largely due to job losses in formal sectors like trade and services. The disparity underscores the heightened vulnerability of rural communities to economic shocks compared to their urban counterparts. These findings on household income loss due to the conflict complement the findings shown in Table 1, where employment disruptions for urban households were linked to reduced household earnings, particularly for those heads of household working in vulnerable sectors and regions.

**Food security trends**

Food insecurity worsened dramatically during the conflict (Figure 1). Households in rural areas faced heightened challenges in gaining access to sufficient food due to agricultural disruptions and pre-existing vulnerabilities—rural female-headed households experienced particularly severe impacts on their food security due to the conflict. Food security among female-headed rural households declined by 83 percent, compared to a 74 percent reduction for male-headed rural households. This disparity highlights the compounded challenges faced by women in conflict settings, where already limited access to resources and support systems may be further restricted. Larger households also struggled disproportionately under the adverse effects of the conflict. Their resources were stretched some thinner than was the case for smaller households. With more members, it has become more difficult for many to meet their basic needs. These findings emphasize the critical need for targeted interventions to address the unique vulnerabilities of female-headed and large households during crises.

Figure 1 Food Security Trends Before and During the Conflict



Source: Ahmed et al. (2024).  
 Note: Proportion of food-secure, moderately insecure, and severely insecure households before (SLMPS) and during the conflict (SRHS and SUHS).

**Effectiveness of assistance and remittances**

Assistance programs predominantly targeted the most vulnerable households (Table 2). Most of these households were already experiencing severe food insecurity, which explains why the assistance did not translate into significant overall improvements in food security metrics. Logistic regression analysis indicates a negative correlation between receiving assistance and food security status (-0.119 log odds), suggesting that, while assistance reached those in critical need, it was insufficient to lift them out of severe insecurity. Similarly, remittances provided essential financial lifelines to displaced and vulnerable households, yet their direct impact on reducing food insecurity was limited. This highlights the importance of complementary policies, such as strengthening market access and ensuring consistent support through cash transfers, to maximize the effectiveness of both assistance and remittances in improving household welfare during conflict and in the recovery phase after the conflict has ended.

Table 2 Assistance and food security of rural Sudanese households during conflict, logistic regression results

Variable	Food Secure (Log Odds)	Significance
Received assistance, 0/1	-0.119	***
Conflict affected, 0/1	-0.108	***
Interaction: Assistance x Movement	0.101	***

Source: Analysis of 2023/24 Sudan Rural Household Survey data; Ahmed et al. (2024).  
 Note: Significance: \*p<0.10, \*\*p<0.05, \*\*\*p<0.01.

**Conclusion and Policy Recommendations**

Since its start in April 2023, the ongoing conflict in Sudan has profoundly disrupted livelihoods with significant declines in employment, income, and food security. Domestic and international stakeholders must act decisively to address these challenges through a comprehensive strategy that integrates immediate relief with sustainable long-term recovery efforts.

Specific recommendations that emerge from the household survey analysis include:

### Stabilizing employment and incomes

- **Urban job creation:** Restore industrial zones and trade networks to generate employment in urban centers.
- **Rural agricultural recovery:** Invest in input subsidies and irrigation systems and create secure systems of access to farmland to support rural livelihoods.

### Enhancing the effectiveness of transfers

- **Improve targeting:** Use data-driven approaches to refine the targeting of humanitarian assistance.
- **Digital payment systems:** Introduce digital platforms for transferring remittances and for delivering other assistance to improve efficiency and reduce costs.

### Building resilience and monitoring

- **Real-time data systems:** Employ remote sensing and a program of regular surveys to monitor household welfare and inform adaptive economic recovery programming.
- **Community-based interventions:** Engage local actors to design and implement recovery programs tailored to specific community needs.

By combining short-term humanitarian measures with structural investments in infrastructure, market access, and social safety nets, Sudan can mitigate the devastating effects of the conflict and lay a foundation for inclusive recovery and sustainable development.

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<sup>1</sup> UNHCR (United Nations High Commissioner for Refugees). 2025. "Operational Data Portal | Sudan." 09 January 2025. <https://data.unhcr.org/es/situations/sudansituation>.

<sup>2</sup> ACLED (Armed Conflict Location & Event Data Project). 2024. "Foreign Meddling and Fragmentation Fuel the War in Sudan." Conflict Watchlist 2025 | Sudan, 12 December 2024. <https://acleddata.com/conflict-watchlist-2025/sudan/>.

<sup>3</sup> Ahmed, M., O.K. Kirui, A.S. Taffesse, M. Raouf, H. Abushama, and K. Siddig. 2024. *Income, Employment, Transfers, and Household Welfare Dynamics Before and During the Conflict in Sudan*. Sudan Strategy Support Program Working Paper 21, Washington, DC: International Food Policy Research Institute. <https://hdl.handle.net/10568/168417>.

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